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भारतीय छाप

#### VANI VIHAR, BHU ODISH

Prof. Soumendra M. Patnaik VICE CHANCELLOR

Tel. Off	1	(0674) 2567700
FAX	G .	(0674) 2567850
Email	÷.	vcuu@rediffmail.com

Dated: 13.4.2018

No.VC/ 5-2 /2018,

To

Dr. Arun Bhardwaj Scientist E, O/o the Principal Scientific Adviser to Government of India, 313, Vigyan Bhawan Annexe, Maulana Azad Road, New Delhi – 110 011

#### Sub: Minutes of Interface meeting between Utkal University and National Institutes.

Dear Sir,

In continuation to our earlier e-mail I am sending herewith the hard copy of the minutes of interface meeting between Utkal University and National Institutes in around Bhubaneswar held on 13.01.2018 for the needful at your end.

An acknowledgement in this regard will be highly appreciated.

Yours faithfully,

(Soumendra M. Patnaik)

Encl: as above.

Minutes of the interface meeting between Utkal University and other National Institutes/Laboratories in and around Bhubaneswar, held on Dt.13.01.2017, in the office of the Honourable Vice Chancellor, Utkal University.

#### Members Present

1.	Prof. Soumendra Mohan Patnaik	(Vice Chancellor, Utkal University)
2.	Dr. Ajay Parida	(Director, ILS, Bhubaneswar)
3.	Prof. Sudhakar Panda	(Director, Institute of Physics, Bhubaneswar and
		Director, NISER, Bhubaneswar)
4.	Dr. Santosh Mishra	(Director, IMMT, Bhubaneswar)
5.	Dr.(Mrs.) Sanghamitra Pati	(Director, RMRC, Bhubaneswar)
6.	Dr. B. S. Jena	(Co-ordinator, Academy of Scientific and
		Innovative Research, IMMT, Bhubaneswar)
7.	Prof. B. Satpathy	(Chairman, P.G. Council, Utkal University)
8.	Sri. D. Nayak	(Registrar, Utkal University)
9,	Prof. Swapna Mahapatra	(Director, R&D, Utkal University)
10	Prof. J. Dandapat	(Professor, P.G. Department of Biotechnology
		& Convener of the committee)

With reference to the letter received from the office of the Principal Scientific Advisor to Govt. of India (letter no: Prn.SA/National labs/2017, dated: 22<sup>nd</sup>, December, 2017), an interface meeting between Utkal university and National Laboratories was held on 13<sup>th</sup> January, 2018, and the following matters were discussed:

#### **Business transacted**

- At the outset, Vice Chancellor, Utkal University (Chair person of the committee) welcomed all the members and elaborated on the academic linkages initiated by the office of the Principal Scientific Advisor, Govt. of India, between 10 highly graded universities with the National Institutes of repute in and around the respective cities where the Universities are located. He also briefed about the mandate and activities of the University and other academic partners under this programme.
- Director, Institute of Life Sciences, Bhubaneswar (Co-Chair of the committee) deliberated on the genesis of this proposal for the academic upliftment and mutual benefits of the collaborative Institutes.
- 3. All the members appreciated the efforts and the steps taken by the office of the Principal Scientific Advisor, Govt. of India, for such a novel strategy, for the mutual growth and academic benefits of different stake holders (Post Graduate Students/ Research scholars/ Faculty members/ Scientists) through exchange of ideas and infrastructure support.

- Director, Institute of Physics and NISER, suggested to develop MOUs as advised by the office of the PSA, Govt. of India, for better implementation of the academic activities.
- 5. All the members felt that some mechanism should be developed by the office of the PSA or MHRD, Govt. of India, for the provision of dedicated grants to the University and the partner Institutes to meet the operational cost of the high end equipments and their upgradation for a smooth running of the collaboration in various programmes.
- All the members also opined that there should be some nominal user fee for the academic partners for the maintenance of the equipments.
- 7. It is resolved to have MOU with the partner Institutes with the provision of exchange of teaching/ research / joint collaborations as well as for taking the Ph.D. students in different disciplines under Utkal University. It is further resolved that scientists / academicians from partner Institutes should be able to guide Ph.D. Students independently under Utkal University.
- Depending on the requirements and the numbers of Ph.D. aspirants in a particular subject, more numbers of nodal centres can be opened among the partner Institutes with mutual collaboration between University and concerned Institutes.
- It is also suggested that, other National institutes in and around Bhubaneswar like IIT, AIIMS, CIPET, ICAR-CIFA, ICAR-NRRI, will be invited to join this program for better dissemination of knowledge and expertise.
- 10. To improve the resource accessibility of the Masters students, Research scholars, Faculty members, Scientists of the Institutes / University, it is resolved that the e-resource subscribed by the National Institutes /University should be shared among the various stake holders. Suitable and sustained mechanism need to be developed in this regard. It is further resolved that the Office of PSA or MHRD, Govt, of India will be requested for additional funding for the subscription of Science Direct and other e-resources (beyond the existing ones) for the purpose.
- 11. As a part of future strategy it is resolved to have interface meeting (one to one/ group to group) among the academic partners for the development of Multi-Institutional research proposals. It is further resolved to initiate scientific / popular talks among the academic Institutes to foster inter-disciplinary research and generation of novel ideas.
- It is resolved to initiate Joint Research Scholars conclave with the mutual consent/interest among the partner Institutes.

The meeting ended with a vote of thanks by Prof. Swapna Mohapatra, Professor of Physics and Director, Research and Development, Utkal University, Bhubaneswar.

Watroie 13.01.2018 Prof. Soumendra Mohan Patnaik Vice Chancellor, Utkal University

Dr. Santosh Mishra

Dr. Santosh Mishra Director, IMMT, Bhubaneswar

(Chair person of the committee)

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Dr. Ajay Parida Director, Institute of Life Sciences, Bhubaneswar (Co-Chair of the committee)

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Prof. Sudhakar Panda Director, Institute of Physics, Bhubaneswar and Director, NISER, Bhubaneswar

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Prof. B. Satpathy Chairman, P.G. Council, Utkal University

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Director, RMRC, Bhubaneswar

Sanstanita Pati 13/ 11/18 Dr. (Mrs.) Sanghamitra Pati

Dr. B. S. Jena Co-ordinator, Academy of Scientific and Innovative Research, IMMT, Bhubaneswar

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Sri D. Nayak Registrar, Utkal University

Inahapaties, 1.2018

Prof. Swapna Mahapatra Director, R&D, Utkal University

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Prof. J. Dandapat Professor, P.G. Department of Biotechnology & Convener of the committee

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भारत सरकार के प्रमुख वैज्ञानिक सलाहकार का कार्यालय 326, विज्ञान भवन एनेक्सी मोलाना आजाद मार्ग, नई दिल्ली-110011 Office of the Principal Scientific Adviser to the Government of India 326, Vigyan Bhawan Annexe Maulana Azad Road, New Delhi-110011 Tel. No.: 91-11-23022091, 23022115 Fax: 91-11-23022091, 23022115 Fax: 91-11-23022113, 23022116 E-mail : npsa@nic.in, npmsa@gmail.com Website : http://www.psa.gov.in F.No.Prn.SA/National Labs/2017 Date: 22<sup>nd</sup> December, 2017

Prof. Patra; K.

India has a large number of public funded research institutes supported by various Government Ministries and Departments, and we also have a large number of universities, and other academic institutions, which are engaged in teaching and research. There has been a long-feit need to create and foster synergy between the universities of the country, and the National Laboratories, for mutual benefit. This can be centred around the various real world cutting edge problems and themes that the scientists of our National Laboratories engage in and in which there is also a great deal of interest and expertise available in our universities. One of the biggest advantages that our university system offers is the presence of a large number of young minds that are fascinated by science and technology and who are enrolled in various programmes of learning at the Undergraduate (UG) and the Postgraduate (PG) levels in the various universities.

2. In this regard, the Principal Scientific Adviser to the Government of India has held many meetings, with various stakeholders, in the past several months. To take this forward, a meeting was held on the 18<sup>th</sup> of December, 2017 (minutes of the meeting enclosed), wherein a list of highly-graded Universities and a list of our National Labs, drawn from ten major cities in India, were discussed. For each of these ten cities, a Chair and a Co- Chair have been identified, who will be meeting the Vice Chancellors of these universities, as also with the Directors of the National Labs in the respective cities.

3. The main idea is to draw upon the expertise at the National Labs to help improve University PG (and also UG) courses and expose students, and also the faculty in the University, to the collection of research areas, themes and problems of the real world that are under investigation at the National Labs. Association of young minds, at the UG and the PG levels in the universities, will also greatly benefit the National Labs.

4. For Bhubaneswar, you as the Chair are requested to co-ordinate with the Heads of universities and National Labs given overleaf and chair a meeting with them at the earliest to discuss the modalities of cooperation, including the draft Memorandum of Understanding (MoU) (enclosed). You may take on board any other experts you desire from Universities and National Labs in proximity. As we are aspiring to take an early decision in the matter, we shall be grateful if the feedback, after the meeting, reaches us within ten days.

With regards,

Yours sincerely (NEERAJ SINHA)

22,12,2017

Encl: As stated above

Prof. S.M Patnaik Vice Chancellor Utkal University Vani Vihar, Bhubaneswar Odisha -751 004.

7 (Bhubaneswar) Chairman: Vice Chancellor Utkal University	Utkal University, Bhubaneswar – 751004 (NAAC CGPA -3.53)	Institute of Minerals & Materials Technology (IMMT), Bhubaneswar, Orissa (CSIR LAB)	Mineral Processing Technology Extractive Metallurgy, preparation of Special Materials and alloys
Co Chain Director, institute of Life Sciences		Institute of Life Sciences, Bhubaneswar (Department of Biotechnology)	Life Sciences
		Regional Medical Research Centre, Bhubaneswar (ICMR LAB)	Medical
		The Director, Institute of Physics P.O; Sainik School, Bhubneswar- 751005, India (DAE)	High-energy physics, condenset matter, atomic and nuclea physics.



#### UTKAL UNIVERSITY VANI VIHAR: BHUBANESWAR-4.

#### NOTIFICATION

NO, Exam-VII/17872

/ 2021,

Date: 21.10.2021

In Conformity to UGC Notification dated 5<sup>th</sup> May 2016 (Regulation for Doctor of Philosophy) and with the approval of Vice-Chancellor, it is hereby informed for all concerned that, every Post Graduate Department will constitute a Departmental Research Committee (DRC) to monitor the research activities/ Ph.D. Programme in the Departmental level as per rules & regulations of UGC.

- It will comprise internal members from the department & academicians of repute as external members in the concerned subject and nominee of Vice Chancellor.
- It will usually be valid for 2 years and routinely will be constituted /reconstituted as a normal practice under the kind approval of Honorable Vice Chancellor.
- Any issue which is not resolved in the DRC will be referred to the University Research Committee (URC) or Research Advisory Committee (RAC) of the University for final decision with approval of Vice-Chancellor.
- DRC is the baseline committee for the promotion of research activities of the University.

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Memo No. Exam-VII/17873(3)

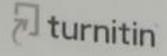
/2021,

Dated: 21.10.2021

Copy to:-

- 1. HOD All P.G Departments of Utkal University for information.
- 2. P.S to Vice-Chancellor, Utkal University.
- 3. Steno to Controller of Examinations, Utkal University.

CONTROLLER OF/EXAM



Ref: OSUC/2021/Renewal

To The Chief Librarian (i/c) Utkal University Bhubaneswar-751004 Odisha

Dear Sir,

#### Sub: Submission of Renewal Proposal

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Tue, 3 Nov 2020 at 6.44 pm

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#### Kind Regards Seema Bhatt

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#### Odisha State University Consortium - Submission Report (3rd Nov 2020 to 30th September 2021)

# **BIOSAFETY GUIDELINES**

Subtitle



#### What is biosafety guidelines?

Policy proposed or adopted by the Government to avoid the risks of GEOs on environment and public health.

#### Aim of biosafety guidelines

- Regulating rDNA research with organisms that have least or no adverse effect.
- Minimizing the possibilities of occasional release of GEOsfrom the laboratory
- Banning the release of GEOs if they are supposed to be causing potential risks in the environment

#### The rDNA Biosafety Guidelines Of India In India, DBT has proposed "The recombinant DNA safety guidelines" in 1983 and amended in 1990. These guidelines deals with a set of rules for production, use, import, export and storage of hazardous organisms.

# In India, the rDNA guidelines has been implanted through three committees

- Institutional biosafety committee (IBSC)- controls research activities at institutional level.
- Review committee on genetic manipulation(RCGM)- reviews special situations where research with hazardous organisms in laboratory and grants permission to do that research.
- Genetic engineering approval committee(GEAC)- approves the GEOs for large scale production and use in India.

To perform certain gene manipulation experiments, the workers need to acquire permission of review committee and approval committee before commencement Toxin gene cloning Cloning of genes for vaccine production Cloning of mosquito and tick DNA Cloning of antibiotics resistance genes **Cloning of oncogenes** Experiments with infectious animal and plant viruses Transgenesis experiment in animal cell cultures Transfer of toxicity genes into plants Gene therapy for hereditary diseases

### CONTAINMENTS

The term "Containment" is used in describing the safe methods for managing infectious agents in the laboratory environment where they are being handled or maintained.

### Purpose of containments

To reduce exposure of laboratory workers, other persons, and outside environment to potentially

# Elements of containments

Laboratory Practice and Technique Safety Equipment(primary barriers) Design Facility(Secondary Barrier)

# types of containments

Physical containment Biological containment

#### Physical containment

The physical methods being adopted inside the laboratories to prevent escaping the GEOsto the environment It works on the principal of physical barriers It helps to keep the dirt in the laboratory itself

# The physical containment include

Air filtration Sterilization lights Waste disposal Protective handling

# Biological containment

The biological principles used in the laboratories to prevent the escape of GEOs or microbes Biological containment makes the organisms unable to survive in the outside environment

## Implementation of biosafety guidelines

The rDNA biosafety guidelines are implemented for the government of India by four committee Recombinant DNA advisory committee (RDAC) Institutional biosafety committee (IBSC) Review committee on genetic manipulation (RCGM) Genetic engineering approval committee (GEAC)

# Recombinant DNA advisory committee (RDAC)

Organized by the Department of Biotechnology (DBT) under the Ministry of science and technology It provides regulatory control to the implementation committees



The RDAC has been arranging meeting once in six months or sooner to discuss about the standards of safety regulations These meeting helps to Evolve long term policy for R/D in rDNAresearch Formulate suitable safety guidelines Train the research and technicians about the hazards and risks of rDNA research techniques

# Institutional biosafety committee (IBSC)

This is a small committee established by every institution engaged in rDNA research and the related production activities

It monitors rDNA research activities at the institutional level

This committee is formed of head of institution, 3or more scientists, a medical officer and one DBT nominated person



#### Role of IBSC

Sends report to RCGM regarding observance of safety guidelines on accidents risks and on deviations if any Reviews the requirements of guidelines for safety new projects Allows some person to take training on biosafety in research activities Takes emergency plans in urgent situations

Attempts to provide medical care to persons working in the laboratory

#### Review committee on genetic manipulation (RCGM)

The RCGM is functioning under DBT It is formed of

Department of biotechnology (DBT) Indian council of medical research (ICMR) Indian council of agricultural research (ICAR)

Council of scientific and industrial research (CSIR)

Department of science and technology (DST)



#### **RCGM** functions

Establishes the procedural guidance manual for regulatory process with GEOs It reviews the risk potentials of GEOs in the laboratory and field experiments It decides which containment have to be followed for experiments with risky hazardous microbes It advices custom authorities on import of GEOs and other biological materials from other nations It provides advice on IPR and patents

It assists the **Bureau of India standards (BIS)** to evolve standards of products coming from rDNA technology The monitoring group of RCGM visit frequently to laboratories where rDNA works are going on and inspects safety conditions in those lab

# GENETIC ENGINEERING APPROVAL COMMITTEE (GEAC)

This is a higher level committee working under the Department of Environment and Forests.

It has full power to permit Large scale use of genetically engineered organisms rDNA products R/D of rDNA technology Industrial production of rDNA products Release of GEOS in environment and field use

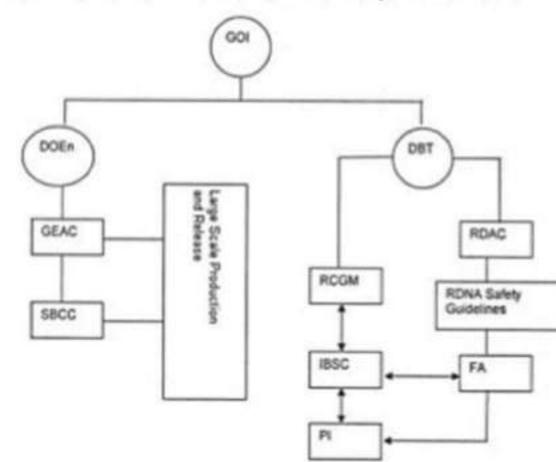


#### The GEAC gives approval for

Import, export, transport, production and sale of GEOs and other organisms Release of GEOs from the laboratories to environment Large scale culture and use of GEOs and microbes in industries Use of GEOs in field application and experimental trials Monitoring the risks and accidents due to GEOs

# Mechanism of implementation

### Institutional mechanism for implementation of guidelines frame work for implementation



GOI
DBT
RDAC
Committee
IBSC
RCGM
Manipulation
DOEn
GEAC
Committee
SBCC
Coordination Committee
PI
(R&D/Industry/Others)
FA
Public Institutions)

Government of India Department of Biotechnology Recombinant DNAAdvisory

Institutional Biosafety Committee Review Committee on Genetic

Department of Environment Genetic Engineering Approval

State Biotechnology

Principal Investigator

Funding Agency (Govt/Private &

# THANK YOU

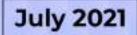


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# **BIOTECH-PRIDE**

(<u>P</u>romotion of <u>R</u>esearch and <u>Innovation through <u>D</u>ata <u>E</u>xchange)</u>

# GUIDELINES



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### डॉ0 जितेन्द्र सिंह

राज्य मंत्री (स्वतंत्र प्रभार), विज्ञान एवं प्रौधोगिकी मंत्रालय; राज्य मंत्री (स्वतंत्र प्रभार) पृथ्वी विज्ञान मंत्रालय; राज्य मंत्री, प्रधान मंत्री कार्यालय; राज्य मंत्री कार्मिक, लोक शिकायत एवं पेंशन मंत्रालय; राज्य मंत्री कार्मिक, लोक शिकायत थ्व राज्य मंत्री अंतरिक्ष विभाग भारत सरकार



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#### Message

The Government of India invests a large amount of public funds to generate data in various sectors, including in the biosciences for knowledge generation, to gain deep insights into intricate biological mechanism and other processes and for translation. The data generated from all sources within the country should be shared publicly and within a reasonable period of time of data-generation for effective utility and to accrue maximal benefit from investments in generation of data. Hence, it is also imperative that India puts the right framework to store, manage, archive and distribute all biological data generated in the country.

With this in view, and in conformity to the principles of NDSAP 2012, the Department of Biotechnology, Ministry of Science and Technology in consultation with all the relevant stakeholders have brought out the Biotech Promotion of Research and Innovation through Data Exchange (PRIDE) Guidelines. These Biotech- PRIDE GUIDELINES will enable storage, access and sharing of biological data in general and is specifically applicable to high-throughput, highvolume data generated in the country.

I congratulate all the members of the team who have brought out this document.

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#### Foreword

A wealth of information, representing scientific disciplines in the healthcare, genomics, proteomics, metabolomics, microbiomes, protein structures, natural compounds, agriculture and population genetics, is being generated in India. Modern sciences have become data intensive and data dependent, often requiring integrative analysis. However, in the absence of any central data framework for biological data generated in the country, both data sharing and data dependent research are restricted. Accordingly, the 'Biotech-PRIDE Guidelines' have been formulated for sharing a wide range of large scale data so as to understand the molecular and biological processes that will contribute to human health on agriculture, animal husbandry, fundamental research and thus will extend to societal benefits.

I congratulate all the domain experts, representatives from the Industries, concerned ministries and Govt. organizations for their participatory role which has led to formulation of this document on Biotech Promotion of Research and Innovation through Data Exchange (Biotech-PRIDE) Guidelines. I am confident that Biotech-PRIDE guidelines will facilitate and enable exchange of information to promote research and innovation in different research groups across the country. Also this guideline document mentions about the Indian Biological Data Centre (IBDC) which is an initiative of Department of Biotechnology. This Centre will serve as the national repository for deposition, storage, quality control and annotation of biological data and will also help in consolidation of past, current, and future biotechnology data for variety of applications.

(Dr. Renu Swarup)

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### PREFACE

Keeping in view the emphasis of the Government on engaging citizens in Governance Reforms, placing of non-strategic data in public domain and the provisions of RTI Act 2005 for empowering the citizens to secure access to information under the control of public authority leading to the transparency and accountability in the working of every public authority, the National Data Sharing and Accessibility Policy (NDSAP) has been published in March 2012. Sharing of data generated is important not just to allow access to other research groups but also to develop a strong research response ecosystem by allowing access to data to researchers and students from universities and laboratories across the country. Currently the biological data which is generated is deposited in International Repositories; moreover there are no guidelines which mandate this. The value of data and knowledge will be enhanced multifold if this is shared. Globally all major funding agencies and governments have well defined data sharing policies/guidelines for biological data deposit and sharing.

Biotech - PRIDE (Biotech - Promotion of Research and Innovation through Data Exchange) Guidelines of India are to facilitate and enable sharing and exchange of biological knowledge, information and data generated through research conducted within the country and is specifically applicable to high-throughput, high-volume data like nucleic acid and protein sequences generated by instruments like next-generation sequencers, microarrays and mass spectrometry; biomolecular structures as determined by X-ray crystallography, Nuclear Magnetic Resonance (NMR), CryoEM etc.; images of whole body (like CT scans, PET scans, X-rays and MRI images), organs and cells; and flow cytometry data. Sharing of 'sensitive data' as defined in the document is not allowed under these guidelines.

These guidelines do not deal with generation of biological data per se. These guidelines create an enabling mechanism to share and exchange information and knowledge that is produced/generated/submitted by the Data Producer/ Generator/ Submitter following relevant extant laws, rules, regulations and guidelines of Government of India (Gol). These guidelines have been harmonized with relevant extant norms of Gol.

Since the technology platforms for acquiring data along with the nature of data are changing rapidly and the related policies by other agencies are under consideration for approval by the Government of India, it is anticipated that this guidelines document will be reviewed periodically and modified as appropriate.

### ACKNOWLEDGEMENT

Data generated from one study can be utilized to explore other research questions and thus may result in amplifying the scientific value of data. With this in view, and in conformity to the principles of NDSAP 2012, the Biotech -PRIDE guidelines have been formulated through extensive Stakeholders and Inter-Ministerial Consultation for enabling the sharing, access and storage of biological data.

In the current scenario the biological data being generated is deposited in international repositories and there are no existing guidelines which mandate this. Hence, the formulation of Biotech Promotion of Research and Innovation through Data Exchange (Biotech-PRIDE) Guidelines has been an uphill task. The Department initiated steps towards formulation of the document on sharing and exchange of biological knowledge, information and data. A 'Zero Draft' was prepared by 'Working Group' comprising of Dr. Partha Majumder, NIBMG, Kalyani, Dr. Alok Bhattacharya, Ashoka University, Sonipat, Dr. Binay Panda, JNU, New Delhi, Dr. Ramesh Sonti, CCMB, Hyderabad and Dr. Yogesh Shouche, NCCS, Pune. We profusely thank the Working Group for taking first strides towards drafting of this document. The Advisory Committee chaired by Working Group and modified to the 'First Draft'. We are grateful to the Chair and members of the Advisory Committee for their kind suggestions and efforts throughout the journey for preparation of document.

The Draft was placed in the public domain for the comments from various stakeholders. Comments of concerned government agencies – DST; DSIR & CSIR; DARE & ICAR; DHR & ICMR; MoHFW; NBA; MoEFCC; MoES; Meity, MoH, Office of PSA and NITI Aayog were also sought. We sincerely acknowledge the constructive criticism and suggestions by each respondent which helped us to shape the document further.

The draft was modified, taking into cognizance the comments of public consultation and from concerned government agencies and all other stakeholders by the Inter-Ministerial Committee chaired by Dr. Renu Swarup, Secretary, DBT. We copiously thank the Chair and members of the Inter-Ministerial Committee for finalizing the document which has now been promulgated as Biotech-PRIDE Guidelines.

Last but not the least, untiring efforts and enthusiasm of the DBT team are to be put on record with high appreciations. The efforts of Dr. Shahaj Uddin Ahmed, Scientist 'E', Dr. A. Vamsi Krishna, Scientist 'E' and Dr. Onkar Nath Tiwari, Scientist 'E' in preparation of this document are commended. The efforts and zeal of Dr. Richi V Mahajan, Scientist 'C', are also appreciated. We further compliment the support extended by Mr. Ankit Agrawal and Ms Prachi Grover for designing of the document. Hard work of support staff in DBT is also acknowledged.

We express our sincere thanks and gratitude to everyone who has directly or indirectly contributed to this document.

Dr. Suchita Ninawe Adviser, DBT

## **ABBREVIATIONS**

BAM	Binary Alignment Map
BCF	Bit Clear File
BED	Browser Extensible Data
CEL	CIMFast Event Language file
CRAM	Challenge Response Authentication Mechanism
DBT	Department of Biotechnology
DHR	Department of Health Research
DNA	Deoxyribonucleic acid
dta	Defence Technology Security Administration
EXP	Protected mode executable program
GA4GH	Global Alliance for Genomics and Health
GBS	Genotyping by sequencing
GFF	General Feature Format
GoI	Government of India
IBDC	Indian Biological Data Centre
ICMR	Indian Council of Medical Research
MIMAG	Minimum Information on Metagenome Assembled Genomes
MIMARKS	Minimum Information on MARKer gene Sequence
MISAG	Minimum Information for Shotgun Assembled Genomes
NBA	National Board of Accreditation
NDSAP	National Data Sharing and Accessibility Policy
PCR-RFLP	Polymerase chain reaction-Restriction fragment length polymorphism
PRIDE	Promotion of Research and Innovation through Data Exchange
RNA	Ribo-Nucleic Acid
SGA	System Global Area
ТРМ	Trusted Platform Module
ТХТ	Text
VCF	Visual Component Framework

**BIOTECH-PRIDE GUIDELINES** 

### **1.INTRODUCTION**

#### **1.1** The necessity of data exchange and sharing and related issues

Sharing of data is encouraged as emphasized through an Indian National Data Sharing and Accessibility Policy (NDSAP) promulgated in 2012. The Government of India invests a large amount of public funds to generate data in various sectors, including in the biosciences for knowledge generation, to gain deep insights into intricate biological mechanisms and other processes and for translation. Unless the data is exchanged and shared with other research groups within a reasonable period of time after datageneration, the utility of the knowledge generated data will be constrained. Resultantly, accrual of benefit of public investment for the knowledge generation will be compromised. The necessity of data-sharing and exchange, is, therefore, to accrue maximal benefit from public investment in generation of knowledge and data. In India there is no specific guidelines for storage access and sharing of Biological data. The Biotech PRIDE Guidelines will facilitate this and enable exchange of information to promote research and innovation in different research groups across the country. The Biotech PRIDE Guidelines are applicable for all biological data generated through research conducted within the country. Major data types are given in section 3 of this document.

Maximal accrual of benefit from data is possible if there is a national repository (hub) of data that stores all biological data in its servers linked to various other centres/ datasets (spokes). The national repository will act as a facilitator responsible for access and sharing of Biological Knowledge, Information and Data. This document provides a framework and principles for exchange and sharing of data generated from all biological resources while protecting the rights of individuals and populations and without causing any harm to them. It also ensures benefit sharing arising due to the sharing of data generated from accessing biodiversity of the country. The data provider/ generator/ submitter and users shall be bound by the relevant extant laws, rules, regulations and guidelines of Gol.

### **1.2** Imperatives of data exchange and sharing

There are primarily four stake-holders of this resource – funders who help generate the resource, producers, individuals whose samples are used for data generation, and users of the resource. All four stake-holders must assume responsibility on how the data are exchanged and shared. There are many issues that must be taken into account while sharing public resource data.

Data-sharing must be done in a responsible manner. Modalities in which data are shared must protect privacy, confidentiality, security and should be non- discriminatory and fair, and no harm must be done to individuals as a result of human- data sharing. It should also honour relevant National and International agreements accepted by Gol on protection of rights on biodiversity and benefit sharing. The guidelines do not allow sharing of 'sensitive data'.

It is mandatory that the Data Generator/Provider/Submitter shall follow the relevant extant laws, rules, regulations and guidelines of Gol for data generation using 'Human' and 'Non-human' samples.

Responsible data-sharing implies that certain principles are to be followed. These include:

#### • Data quality, storage and security:

The quality of the data must be of a high standard, unbiased and verifiable. For the nonhuman data, it must be accompanied by minimum essential metadata as mentioned above. Metadata of the population must be available in case of mapping populations (such as recombinant inbred lines, F2 lines and others) along with phenotyping data. For genome-wide association studies (GWAS), the phenotypic data of the population under study must also be made available along with their metadata. The data submitter is responsible for ensuring high quality and authenticity of submitted data as per the defined standards for data ollection which are prescribed and regularly updated by the national repository. The storage must be done in a manner that protects privacy and confidentiality, and promotes ease of access, search and long-term maintenance. Appropriate security features must be embedded in the storage and access framework to avoid breach of data-trust. Features to enable tracing of chain of data access may be built-in. The storage and security guidelines must also address duration of data storage and accessibility. Mechanisms for obtaining feedback from resource users must be put in place in order to improve data quality, data access, data integrity and interoperability.

#### • Protection of privacy and confidentiality:

Shared data generated from humans must not include any personal identifiers and must have been collected with informed consent, including consent to share data after adequate anonymization/de-identification. Re-identification after anonymization/ de-identification must not be attempted, unless and until there is any legal order to do so. In addition, care must be taken to ensure that the data resource is not used to discriminate communities - ethnic, religious, geographical or any other. Appropriate ethical approval(s) need to be obtained by the data-submitter prior to data generation using human samples.

#### Transparency of guidelines:

Data-sharing guidelines must be transparent and must state in a publicly-accessible manner the guidelines of data transfer within and across national boundaries, with public and private organizations, for knowledge and commercial use.

#### Public engagement and complaints:

Citizens should be engaged in the development of data-sharing policies and modalities. The engagement should result in improvement of future guidelines. There should also be a formal mechanism to register complaints of data misuse and to handle such complaints.

### **1.3** Harmonization with international policies, ensuring that national policies supersede

Many international consultations have been held to establish and evolve norms, rules and regulations for sharing of biological information and data. These include the Bermuda Agreement, 1996; Fort Lauderdale Agreement, 2003; Nagoya Protocol on Access and Benefit Sharing, 2010, Guidelines of the Global Alliance for Genomics and Health (GA4GH), 2013 and the European Union's General Data Protection Regulation, 2016. This present framework on Biotech Resource Information and Data sharing respects and upholds the principles and tenets of the international discourses and agreements emphasizing the principle that data should be rapidly released and shared after generation. This framework is also in harmonization with the International Agreements in place, however, in a circumstance in which there is a misalignment of national and international policies, national policies and guidelines shall supersede.

### **2. DEFINITIONS**

'Access' means retrieval of information/ data by a user from a repository for research/ patient care/ commercial purpose.

'Anonymization' means the process of encrypting or removing all information that can identify an individual from the data.

**'Biological data**' means all information related to living organisms, including their nucleic acids, protein sequence, metabolites, and other molecular and functional characteristics.

**'Consent**' means expressed informed consent granted with full knowledge and understanding the nature, purpose and consequences of the collection, use, storage or disclosure of their data in any written/electronic/video form.

**'Custodian**' means the Data Centre that is responsible for storing the biological data, developing measures for safety, standards and quality for datasets and establishing detailed modalities for data access.

**'Data'** means a representation of information, numerical compilations and observations, documents, facts, maps, images, charts, tables and figures, concepts in digital and/or analog form.

**'Data repository'** or **'National Biological Knowledge, Information and Data Centre'** is a place for storage of all biological data and responsible sharing of the data with the user.

'Data storage' means retaining biological data in digital form on storage devices.

**'De-identification'** means the process of removing, obscuring, redacting or delinking all personally identifiable information from an individual's data in a manner that eliminates the risk of unintended disclosure of the identity of the individual.

'Metadata' means the information that describes the data source and the time, place, and conditions under which the data were created. Metadata informs the user of who, when, what, where, why, and how data were generated. Metadata allows the data to be traced to a known origin and know quality.

'**Processed data**' means the raw data that has been manipulated or modified to obtain certain information.

'**Producer or Generator or Submitter**' means those who are involved in generating and capturing data through automated and manual means.

'**Public funds**' means funds from any agency or autonomous body of the Government of India.

'**Public resource data**' means the data that has been generated to support development of research or any other public good.

**'Raw data'** means primary data collected from a source and not been modified or changed. For example, data coming out from a sequencing machine will be considered as raw data.

**'Reference data'** means data that are used for comparison and can be used as standards in further analysis. For example, a reference human genome is highly useful to find variants in analysis of patient genomic sequences.

**'Research data'** means data that is collected or created for purpose of analysis leading to understanding a scientific question.

'Security' refers directly to protection of data, and specifically to the means used to protect the privacy and use of data.

'Sensitive data' means data that are sensitive from a personal standpoint (e.g. racial or ethnic origin, some health or behaviour related data) or from a conservation viewpoint (metadata that reveals location of a rare and endangered species) or from a national security standpoint that is not publicly accessible and as defined in various Acts and rules of the Government of India.

'Sharing' means facilitating access and use by users.

'**Users**' means individuals or organizations who make use of the data by accessing data from a repository after obtaining necessary permissions, if required.

### 3. SOURCE AND TYPES OF DATA

### **3.1 Public Resource Data**

Individuals engaged in research on scientific or social problems generate biological data that are of interest to them. These data comprise a resource, but may not be of immediate use to others. Even so, the biological data must be shared in a timely manner, especially if the data were generated using public funds. On the other hand, many government agencies generate biological data that are not meant to answer an individual researcher's questions but to become a public resource. Such resource data include disease registry data, genome sequence data on members of various ethnic groups, crops/core collections of crops, animals, etc. Public resource data must be shared rapidly after generation and curation.

### 3.2 Major Data Types

It is almost impossible to define all biological data-types that are generated by the biotechnological methods. Data-types, particularly high-throughput data, also change with changing technologies. However, currently data can be classified into some broad and major types. These include, but are not to be considered as exhaustive.

**3.2.1 DNA sequence data** – Such data can be at the level of a whole genome, exomes, certain coding regions, DNA fragments or single genes. Such data can be a single sequence (such as, sequence data generated by a Sanger sequencer) or multiple fragmented sequences from a genomic region with a high depth of coverage (such as those generated by a massively-parallel DNA sequencer).

**3.2.2 RNA sequence transcriptomic data** – The nature of the data are similar to those generated by a massively-parallel DNA sequencer, since usually cDNA synthesis is performed before sequencing. However, recent technological developments allow single-molecule direct RNA sequencing without cDNA synthesis.

**3.2.3 Genotype data** – Modern methods use high-density microarrays to genotype individuals at a large number of loci spread across the entire genome. Genotyping by sequencing (GBS) is being increasingly used for genome wide association studies especially in plants. However, for various specific purposes, small-scale genotyping using PCR-RFLP and other similar technologies continue to be used.

**3.2.4 Epigenomic data** – These data are also primarily generated using high-through put methods analogous to a DNA microarray or DNA sequencing after suitable pre-processing.

**3.2.5** *Microbiome data* – These data are also nucleic acid sequence data and currently are of three major subtypes (a) Amplicon sequencing data from which specific groups of microrganisms present in any sample (e.g., human stool, soil, sediment, etc.) can be identified, or (b) Shotgun metagenomic sequence data that allows comprehensive assessment of all microbial organisms present in a sample and (c) genome sequences of individual isolates In addition, there is also data in the form of individual gene sequences used for Multi Locus Sequence Analysis and Multi Locus Sequence Typing, or for taxonomic purpose like 16S rRNA, gyrase and many other genes.

**3.2.6** *Protein Structure data* – Atomic coordinates and other information that describes a protein and other important biological macromolecules comprise such data. These data provide 3D shapes of proteins, nucleic acids, and complex assemblies that help understand various aspects of protein synthesis under different conditions.

**3.2.7** *Mass Spectrometry data* – Mass spectrometry is a key analytical technology in current proteomics and mass spectrometers are widely used to generate data that allow protein identification, annotation of secondary modifications, and determination of the absolute or relative abundance of individual proteins.

**3.2.8 Flow Cytometry data** – Flow cytometry is a technique used to detect and measure physical and chemical characteristics of a population of cells or particles. Flow cytometry data pertain to counts and multi-parameter profiles of different cells in a heterogeneous fluid mixture.

**3.2.9** *Imaging data* – Ilmages of individual cells, organs or body parts, for example, chest X-rays or images of human eyes or mouth cavity.

**3.2.10 Metabolome data** – Metabolomics is increasingly used to understand metabolite levels either independently or in relation to gene expression. It is also used in conjunction with microbiome data to better understand host- microbiome interaction. Small molecule metabolite patterns are generated using either LC MS or GC MS or CE MS.

Data on phenotypes (e.g. plant height, insulin level, morphology, biochemical and chemotaxonomic characters for microbes) on individual samples also comprise biological data. Further, for the purpose of interpretation of results of analyses of biological data, environmental exposure data (e.g., dietary pattern, level of air-pollution) may also be collected in research. These data may also be considered essential to be shared, if collected. Examples of some common high-throughput data levels are provided below.

### Levels of Data

**Raw (Level 1) Data:** First level data converted from raw images. Examples of Level 1 data are FASTQ/CSFASTA/HDF5/SSF files, intensity (idat) files along with the manifest (bpm/bgx/TXT) file for Illumina microarrays, EXP and CEL files for Affymetrix arrays, dta/pkl/ms2/mgf files for protein mass spec data, spectrum data for metabolites, TIFF/JPG/PNG files for images, higher level coordinates for 3D structures for biological macromolecules.

**Processed (Level 2) Data:** Raw (Level 1) data are curated, processed and analyzed to provide value- addition and to ease inferences. Examples of such data are BAM/CRAM/ FAST5/ProBAM files for sequencing, nmrML files for metabolite profiling experiments, CHP file for Affymetrix microarrays, gtc files for Illumina microarrays. Processing of raw or semi-processed data are done in a variety of ways. Examples of such higher-level processed data are VCF/BCF files for variants, TXT file with genes with analyzed expression values (FPKM/RPKM/TPM normalized BED files), BED/ ProBED files for genomics and proteomics data respectively, SGA/GFF files for chip-seq experiments.

**Metadata:** Examples of certain metadata include but not limited to gender, ethnic background, phenotype, demographic information etc. for human data; for non-human samples - Minimum Information on MARKer gene Sequence (MIMARKS), Minimum Information for Shot gun Assembled Genomes (MISAG) and Minimum Information on Metagenome Assembled Genomes (MIMAG) for metagenomics data. For non-human samples, the biological metadata must include passport data including family, genus, species, variety, accession number, geographic location from which isolated, etc.

### 4. DATA DEPOSIT STRATEGY AND TIMING

#### 4.1 Data Deposit and Timing

In current research and other scientific activities, large volumes of data are generated. These data comprise raw data that are produced by the various equipment that are used e.g. DNA sequencer, Flow cytometer, etc. The raw data are then processed and analysed by researchers to draw scientific inferences. When public funds are used to generate data, these data must be made accessible to others in a form that is valid and user-friendly. It is recognized that raw data can be deposited almost immediately after it is generated, but data-processing may take time and hence processed data may not become immediately amenable to deposit in the repository. Further, often there is no unique method of data-processing; methodological development may also be a part of data-processing.

It is the responsibility of the data-generator/producer/submitter to deposit data in an appropriate database in the notified Data Repository. However, depositing data in the national repository does not always mean that data will be available for sharing.

It is recommended that – when funds provided by any agency of the Government of India to generate data, either wholly or partially – such data after appropriate processing be shared in accordance with the following:

**4.1.1 Raw (Level-1) data** must be deposited, by placement on a database in the identified repository, within one year of generation of the data. Experimental conditions and specifications of the equipment used to generate these data (experimental metadata) shall also be deposited along with the raw data, where relevant.

Sometimes an agency of the Government of India funds activities that are solely devoted to data generation, usually for the purpose of generating a "reference" data set. When data from such a project are generated, these data must be deposited within six months of data-generation.

**4.1.2 Processed (Level-2) data** based on data generated wholly or partially with funding from Government of India must also be deposited. In recognition of the facts that (a) processing of data takes time, and (b) the research group that was funded to generate data and draw inferences from the data must be accorded the first right to publish the findings, it is recommended that processed data must be deposited with others within two years of data-generation.

#### 4.2 Deposit of Metadata

Use of certain types of data even if made publicly available may be of limited use unless some associated metadata are also made available. Such metadata include gender, ethnic background, phenotype, demographic information etc. Metadata must be deposited concurrently with other types of data (e.g., DNA sequence data) in order that the value of the released data is not diminished. Released metadata, alone or in combination with other data, must not enable identification of the individual to whom the data pertain. For non-human data, the passport data of the sample including place of collection must be provided so that appropriate communities can receive a share in the benefits that might accrue from any commercial applications that are derived by use of the data. It is extremely important that this information is made available at the time of data submission.

#### **4.3 Exemptions to Data Deposition**

Release of 'sensitive data' shall be exempted. Therefore, if an exemption to deposit of 'sensitive data' is requested, the request may be considered and granted

#### 4.4 Withdrawal of Data

Data withdrawal may be granted if the individual or the organization, whose data have been placed on a publicly accessible database, make a justified request either directly or through the submitter, with valid claims to the data. Such requests may be considered and granted provided that the data are identifiable in the database.

### 5. FRAMEWORK FOR DATA SHARING AND ACCESS

(a) Initially, these Guidelines will be implemented through Indian Biological Data Centre (IBDC) at Regional Center for Biotechnology supported by Department of Biotechnology. Other datasets/ data centres will be bridged to the IBDC which will be called Bio-Grid. The Bio-Grid will be a National Repository for all biological knowledge, information and data generated through research within the country and will be responsible for enabling its exchange to facilitate the Research and Innovation, developing measures for safety, standards and quality for datasets and establishing detailed modalities for accessing data.

The expansion of IBDC will be considered after assessing the volume of biological data in the country.

- (b) A Data Management Group under the guidance of Expert Advisory Committee will be responsible to put in place a responsive data sharing guidelines management and decision-making system in place. The implementation of the guidelines shall be overseen and administered by an Inter-ministerial National Steering Committee with Secretary DBT – Chair, Secretary DHR & Director General ICMR and Chairman NBA – Co-chairs, Representatives of all concerned government agencies (not below the rank of Joint Secretary) – Members, 4-5 Domain Experts. Ministry of Home Affairs shall be observer in the Inter-ministerial National Steering Committee to analyze datasets from the national security standpoint.
- (c) The modalities for data sharing shall be managed by the IBDC under three categories as follows:

#### • Open access:

Open access data are those which are intended to be shared openly by the data provider. All data, under 'open access' category, generated from public-funded research will be available to everyone (larger scientific community and public) under FAIR (findable, accessible, interoperable and reusable) principles. However, the user shall be bound by relevant extant national regulations, which he/she will have to agree to comply with at the time of downloading from the IBDC by electronically checking a box on the screen. Most data stripped of all personal identifiers and data that are not subjected to any intellectual property or patent restrictions should be covered under 'open access', especially if the data are generated using public funds. The data under open access category will also be available at <u>www.data.gov.in</u>

#### • Managed access:

Managed access data are those which are shared with specific restrictions imposed by the data producer/generator/submitter. In case of data generated using public funds, restrictions to access and use of such data are to be established by the funding agency before its deposition. If there are restrictions placed on the use of data, these restrictions must be made known publicly and adhered to. In 'managed access,' prior to any data download attempt, a written proposal shall be provided by the data- requester intending to download such data to the IBDC regarding use and downstream sharing of the data. The proposal will be considered for approval by the IBDC. The data downloader, prior to actual download, will be required to sign a data use and sharing agreement form.

#### No access:

Access to 'sensitive data' shall not be permitted, even if generated using public funds.

The sharable data from IBDC shall be available on an "as-is" "where-is" basis. The access to a data set may be periodically reviewed by the Data Management Group and the nature of access to the data set may be altered.

- (a) High standards and best practices should be used in generation, management and access to data. Data that are valuable in the long-term should be stored in a manner that these remain accessible for a long time.
- (b) The conduct of research must not be jeopardized by release of data. The research organization must ensure that due consideration is given to protect the interest of the data generator.
- (c) Data generator may require privileged use of the data. Therefore, the data generator may request exclusive access to the data and a reasonable period of moratorium to the IBDC before public release of the data. The period of moratorium may vary with the nature of the data and it is expected that data generated by public funds will be released without any significant time lag.

### **6. DATA USER AGREEMENT**

The National Repository – IBDC will be responsible for framing detailed Data User Agreement as appropriate for the category and type of data, and will operationalize data sharing.

### 6.1 Open Access Data

The following terms shall be included in the Data User Agreement:

**6.1.1 Acknowledging the data producer:** If the data-producer is identified in the database, then it is expected that the data user will adequately acknowledge the dataproducer in publications and such documents in which results generated from the data are announced.

**6.1.2 Intellectual property created from the shared data:** The onus of arriving at a decision on who has the right to hold intellectual property created from shared data will be on the national regulatory authorities and to a large extent will depend on prior intellectual property rights granted by regulatory authorities to others, notably the data-generator/ producer.

**6.1.3 Re-identification of individuals using shared human-data:** Re-identification is prohibited and appropriate reprimands or legal provisions will be imposed by appropriate statutory or legal bodies.

### 6.2 Managed Access Data

In addition to the terms mentioned under 6.1, the following terms shall be included in the Data User Agreement:

**6.2.1 Purpose of access**: The data-requester must apply for access and use of 'managed access' data.

**6.2.2 Competence of data-user requesting data access**: The data provider shall assess the competence of the data-requester to responsibly use the data for the purposes described by the data-requester before access to the data is provided.

**6.2.3 Authority designated to sign on behalf of the data user**: Unless otherwise stated, normally the head of the institution to which the data- user belongs or a designated nominee shall sign applications and other documents pertaining to data access and use on behalf of the data-user.

**6.2.4 List of users authorized to access the data**: Access to managed- data shall normally be given to a one or a small number of users of an institution. The list of individuals who plan to access and use the data shall be provided on the application for data-access. The data- management group shall examine the list of possible users and their levels of competence before providing approval to data-access.

**6.2.5 Duration of data access**: The duration may be variable depending on intent of use of the managed data. The duration for which access is requested must be specified in the application and the data-management group may examine the appropriateness of the duration for which managed data-access is requested before approval.

**6.2.6 Renewal of data access:** A fresh application must be submitted to the datamanagement group, in which the past use of the data and the future intended use shall be clearly described and justified. No access would be granted for unlimited time without renewals.

**6.2.7 Confidentiality and security of shared data**: The application for data- access must clearly describe the plan to uphold the confidentiality of the data and the security of the data to prevent access by unauthorized users.

### 6.3 Duration of Data Access

There is no upper limit to the duration of access to open-access or managed-access data and The duration may be variable depending on intent of use of the data. However, technologies (e.g., data storage space) may be the determining factors to limit the duration of access. It may also be noted that data categories are not static; managed-data at a point of time may be declared, by relevant statutory authorities, as open data and no-access data may be declared as managed-access data. The duration for which access is requested must be specified in the application and the data-management group may examine the appropriateness of the duration for which data-access is requested before approval.

# 7. AUDIT AND LEGAL ISSUES

Data will remain the property of agency/ Department/ Ministry/ entity which is responsible for its collection and reside in their IT enabled facility for sharing and providing access. Access to sharing of data under these guidelines will not be in violation of any act and rules of GOI in force. Report of any breach in data-access or data-usage shall be appropriately dealt within the Legal framework of NDSAP published by GOI vide Gazette notification No. DL(N)-04//0007/2003-05 dated 23rd March 2012

### **ANNEXURE-I**

The Advisory Committee constituted by the Department of Biotechnology vide OM No.BT/Data Policy/2019 dated March 19, 2019 and reconstituted on July 9, 2019

1.	Dr. G. Padmanaban, IISc., Bengaluru	Chairman
2.	Dr. Partha Majumder, NIBMG, Kalyani	Co-chair
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	Dr. Anurag Agarwal, IGIB, Delhi	

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28. Dr. Vamsi K. Addanki, Scientist 'E', DBT	Co-Member Secretary
29. Dr. Shahaj Uddin Ahmed, Scientist 'E', DBT	Co-Member Secretary
30. Dr. Onkar Nath Tiwari, Scientist 'E', DBT	Co-Member Secretary

## **ANNEXURE-II**

The Inter-Ministerial Committee constituted by the Department of Biotechnology vide OM No.BT/Data Policy/2019 dated July 9, 2019

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14.	Dr. Alok Bhattacharya, Ashoka University, Sonepat	Member
15.	Dr. Binay Panda, Ganit Labs, Bangaluru	Member
16.	Dr. Ramesh Sonti, NIPGR, New Delhi	Member
17.	Dr. Yogesh Shouche, NCCS, Pune	Member
18.	Dr. Suchita Ninawe, Adviser/Scientist G, DBT	DBT Coordinator
19.	Dr. Vamsi K. Addanki, Scientist 'E', DBT	Co-Member Secretary
20.	Dr. Shahaj Uddin Ahmed, Scientist 'E', DBT	Co-Member Secretary
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## National Guidelines for Stem Cell Research



Indian Council of Medical Research & Department of Biotechnology



### National Guidelines For Stem Cell Research



Indian Council of Medical Research & Department of Biotechnology 2017



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### FOREWORD

Responsible research must focus on harnessing the potential of science to improve our understanding of human health and illness, as well as discover newer ways to prevent and treat illness. Fundamental research in the field of stem cells has taken a big leap globally in the past two decades. The excitement that this emerging area of biomedical research once generated is still alive today. Though, the expectation that it would be a panacea for all ills has not been met. Scientists across the world are working on improving existing technologies and at the same time developing novel ones for creating safer products for potential human use. The most recent and vehemently debated example is that of using the gene editing technology to cure genetic disorders. The last decade has also witnessed a spurt in translational research using different types of stem cells. It was hoped that like the well-established hematopoietic stem cell transplantation (HSCT) with clearly defined clinical indications, other stem cell based therapies too will be integrated into routine clinical practice. However, this did not happen due to lack of systematic clinical research using common protocols and objective outcome evaluation. This still remains the major impediment in the process of translation from the bench to bedside.

Parallel to these scientific developments, the field is unfortunately witnessing rampant malpractice, posing challenges for the regulatory authorities worldwide. In India too, science and the medical practice is at the crossroad. Clinical research is struggling to cope with the regulatory requirements, industry sponsored clinical research is gaining momentum, but seeks greater clarity and direction. Meanwhile, unscientific or unethical stem cell therapy continues to pose a threat to the well-being of patients and other vulnerable individuals. In the prevailing scenario, one may question, if our regulatory framework and mechanisms can keep up with the rapid pace of changes in stem cell research and ground realities. The relevant government agencies have taken cognizance of these challenges, and are evolving systems to address them. There is continuous endeavor to actively engage with all stakeholders and come up with timely and suitable reforms.

Different government agencies have facilitated establishment of state-of-the-art infrastructure for basic and clinical research. To further engender an enabling environment for clinical research, proactive steps have been taken to expedite regulatory approvals. Cell Biology Based Therapeutic Drug Evaluation Committee (CBBTDEC) was constituted in 2010 by Central Drugs Standard Control Organization (CDSCO) to review cell therapy based clinical trials. Further, the Apex Committee of CDSCO recently recommended that the Investigational New Drug proposals evaluated by CBBTDEC shall be directly placed before the Apex Committee without going through the Technical Committee as was required earlier. Another milestone has been provision of conditional approval of cell based products for unmet needs, if the process or product is demonstrating substantial safety and efficacy trends.

We are committed towards stem cell treatments that are safe and have proven efficacy. The Guidelines for Stem Cell Research and Therapy in 2007 was a step towards this commitment, which were revised after public consultations and released as National Guidelines for Stem Cell Research (NGSCR-2013). The National Guidelines for Stem Cell Research, 2017 is an outcome of concerted efforts of different stakeholders. It has been formulated taking into account several new scientific and technical advancements as well as the perceived challenges in the field. Efforts were made to bring together all concerned ministries/agencies to chalk out strategies to curb rampant unethical practices of banking and therapeutic application. The recommendations of the Inter-Ministerial/Inter-Agency meetings have helped to shape these guidelines. Detailed and extensive consultation with stakeholders were held and their suggestions taken into account before finalization. Most importantly, the guidelines have been harmonized with existing rules and regulations resulting in a comprehensive document.

The 2017 guidelines, reiterate that any stem cell use in patients, other than that for hematopoietic stem cell reconstitution for approved indications, is investigational at present. Accordingly, any stem cell use in patients must only be done within the purview of an approved and monitored clinical trial with the intent to advance science and medicine, and not offering it as therapy. In accordance with this stringent definition, every use of stem cells in patients outside an approved clinical trial is unethical and shall be considered as malpractice. The document provides important definitions for and elaborates upon levels of manipulations; category of research (permissible, restrictive or prohibited); manufacturing process; release criteria among others. A list of approved indications for HSCT has been provided. The mechanism for review and monitoring of clinical research has been strengthened by making CDSCO approvals mandatory prior to initiation of any clinical trial. Some major amendments include: mandatory registration of Institutional Committee for Stem Cell Research (IC-SCR) and Institutional Ethics Committee (IEC), with National Apex Committee for Stem Cell Research and Therapy (NAC-SCRT) and CDSCO respectively; undertaking clinical trials only at institutes with registered IC-SCR, IEC, and only at Good Manufacturing Practice (GMP) and Good Laboratory Practice (GLP) certified facilities; research undertaken by medical professionals registered with the Medical Council Of India (MCI) and an MCI approved post graduate gualification in the domain area of the specific trial.

India has a large unmet medical need, which requires facilitation of safe and regulated translational and clinical stem cell research. In framing this guidance document, utmost care

has been taken to ensure that giving an impetus to stem cell research does not in any way compromise the safety of patients and vulnerable individuals. Also, going forward, sustained efforts will be made to proactively engage with all stakeholders to incorporate appropriate and timely revisions as per needs of this ever evolving area of research.

K. Vijayller

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Dr. Soumya Swaminathan Secretary Department of Health Research Ministry of Health & Family Welfare & Director General, Indian Council of Medical Research

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The extensive workout for the Guidelines for Stem Cell Research and Therapy, 2007 started with the constitution of Drafting Committee with eminent guidance of Late Prof. Shyam Agarwal and Prof. Avinash Bhisey under the leadership of Dr. Vasantha Muthuswamy. We shall always be grateful to this group of experts for giving first most comprehensive guidance document for researchers and clinicians of India. It is again a great feeling of gratitude towards them for guiding and steering the public consultations that led to reshaping the guidelines to National Guidelines for Stem Cell Research, 2013. Here we would categorically acknowledge Late Prof. Shyam Agarwal for providing foresightedness to the document and safeguarding the rights of the human participants.

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# ABBREVIATIONS

AE	-	Adverse Event
ASCI	-	Advertising Standards Council of India
BSE	-	Bovine Spongiform Encephalopathy
CAP	-	College of American Pathologists
CD	-	Cluster Differentiation
CDSCO	-	Central Drugs Standard Control Organization
CEO	-	Chief Executive Officer
CMC	-	Chemistry, Manufacturing and Control
CME	-	Continuing Medical Education
CSO	-	Chief Scientific Officer
COI	-	Conflict of Interest
CPCSEA	-	Committee for the Purpose of Control and Supervision of Experiments on Animals
CRISPR	-	Clustered Regularly Interspaced Short Palindromic Repeats
CSIR	-	Council of Scientific & Industrial Research
CTRI	-	Clinical Trial Registry India
BM	-	Bone Marrow
DAE	-	Department of Atomic Energy
DBT	-	Department of Biotechnology
DHR	-	Department of Health Research
DGFT	-	Directorate General of Foreign Trade
DGHS	-	Directorate General of Health Services
DNA	-	Deoxy-ribonucleic Acid
DRDO	-	Defence Research and Development Organization
DSIR	-	Department for Scientific & Industrial Research
DSMB	-	Data Safety Monitoring Board
DST	-	Department of Science and Technology
EBV	-	Epstein–Barr Virus
ELISA	-	Enzyme-Linked Immunosorbent Assay
FACS	-	Fluorescence Activated Cell Sorting
GCP	-	Good Clinical Practice
GLP	-	Good Laboratory Practice

GMP	-	Good Manufacturing Practice
GTP	-	Good Tissue Practices
ESC	-	Embryonic Stem Cells
Hb	-	Hemoglobin
hESC	-	Human Embryonic Stem Cells
HBV	-	Hepatitis B Virus
HCV	-	Hepatitis C Virus
HIV	-	Human Immunodeficiency Virus
HLA	-	Human Leukocyte Antigens
HMSC	-	Health Minister's Screening Committee
HSC	-	Hematopoietic Stem Cell
HSCT	-	Haematopoietic Stem Cell Transplantation
IAEC	-	Institutional Animal Ethics Committee
IBSC	-	Institutional Biosafety Committee
IC-SCR	-	Institutional Committee for Stem Cell Research
ICM	-	Inner Cell Mass
ICMR	-	Indian Council of Medical Research
ICSI	-	Intra-cytoplasmic sperm injection
ICF	-	Informed Consent Form
ID	-	Identity Document
IEC	-	Institutional Ethics Committee
IMA	-	Indian Medical Association
IND	-	Investigational New Drug
INE	-	Investigational New Entity
IPR	-	Intellectual Property Rights
iPSC	-	Induced Pluripotent Stem Cells
IVF	-	In vitro Fertilization
MCI	-	Medical Council of India
MD	-	Managing Director
MNCs	-	Mono Nuclear Cells
MOU	-	Memorandum of Understanding
MSC	-	Mesenchymal Stem Cells
MTA	-	Material Transfer Agreement
MTP	-	Medical Termination of Pregnancy

NABL	-	National Accreditation Board for Testing and Calibration Laboratories
NAC-SCRT	-	National Apex Committee for Stem Cell Research and Therapy
NBE	-	New Biological Entity
NGSCR	-	National Guidelines for Stem Cell Research
NOAEL	-	No Observed Adverse Effect Level
NOC	-	No Objection Certificate
QA	-	Quality Assurance
QC	-	Quality Control
PBSCs	-	Peripheral Blood Stem Cells
PCR	-	Polymerase Chain Reaction
PSC	-	Pluripotent Stem Cell
RCGM	-	Review Committee on Genetic Manipulation
RHS	-	Railway Health Services
R&D	-	Research and Development
SAE	-	Severe Adverse Event
SCNT	-	Somatic Cell Nuclear Transfer
SOP	-	Standard Operating Procedures
SSCs	-	Somatic Stem Cells
SVF	-	Stromal Vascular Fraction
TOP	-	Termination of Pregnancy
UCB	-	Umbilical Cord Blood

## 1. Preamble

In recent years, stem cell research has emerged as an important area of biomedical science. It has potential applications in varied areas of biomedicine including developmental biology, disease modelling, tissue engineering, drug development, toxicity testing. Use of stem cells in regenerative medicine holds promise for improving human health by restoring the function of cells and tissues that are damaged due to degeneration and/or injury. Like all other medical innovations, basic and translational research in the field not only requires a sound scientific rationale, but also needs to take into consideration ethical, legal and social norms. Apart from challenges of selecting the appropriate stem cells for a particular condition, there are important concerns related to the use of embryos for creating human embryonic stem cell (hESC) lines as these may lead to commoditization of human cells and tissues. Further, there are challenges related to gene editing/modification, human germ-line engineering and reproductive cloning. Besides, the robust technologies are being developed for deriving pluripotent stem cells from a variety of sources which may be easily accessible for clinical applications, often without rationale. The potential danger of tumorigenicity of stem cells, considering their capacity for unlimited proliferation, possible risk of contamination and genomic changes arising due to in vitro manipulations, and limitations related to immunological tissue incompatibility between individuals are all areas of serious concern. All of these pose an inherent risk of exploitation of individuals particularly those belonging to the underprivileged groups. Hence the guidance for stem cell research, development and its possible application in the frame of clinical trial is felt essential.

Stem cells and their derivatives fall under definition of 'Drug' as per the Drugs and Cosmetics Act 1940, and are categorized as 'Investigational New Drug (IND)' or 'Investigational New Entity (INE)' when used for clinical application. Hence the principles of bioethics and regulation must be followed accordingly before initiating clinical trials. Adequate safeguards must be in place so that recipients of these cells in clinical trials are fully protected. Societal concerns regarding compensation for research related injuries and unforeseen adverse effects are additional concerns that need to be adequately addressed.

Last decade has witnessed a proliferation of indiscriminate use of stem cell based therapies without establishing either their safety or therapeutic efficacy has led to the exploitation of vulnerable patients. This has the risk of adversely affecting patients both in terms of their well being and their economy.

The National Guidelines for Stem Cell Research (NGSCR)-2017 takes into consideration all of the above mentioned issues. The guiding philosophy of the document is prevention of premature commercialization of unproven stem cell therapies and generation of new knowledge based on sound scientific rationale while addressing all ethical concerns.

## 2. Aims and Scope

These guidelines are applicable to all stakeholders including individual researchers, organizations, sponsors, oversight/regulatory committees and all others associated with both basic and clinical research involving any kind of human stem cells and their derivatives. The guidelines do not apply to research using non-human stem cells and their derivatives. Further, these do not apply to use of hematopoietic stem cells for treatment of various haematological, immunological and metabolic disorders since these have already been established as a standard of medical care. Protein rich plasma (PRP) and autologous chondrocyte/oteocytes implantation does not fall under the purview of these guidelines as they are categorised as other cell based applications and not stem cell transplantation.

The guidelines reiterate that the general principles of ethics for biomedical research involving human participants shall also be applicable. In addition, the guidelines specify unique provisions for stem cells, because of their inherent property for unlimited proliferation, differentiation to cells of the germ layers, oncogenic potential, unrecognised toxicities and possible involvement in pre-implantation stages of human development.

The guideline therefore focuses on:

- 1. Monitoring mechanism and regulatory pathway for basic, clinical research and product development based on categories of research and level of manipulation.
- 2. Procurement of gametes, embryos and somatic cells for derivation and propagation of any stem cell lines, their banking and distribution.
- 3. Other important areas like international collaboration, exchange of cell/lines and education for stakeholders and advertisement.

The guidelines have been laid down to ensure that all research with human stem cells is conducted in an ethical and scientifically responsible manner. All stakeholders are required to comply with all regulatory requirements pertaining to biomedical research in general and stem cell research in particular.

It is important to recognize that this is a rapidly evolving field; hence the guidelines will be updated at regular intervals. It is the responsibility of the researcher and members of the Institutional Review Committees to understand the basic principles of these guidelines and keep themselves abreast with the current guidelines and regulations in the country, and ensure compliance.

## 3. General Principles

Research on human participants involving cells and tissues derived from human embryos, fetuses or any other sources must safeguard human rights, safety, dignity, and fundamental freedom. This includes processes related to obtaining human tissues/cells for research, diagnosis and clinical trials. It is important that the fundamental tenets of beneficence, non-malfeasance, justice and autonomy are adhered to for any research involving human participants. Research involving the use of stem cells must be conducted under specific requirements and guidelines related to these cells as described in Section 4.

It is equally important to follow the general principles as laid down in the National Ethical Guidelines for Biomedical and Health Research Involving Human Participants, 2017.

The General Principles of these are highlighted below:

- Principle of Essentiality
- Principles of Voluntariness
- Principle of Non-exploitation
- Principle of Social Responsibility
- Principle of Ensuring Privacy and Confidentiality
- Principle of Risk Minimization
- Principle of Professional Competence
- Principle of Maximization of Benefit
- Principle of Institutional Arrangements
- Principle of Transparency and Accountability
- Principle of Totality of Responsibility
- > Principle of Environmental Protection.

# 4. Ethical and Scientific Considerations Determining Specific Requirements Related to Stem Cell Research:

Stem cells are unique in many ways. While they present several potential clinical benefits as reported through controlled clinical trials, there are equally unforeseen hazards for their use. However, the biological properties of these cells and the effect of their processing and *ex vivo* handling raise specific concerns. Of these major are specific to their collection, processing, storage and use for clinical applications. It must be understood that the donor has the exclusive right to get apprised of all details related to his/her health and safety. The considerations include the following:

## 4.1 Ethical Consideration

#### 4.1.1 Health, Safety and Rights of the Donor

Prior to procurement of biological material for isolation of stem cells, it is mandatory to obtain informed consent from the voluntary donor. This shall include video consent as per the CDSCO guidelines for audio-visual recording dated 9<sup>th</sup> January 2014 (schedule Y). The researchers and stakeholders are expected to follow the ethical principles defined in Section 3 above. The donation of gametes, embryos and fetal tissues raise special ethical and moral concerns; hence it is necessary to ensure that the donors are neither exploited nor commoditized. While confidentiality and privacy are sacrosanct, the researcher shall ensure that provisions are in place for traceability in a contingency situation.

- 4.1.1.1. The donor must be informed about the need for screening of transmittable diseases (about which s/he may or may not be aware of) and of any other risk factors including possible genetic disorders as is practised for blood and other organ/tissue/cells donation.
- 4.1.1.2. Further, procedural risks involved during collection of organ/tissue/ cells (e.g. ovum, bone marrow etc), under local or general anesthesia should be adequately explained. These details must be included in the information sheet and should be understood by the donor in his/ her preferred language.
- 4.1.1.3. The donor shall also be informed that under exceptional circumstances, cell lines/products may be generated from the donated material and that these may be banked and shared with other scientific groups.
- 4.1.1.4. The cell lines/products may also undergo genetic manipulation and have the potential for commercialization. In the latter event, the Intellectual Property Rights (IPR) of the biological material will not vest with the donor. However, if commercialization brings any benefits, say financial, efforts should be made to pass on the same to the donor/community wherever possible.
- 4.1.1.5. The donors should be made aware that they may be contacted in future for any specific requirements.
- 4.1.1.6. The inclusion and exclusion criteria for selection of an individual to be a donor along with various laboratory investigations required are given in *Annexure IV*.

#### 4.2 Scientific Considerations

#### 4.2.1 Manufacture and Quality Assurance of Stem Cell and its Products/Derivatives

It is now being universally accepted that human adult tissues have an inherent population of stem cells. To obtain these cells in large numbers, some degree of processing, enrichment and/or *in vitro* expansion may be necessary. Such manipulations may also be needed to enhance their utility. One of the challenges in testing the potency of stem cells is the lack of suitable animal model system. Accordingly, innovative surrogate assays are needed for the purpose. It is mandatory that the stem cells or their products/derivatives are processed in CDSCO licensed Good Manufacturing Practices (GMP) compliant facility. *Annexure V* provides details on the requirements for manufacturing of stem cells and their derivatives.

- 4.2.1.1 Pluripotent stem cells carry additional risks due to their inherent property of ability to differentiate into cells of all three germ layers. These include ability to acquire mutations when maintained for prolonged periods in culture, to grow and differentiate into inappropriate cellular phenotypes, to form benign teratoma or malignant outgrowths, and to fail to mature. These confer additional risks to patients/individuals. Accordingly, appropriate measures should be taken and proper investigations performed to ensure that the stem cell derived product is safe for human application.
- 4.2.1.2 Factors that could confer risk to the patients/human participants from transplantation of cells are differentiation potential, source (autologous, allogeneic), type of genetic manipulation (if any), homologous versus non-homologous or ectopic use, their persistence in the receipients, and their possible differentiation into tissues or organs.
- 4.2.1.3 For cryopreserved or otherwise stored products, possible impact of short or long-term storage on product viability and potency must be determined.
- 4.2.1.4 The rigor of quality control and quality assurance (QC/QA) for product development including cell processing and manufacturing stages is critical and should be compliant with requirements as per Schedule M of Drugs and Cosmetics Act, 1940 and rules therein. This is mandatory for all clinical trials.

### 4.2.2 Release Criteria

Stem cells or their products intended for administration in humans as a part of clinical trial should fulfil the quality criteria as defined in *Annexure VI*. These include cell viability, final cell population (using CD markers), stability and requirements for release.

- 4.2.2.1 All stem cells or their products should have proper labelling before release.
- 4.2.2.2 It is necessary that the product is sufficiently stable for the duration as required for the study.
- 4.2.2.3 All procedures shall be laid down in the form of SOPs and strictly adhered to, so as to provide reproducibility of well characterized clinical grade cells that meet the desired standards of identity, purity, safety, potency and traceability.
- 4.2.2.4 The infrastructure facility shall be duly certified by CDSCO, and submit the CMC (Chemistry, Manufacturing and Control) documents for necessary regulatory approvals.

### 4.2.3 Evidence Based Applications

At present there is lack of solid scientific evidence to substantiate the clinical efficacy of stem cells in a disease state other than their use for hematopoietic stem cell transplantation (HSCT) for approved indications as listed in *Annexure III*. Accordingly, the commercial use of stem cells as elements of therapy is prohibited. It must be emphasized that no stem cell administration to humans is permissible outside the purview of clinical trials. The protocol should be designed carefully with well defined primary and secondary end-points. The follow-up period should be at least two years. It could even be longer depending on the type and source of cells used, the intended clinical application and age and gender of the recipient. It is essential that stakeholders involved in such clinical trials are fully conversant with the current regulations and best international practices in the field including provisions for GMP and Good Clinical trial should not be charged for any procedure(s) related to the trial including hospital stay and laboratory investigations.

#### 4.2.4 Intellectual Property Rights and Social Responsibility

Outcome of research on stem cells/lines and/or application of their products/ derivatives may have commercial value. The option of sharing IPR should be indicated in the informed consent form. It is expected that a proportion of the benefit accruing from commercial use of donated tissue/cells will be returned to the community (the word "community" here refers to all potential beneficiaries including patient/s, which has directly or indirectly contributed to the product) as per the norms.

## 5. Mechanism for Review and Oversight

In recent years, stem cell research has made rapid strides raising both hope and hype in the public mind, particularly among patients suffering from incurable diseases. However, research in the field is associated with unique ethical, legal and social concerns that require additional oversight and expertise for efficient scientific and ethical evaluation.

- 5.1 A separate mechanism for review and monitoring is essential both at institutional and national levels.
- 5.2 A National Apex Committee for Stem Cell Research and Therapy (NAC-SCRT) has been established. It monitors and oversees research activities at the national level and lays guidelines for basic and clinical research.
- 5.3 The Institutional Committee for Stem Cell Research (IC-SCR) approves and monitors stem cell research (basic and clinical) at the institutional level.
- 5.4 The composition, functions and responsibilities of NAC-SCRT and IC-SCR are given in *Annexure 1*. These oversight committees shall ensure that the review, approval and monitoring processes of all research projects in the field of stem cell research is conducted in compliance with the national guidelines.
- 5.5 It is mandatory for all institutes and entities engaged in stem cell research to establish an IC-SCR and register the same with NAC-SCRT.

## 6. Stem Cells Classification

Based on the cell type/tissue of origin, stem cells are classified as 'Somatic Stem Cells' (SSCs), and 'Embryonic Stem Cells' (ESCs). SSCs may have a limited capacity of differentiation and may be multipotent or unipotent, whereas ESCs are pluripotent. The pluripotent stem cells can also be generated in the laboratory by reprogramming somatic cells, and the products thus generated are referred to as 'Induced Pluripotent Stem Cells (iPSCs)'. The regulatory requirements for research on each of these stem cells depend on their origin and potency.

Stem cells are classified and defined as:

**6.1 Somatic Stem Cells (SSCs)** are the resident, self-renewable population of cells that are present virtually in all organs/tissues of the body. They are essentially undifferentiated,

resident in differentiated tissues and are committed to the lineage of that organ. They may, however, have limited plasticity.

- 6.1.1 SSCs could be obtained from different sources, for example the fetus, umbilical cord, placenta, infant, child or adult; and from different organs/tissues. These may vary in their proliferative and differentiation potential.
- 6.1.2 The SSCs in bone marrow, skin and gastrointestinal tract divide continuously and differentiate throughout life, but in other organs they remain dormant until required for repair and replacement.
- 6.1.3 SSCs are generally present in relatively low numbers in most tissues. They may need enrichment and expansion before use. The investigator must take into account the following points and take appropriate precautionary measures to avoid the risks involved:
  - 6.1.3.1 Prolonged cell culture/expansion carries the risk of contamination with microorganisms/infectious agents and potential genomic alterations.
  - 6.1.3.2 Cells, culture media and other ingredients may carry the additional risk of inducing immune reactivity.
  - 6.1.3.3 Cells, supplements or reagents of animal origin could introduce xenogeneic pathogens.
- **6.2 Pluripotent Stem Cells** have the ability to differentiate into derivatives of all three germ layers, viz., ectoderm, mesoderm and endoderm, but not placenta.
  - **6.2.1 Embryonic Stem Cells (ESCs)** are derived from pre-implantation embryos (blastocysts). Those derived from embryos before differentiation of trophoectoderm and inner cell mass (i.e. morula stage) are truly totipotent, capable of giving rise to the entire organism including extra-embryonic tissues. ESCs derived from the inner cell mass (ICM) are pluripotent (not totipotent).
  - **6.2.2** Induced Pluripotent Stem Cells (iPSCs), as the name suggests are pluripotent in nature, quite similar to the ESCs. They are capable of indefinite expansion and differentiation into ectodermal, mesodermal and endodermal cells. The iPSCs can be generated from somatic cells by a variety of genetic and epigenetic methods.
  - 6.2.3 Both ESCs and iPSCs, including their derivatives, can be maintained and expanded as pure population of undifferentiated cells. Under appropriate conditions of stimuli, they can be differentiated into lineage-specific progenitors e.g. neurons, cardiomyocytes and other cell types.
  - 6.2.4 The ESCs and iPSCs have tumorigenic potential which could be a major safety concern during clinical application of these cells.

6.2.5 The concerns raised in Clause 6.1.3 for SSCs are also applicable for ESCs and iPSCs.

## 7. Levels of Manipulation

Stem cells, whether autologous or allogeneic, require variable degree of *in vitro* or *ex vivo* processing before their use for clinical application/transplantation/translational research (Section 11). This carries the risk of contamination and may also lead to alteration in their properties which may vary according to the degree and type of manipulation. The investigators should follow the requirements as given in Section 11. All laboratory procedures should be carried out under aseptic conditions in a CDSCO certified GMP (schedule M) and GLP (schedule L 1) facility for human applications. For preclinical studies on animals, the laboratory should have GLP certification from the Department of Science and Technology (DST).

This section describes different levels of manipulation used for stem cells and necessary approvals required for the same:

- **7.1** Minimal Manipulation: This refers to the situation where the processing neither alters the number nor the biological characteristics and function of the cells (or tissue) relating to their utility for reconstruction, repair or replacement.
  - 7.1.1 Processing includes simple isolation/separation, washing, centrifugation and suspension in culture medium/reagents, cutting, grinding, shaping, overnight culturing without biological and chemical treatment, decellularization and cryopreservation for a period not exceeding 72 hours.
  - 7.1.2 Clinical application using such cells requires the IC-SCR, IEC and CDSCO approvals if these are meant for homologous use for unapproved indications.
     For example, use of bone marrow/peripheral blood/umbilical cord blood derived mononuclear cells/bone marrow concenterate using any device by intravenous route for clinical indications other than those listed (*Annexure III*).
  - 7.1.3 If the minimally manipulated cells are to be used for non-homologous purposes, approval from CDSCO is mandatory apart from those from the IC-SCR and IEC before initiating any clinical application.

For example, use of bone marrow/peripheral blood/umbilical cord blood derived mononuclear cells//bone marrow concenterate using any device by any route of administration other than intravenous for neurological, musculo-skeletal, liver and cardiovascular disorders and any other similar examples.

7.1.4 If cells/tissues are removed and implanted into the same individual during the same surgical procedure within a single operation, it should not undergo processing steps beyond centrifugation/rinsing/cleaning/sizing.

- **7.2** Substantial or More than Minimal Manipulation: This is defined as *ex vivo* alteration in the cell population (enhancement or depletion of specific subsets), expansion, cryopreservation or cytokine based activation, but one that is not expected to result in alteration of cell characteristics and function.
  - 7.2.1 Clinical trials using cells that have undergone more than minimal manipulation require approvals from CDSCO only after obtaining clearences from IC-SCR and IEC.

For example, adipose tissue may be more than minimally manipulated if the processing alters the original relevant characteristics of the tissue relating to its utility for reconstruction, repair, or replacement. Adipose tissue is sometimes processed by various means (e.g. enzymatic digestion, mechanical disruption etc.) to isolate its non-adipocyte or non-structural components. In some instances, these non-adipocyte or non-structural components are cultured and expanded. Processing to isolate non-adipocyte or non-structural components e.g. Stromal Vascular Fraction (SVF) from adipose tissue (with or without subsequent cell culture or expansion) is considered more than minimal manipulation. Clinical trials using SVF will therefore require approval by IC-SCR, IEC and CDSCO.

- **7.3** Major Manipulation: This refers to the genetic and epigenetic modification of stem cells, transient or permanent, or of cells propagated in culture leading to alteration not only in their numbers but also biological characteristics and function.
  - 7.3.1 This includes trans-differentiation, transduction/transfection by retro/lenti viruses or other gene delivery vehicles to achieve specific selection and expansion of cells of interest. These alterations may also be carried out at transcriptional or translational level. The process also includes regulated lineage specific differentiation of human ESCs and iPSCs into the desired cell types.
  - 7.3.2 Use of stem cells which have undergone major manipulation shall require approval of CDSCO after obtaining approval from NAC-SCRT through IC-SCR and IEC prior to initiation of clinical application.

## 8. Categorization of Research

The stem cell research could be basic and/ or translational (preclinical and clinical research) as described in Sections 10 and 11. Further, the research has been categorized into three major areas based on ethical and/or safety concerns regarding the source of stem cells and levels of manipulation, which warrant additional review and monitoring as per existing regulations. These include permissible, restrictive and prohibited areas.

### 8.1 Permissible Areas of Research include,

8.1.1 *In vitro* studies using stem cells isolated from tissues can be done with prior approval of IC-SCR and IEC.

- 8.1.2 Establishment of new human ESC lines from spare embryos or iPSC lines from fetal/adult somatic cells or SSCs from fetal or adult tissues, with prior approval of the IC-SCR and IEC,
  - 8.1.2.1 provided appropriate informed consent is obtained from the donor (Section 15).
  - 8.1.2.2 the same shall be registered with NAC-SCRT through IC-SCR with appropriate documentation including details regarding their derivation and characterization.
  - 8.1.2.3 cell lines may be deposited/registered in an accredited cell bank for potential use by other investigators.
  - 8.1.2.4 Pluripotent stem cell lines intended for use in clinical research/trials need approval of CDSCO after obtaining clearences from IC-SCR and IEC.
  - 8.1.2.5 The cell lines should have unique identification number for future reference.
- 8.1.3 In above situations, if the tissue is obtained from hospital/clinic/entity, other than the institute of the investigator, then the IEC clearance from the source institute is mandatory.
- 8.1.4 *In vitro* studies using established cell lines can be carried out with prior approval of the IC-SCR.
- 8.1.5 In vivo studies in experimental animals (other than primates, see Sub Section 8.2) with established cell lines from any type of human pluripotent stem cells viz. ESCs, iPSCs, including their differentiated cells, and human SSCs (fetal, neonatal or adult) from any tissue, are permitted with the prior approval of IC-SCR and Institutional Animal Ethics Committee (IAEC).
  - 8.1.5.1 Such animals shall not be allowed to breed if the stem cells are likely to be incorporated in the gonads.
  - 8.1.5.2 Relevant tissues/organs of the sacrificed animals should be preserved for validation of the claims made and/or similar studies by other investigators in future.
- **8.2 Restrictive Areas of Research** include, basic and translational research activities requiring additional arm of oversight/monitoring due to contentious issues involved. Such activities needs close supervision and strict adherence to the guidelines.
  - 8.2.1 Creation of human pre-implantation embryos by *In vitro* fertilization (IVF), Intracytoplasmic Sperm Injection (ICSI), Somatic Cell Nuclear Transfer (SCNT) or any other method with the specific aim of deriving ESC lines for any purpose. The investigator needs to provide reasoning taking into consideration the following:
    - 8.2.1.1 The proposed research cannot be carried out with existing ESC lines, or those that can be derived from spare embryos.

- 8.2.1.2 Minimum number of embryos/blastocysts required for such research must be clearly defined.
- **8.2.1.3** Research teams involved should have appropriate expertise and requisite training in derivation, characterization and culture of ESCs.
- 8.2.2 Clinical trials using stem cells of any type, source and level of manipulation for homologous/non-homologous transplantation in indications other than listed in *Annexure III* can only be done with prior approval of the IC-SCR, IEC and CDSCO.
  - 8.2.2.1 CDSCO approval is mandatory even if the products are not intended for market authorization.
  - 8.2.2.2 Trials should be carried out using only clinical grade cells, that are processed in CDSCO certified GMP and GLP facility.
- 8.2.3 Clinical trials sponsored by multinationals, employing cell products developed outside India, should have clearances from the regulatory authorities of the country of the origin and shall need prior approval from CDSCO following clearance from both IC-SCR and IEC of the trial site.
- 8.2.4 All international collaborations require approvals from the respective funding agencies followed by approval from the Health Ministry's Screening Committee (HMSC) as per Government of India Guidelines (Available at: http://icmr.nic.in/guide.htm).
- 8.2.5 Import of any type of stem cells and/or their products/derivaties requires license from CDSCO as per the established regulations. These should have prior clearances from the regulatory authorities of the country of the origin.
- 8.2.6 Research involving introduction of human ESC/iPSC/SSCs into animals (including primates), at embryonic or fetal stages of development for studies designed to understand the patterns of differentiation and integration of human cells into non-human animal tissues shall conform to the following:
  - 8.2.6.1 If the expected outcome of the study is suggestive of a possibility that human stem cells could contribute in a major way to the development of brain or gonads of the recipient animal, the scientific justification for such experiments must first be substantiated with data.
  - 8.2.6.2 Animals derived from such experiments shall not be allowed to breed.
  - 8.2.6.3 Such proposals would need approval of the NAC-SCRT for additional oversight and review after clearance has been granted by the IC-SCR, IEC and IAEC (or CPCSEA).
- 8.2.7 Studies on chimeras where stem cells from two or more species are mixed together at any stage of early development (embryonic or fetal), for understanding patterns of development and differentiation would also require prior approval of NAC-SCRT after clearance has been granted by the IEC and IC-SCR.

- 8.2.8 Genome modification including gene editing (for example by CRISPR-Cas9 technology) of stem cells, germ-line stem cells or gamete and human embryos is restricted only to *in vitro* studies. It will require thorough review by the IC-SCR, IEC and IBSC, and finally by Review Committee on Genetic Manipulation (RCGM). Research teams involved should have appropriate expertise, requisite training and infrastructure in gene editing/genome modification and characterization.
  - 8.2.8.1 Only spare embryos, germ-line cells or gametes should be used.
  - 8.2.8.2 The source of somatic cells and/or minimum number of embryos, germ- line cells or gametes required for this research should be clearly defined.
  - 8.2.8.3 Genome modified human embryos should not be cultured beyond 14 days of fertilization or formation of primitive streak, whichever is earlier.

### 8.3 Prohibited Areas of Research

In the current state of scientific knowledge and understanding, stem cell research in the following areas is prohibited:

- 8.3.1 Research related to human germ line gene therapy and reproductive cloning.
- 8.3.2 *In vitro* culture of intact human embryos, regardless of the method of their derivation, beyond 14 days of fertilization or formation of primitive streak, whichever is earlier.
- 8.3.3 Clinical trials involving xenogeneic cells.
- 8.3.4 Any clinical research on Xenogeneic-Human hybrids.
- 8.3.5 Use of genome modified human embryos, germ-line stem cells or gametes for developmental propagation.
- 8.3.6 Research involving implantation of human embryos (generated by any means) after *in vitro* manipulation, at any stage of development, into uterus in humans or primates.
- 8.3.7 Breeding of animals in which any type of human stem cells have been introduced at any stage of development, and are likely to contribute to chimeric gonadal cells.

### 9. Responsibilities of the Investigator, Institution and Sponsor

Although appreciable advances have been made in understanding the biology of stem cells, there are still several elements of unpredictability in the translation aspects of research in this area. Regular review of progress in this field ensures the highest degree of scientific rigor and resolution of ethical concerns. Members of the IC-SCR and IEC shall regularly update themselves with regard to advances in the field.

It is mandatory for all investigators, institutions and sponsors conducting or involved with stem cell research to fully understand and be conversant with all aspects of the guidelines as per this document. Given below is a summary of their responsibilities:

- 9.1 Institutions involved in basic research and/or clinical trials shall constitute an IC-SCR as per these guidelines and provide adequate support for its functioning. The IC-SCR should be registered with the NAC-SCRT.
- 9.2 The investigators and institutions where stem cell research is being conducted bear the ultimate responsibility of ensuring that research activities are in accordance with the national regulations and guidelines.
- 9.3 Research involving hESCs, iPSCs, gene editing/modification and other contentious areas demands extra caution.
- 9.4 The investigator shall endeavor to avoid any activity that leads to hype, or unrealistic expectations in the minds of human participants or general public regarding the status of stem cell research and application.
- 9.5 Investigators should demonstrate respect for autonomy and privacy of those who donate gametes, blastocysts, embryos or somatic cells for stem cell research, and be sensitive to public concerns about research involving human embryos.
- 9.6 Investigators should also ensure confidentiality of the human donors to safeguard their rights and dignity.
- 9.7 Biological material can be procured only from clinics/hospitals that have IEC. The IEC must ensure that the standard operating procedures (SOPs) are in compliance with the guidelines (Section 15). Investigators should treat the biological material with atmost respect and adequate care to avoid misuse.
- 9.8 Creation of human embryos falls under the restrictive areas of research (Sub Section 8.2) and shall be resorted to only when all other alternatives have been exhausted.
- 9.9 Special care should be taken for research involving introduction of human cells in animals, particularly in early developmental stages, since this may lead to development of chimeras or incorporation of stem cells into brain and gonads which can be potentially hazardous.
- 9.10 Research involving stem cells can be conducted only after approval both from the IC-SCR. Additional approvals as spelt in Section 8 may also be necessary depending on the research category. The proposal should first be reviewed by the IC-SCR which primarily evaluates the scientific and technical aspects of the study followed by the IEC that will review overall work plan with major focus on ethical issues.
- 9.11 Clinical trials can be permitted only in institutions/hospitals having registered IC-SCR (with NAC-SCRT) and IEC (with CDSCO).

- 9.12 It is the responsibility of the investigator to generate robust scientific evidence through well designed clinical trials that could yield valuable information for the benefit of patients. The study subject and/or legal representative should be provided adequate and unbiased information about the trial protocol, its limitations and potential adverse effects.
- 9.13 A clinical trial must have a medical specialist registered with MCI and holding MCI approved post graduate qualification in the subject domain of the trial. This can only be conducted in a medical institution/hospital with adequate infrastructure and clinical facilities in accordance with Para 2 (1)(ii) of Schedule Y, Drugs and Cosmetic Act 1940 and rules therein. All medical professionals involved in clinical trials should have a valid GCP certification obtained from agencies such as Central Drug Service Agency (CDSA) or online courses conducted by National Institutes of Health (NIH) USA.
- 9.14 All records pertaining to clinical trials must be maintained for a period of at least 15 years. The head of the institution should facilitate the maintenance of records through investigator and IC-SCR.
- 9.15 Participants enrolled for clinical trials are not liable to pay any charges towards procedures, investigations and/or hospitalization related to the trial.
- 9.16 An institution or laboratory developing or processing stem cells for human use should obtain National Accreditation Board for Testing and Calibration (NABL), accreditation for all laboratory procedures required for product development.
- 9.17 The cells or cell-based products used in the trial should be processed in a CDSCO certified GLP and GMP facility (Schedule L1 and M of Drugs and Cosmetic Act, 1940 and rules therein).
- 9.18 Those working with human iPSCs should be cautious with the vectors and genes used for induction of stemness against possible malignant transformation.
- 9.19 Sponsors shall take note of their responsibilities and liabilities under various statutes, regulations and guidelines governing research and development in this field in the country.
- 9.20 Government agencies/sponsors facilitating stem cell research must ensure that the projects submitted for financial support has prior approval of IC-SCR in addition to IEC/ IAEC/ IBSC (whichever applicable).
- 9.21 For multi-centric clinical trials, all participating sites should obtain approvals form their own IC-SCR and IEC.
- 9.22 Each institution shall have an empanelled roster of investigators conducting stem cell research and ensure that national guidelines, regulations and best practices are followed.
- 9.23 Institutions conducting stem cell research shall establish suitable mechanism for creating awareness amongst the scientific community and the public at large.

## 10. Stem Cell Research: Basic Research

Basic research is an essential component of biomedical science, intended to enhance knowledge and understanding of a subject without necessarily leading to immediate practical solutions and/or therapeutic application. Similarly a focus on basic aspects of research in stem cell biology is important to advance our understanding on the mechanisms responsible for stemness, role of niche, dormancy, recruitment, plasticity and their ability to repair and regenerate etc. This also includes establishing *in vitro* cell culture systems to investigate stem cells and progenitors of different lineages and understand stages of cell differentiation. This is important for drug discovery and toxicity screening.

Research on human ESCs has led to new knowledge about embryo development. Breakthrough in iPSC technology has revolutionized the field of stem cell biology and has led to the generation of human disease specific models to understand the underlying pathophysiology. These technologies have provided a basis for developing possible novel cell based therapies. It is therefore necessary that the associated scientific robustness and ethical concerns are appropriately addressed/reviewed.

The guidelines for basic studies are summarized below:

- 10.1 *In vitro* studies largely fall in the permissible category of research (Sub Section 8.1).
- **10.2** Research involving cells/tissues directly obtained from human subjects, shall require prior approval of the IC-SCR and IEC.
- 10.3 Studies involving established human stem cell lines registered with the IC-SCR (where no direct contact is required with human subjects for obtaining cells), are exempted from obtaining fresh informed consent by IC-SCR/IEC. Necessary GLP guidelines shall however be followed. hESCs and iPSCs and/or lines established by the investigator should be registered with NAC-SCRT through IC-SCR.
- 10.4 *In vivo* studies on experimental animals (other than primates) that fall in the permissible category should be in accordance with Clause 8.1.5.
- 10.5 Studies on chimeras and sub-human primates shall adhere to Sub Section 8.2.
- 10.6 No *in vitro* studies on pre-implantation human embryos shall be carried out beyond 14 days of fertilization or formation of primitive streak, whichever is earlier. Similarly no *in vitro* manipulated cells shall be implanted in human/animal uterus with the intent of developing a whole organism.
- 10.7 hESC lines to be used for any basic study should be in accordance with Clause 8.1.2.
- 10.8 Derivation of new ESC or iPSC lines from human embryonic or somatic cells respectively, shall adhere to the conditions for gamete, embryo and somatic cell donation as laid down in these guidelines (Section 15), and with prior approval of IC-SCR and IEC (Section 8).

- 10.9 Stem cells and cell lines established for basic research shall not be used for human application or clinical trials.
- 10.10 Investigators intending to use stem cells or cell lines for clinical trials need to process and develop these cells and cell lines in CDSCO certified GLP and GMP facility.
- 10.11 For pre-clinical studies, the investigators should follow guidelines as defined in Section 11.

## 11. Stem Cell Research: Translational Research Including Clinical Trials

This section outlines guidelines for both preclinical studies and clinical trials using stem cells and their derivatives, for repair or regeneration of damaged tissues and organs as well as other clinical applications in conditions where use of stem cells has not yet reached the standard of medical care. It involves generating a safe and effective novel product based on fundamental research that can be taken to the bedside. It is recognized that preclinical assays in animal models may not accurately predict the nature of cell behaviour and immune response in humans.

Besides the scientific, technical and entrepreneurial challenges, it is imperative to address the associated ethical, social, and regulatory concerns.

#### 11.1 Preclinical Studies:

These are essential for establishing persuasive evidence in an appropriate *in vitro* and/ or animal model on the feasibility of the intended product, prior to conduct of clinical trials, as per regulatory requirements for any new biological entity (NBE). Such studies are usually carried out on small animals, with or without immuno-suppression so as to prevent immune rejection. These studies shall demonstrate safety and potential of the product and procedures involved, for achieving desired therapeutic effects.

To adequately evaluate different aspects of the product including safety, bio-distribution, immune rejection, more than one animal species (rodents and non-rodents) might be needed.

#### **11.1.1** Approval and Monitoring:

- 11.1.1.1 Preclinical studies can be permitted only after approval from IC-SCR. Additional approvals as listed below to be taken on caseto-case basis:
  - i. For studies involving small animals, clearance from IAEC is necessary.

- ii. In specific situations and depending on nature of the study, large animals and/or non-human primates may be permitted with prior approval from CPCSEA.
- iii. For preclinical studies involving human tissue, approval from IEC is necessary.
- **11.1.2. Study Design**: Like clinical trials, preclinical studies are also associated with selection and/or publication bias. Investigators have often sought to minimize the effects of such bias and confounding factors in clinical trials by using modalities like randomized allocation, blinded outcome assessment, or power calculations. Such rigors should also apply in preclinical studies intended to support trials. Accordingly, the following guidelines should be adhered to:
  - 11.1.2.1 Researchers should reduce bias and random variation by ensuring that the protocol fulfils the following:
    - i. adequate statistical power,
    - ii. availability of appropriate controls,
    - iii. randomization of the protocol,
    - iv. use of blinding systems,
  - 11.1.2.2 Researchers and sponsors should ensure that
    - i. preclinical study models are relevant to the clinical trial settings, best match human disease and characterize disease phenotype at baseline,
    - ii. end-point measures best match clinical outcomes, and demonstrate a mechanism for treatment effect,
    - iii. outcomes in animals are robust and validated independently by third party using a different animal model system,
  - 11.1.2.3 Large animal models/non-human primates may be used wherever necessary;

For example in studies involving cardiac physiology, tissue-related inflammatory and immunological injuries and degenerative disorders of weight bearing joints.

- **11.1.3 Preclinical Safety Studies** shall demonstrate safety of the product and the procedure for achieving proposed therapeutic effects.
  - 11.1.3.1 The stem cells to be employed in such trials should be well characterized, similar to those to be used in clinical trials, and evaluated both for early and late toxicities including immunogenicity and tumorigenicity.

- 11.1.3.2 Single and repeat dose toxicity studies should be performed in relevant animal models.
- 11.1.3.3 The study duration might be longer as compared to standard single dose studies for chemical entities, since the infused cells/ biological entities may induce long-term effects. This aspect should be reflected in the design of these studies.
- 11.1.3.4 The route of administration should be comparable to that intended for clinical use.
- 11.1.3.5 The dosage levels selected should provide information on a dose–response relationship, including a toxic dose and a no observed adverse effect level (NOAEL). Repeated dose toxicity studies are relevant only if the intended clinical use includes multiple dosing.
- 11.1.3.6 The interaction of stem cells with drugs (including immunosuppressants wherever relevant) to treat the underlying medical condition shall be tested in relevant animal model and/or cell culture systems.
- 11.1.3.7 Risks for tumorigenicity must be rigorously assessed for the product, particularly when developed following extensive manipulation in culture or through genetic modification, or in situations involving pluripotent stem cells. This must be achieved before initiation of the clinical trial. Tumorigeneic potential should be assessed in immune-deficient mice using different routes of administration.
- 11.1.3.8 Genotoxicity and developmental toxicity may be assessed depending on the intended clinical use.
- 11.1.3.9 Immunogenicity assessment should also be a part of the repeated dose toxicity study.
- 11.1.3.10 All safety assessment studies should be carried out only in a CDSCO certified GLP facility.
- **11.1.4 Bio-distribution Studies** for all stem cells and its derivatives, whether injected locally or systemically should be performed both within the local as well as distant sites.
  - 11.1.4.1 Studies of bio-distribution, assisted by sensitive techniques for imaging and monitoring of homing, retention and subsequent migration of transplanted cell populations are imperative for interpreting both efficacy and adverse events.

- 11.1.4.2 Bio-distribution and toxicity studies should be performed in a CDSCO certified GLP facility.
- **11.1.5 Pre-clinical Efficacy Studies:** Robust preclinical testing in animal models is important for stem cell and its derivatives, because cell therapies have distinctive efficacy and pharmacological characteristics. Before clinical testing, preclinical evidence should
  - i. establish a mechanism of action,
  - ii. establish optimal conditions for employing cell-based intervention (e.g. dose, co-interventions),
  - iii. demonstrate ability to objectively modify the progression of and/or improve a disease or injury condition when applied in suitable animal systems.
- 11.2. Clinical Trials using stem cells should be in compliance with Schedule Y of Drugs and Cosmetics Act 1940 and rules therein as well as GCP Guidelines of CDSCO (Available at: http://www.cdsco.nic.in/html/GCP1.html) and ICMR-Ethical Guidelines for Biomedical Research involving Human Participants (Available at: http://www.icmr.nic. in/ethical\_guidelines.pdf). The investigator should follow the clinical trial template for protocol as per the given format (*Annexure II*) and submit the application to the office of CDSCO in the Form 44 (Available at: http://cdsco.nic.in/writereaddata/Form-44.pdf). Only institutions having their IC-SCR registered with the NAC-SCRT and IEC registered with CDSCO are permitted to conduct clinical trials.

Responsibilities of the investigators, institutions and the sponsor involved in such trials are given in Section 9 and must be adhered to. Other associated guidelines are given below:

- **11.2.1 Reagents** used for the derivation of human ESCs/iPSCs or expansion/ enrichment of SSCs, for purposes of clinical trials should be of clinical grade/ pharmacopoeia grade.
  - 11.2.1.1 When using research grade material, the quality control program should include testing for safety, purity and potency (as listed in *Annexure V*) of the reagents and their components, wherever appropriate.
  - 11.2.1.2 Animal derived materials/reagents such as fetal calf serum (FCS), bovine serum albumin and trypsin should be tested for adventitious agents (for example, causing spongiform encephalopathy).

- 11.2.1.3 For all imported reagents (for example, FCS and others), the country of origin should be specified. The FCS should be from Bovine Spongiform Encephalopathy (BSE) free country.
- 11.2.1.4 Researchers should be encouraged to use serum free/xeno-free medium for processing of cells.
- 11.2.1.5 Limits should be established for the concentration of components, including those of animal origin, in the final product.

#### 11.2.2 Trial Participants

- **11.2.2.1** The selection of participants for the trials shall be done as per the predefined inclusion and exclusion criteria of the duly approved protocol.
- 11.2.2.2 Amendments/deviations, if any in the protocol must have prior approval of the IC-SCR, IEC and CDSCO.
- 11.2.2.3 Human participants enrolled for clinical trials are not liable to pay any charges towards procedures, investigations and/or hospitalization related to the trial.
- **11.2.3** Information for Human Participants: The patient information sheet and the informed consent form should have prior approval of IC-SCR and IEC, shall specifically address the following information on:
  - 11.2.3.1 the current status on the application of stem cells in the given condition, experimental nature of the proposed clinical study and its possible short and long-term risks and benefits.
  - 11.2.3.2 irreversibility of the intervention.
  - 11.2.3.3 the source and characteristics of stem cells and the degree of their *ex vivo* manipulation, if any.
  - 11.2.3.4 the established standard of care for a given condition.
  - 11.2.3.5 the sample size, duration of study and follow-up.
  - 11.2.3.6 IC-SCR and IEC approvals.
  - 11.2.3.7 the category of the trial viz. blinded/randomized/open labelled etc.
  - 11.2.3.8 the trial participant will not be levied any charges towards procedures, investigations and/or hospitalization related to the trial.
  - 11.2.3.9 the participants should be provided the information sheet and consent form in the vernacular/regional language and the same

should be well understood by the participant.

- 11.2.3.10 video consent shall be recorded as per the CDSCO guidelines for audio-visual recording dated 9 January 2014 (Schedule Y).
- **11.2.4 Regulatory Approval:** This section deals with mandatory approvals from IC-SCR, IEC and CDSCO before enrolling participants for clinical trials.
  - 11.2.4.1 All clinical trials using stem cells shall be registered with the CTRI (Available at: http://ctri.nic.in/Clinicaltrials/login.php).
  - 11.2.4.2 Only those institutions that have their IC-SCR and IEC registered with the NAC-SCRT and CDSCO respectively are permitted to conduct clinical trials.
  - 11.2.4.3 Clinical trials using minimally manipulated autologous SSCs (i.e. HSCs and MSCs) for homologous use for indications other than those listed in *Annexure III* or for non-homologous use for any indication should be approved by IC-SCR, IEC and CDSCO.
  - 11.2.4.4 Clinical trials using stem cells with substantial manipulation should have prior approval of IC-SCR, IEC and CDSCO.
  - 11.2.4.5 Clinical trials using allogeneic SSCs (with any degree of manipulation) and those using autologous SSCs with more than minimal and major manipulation should have prior approval of IC-SCR, IEC and CDSCO.
  - 11.2.4.6 Clinical trials using human pluripotent stem cells (hESCs or iPSCs) or their derivatives should have prior IC-SCR, IEC and CDSCO.
  - 11.2.4.7 Any stem cell based product already approved and marketed outside India (or for concurrent clinical trial in India) will require approval of CDSCO after clearence from IC-SCR and IEC.
  - 11.2.4.8 Any clinical trial with a product intended to be licensed and marketed shall have prior approval of CDSCO after clearence from IC-SCR and IEC.
  - **11.2.4.9** For tissue engineered or combination products, separate approval for individual components and in combination is needed from CDSCO after clearence from IC-SCR and IEC.
- **11.2.5** Monitoring: A separate Data Safety Monitoring Board (DSMB) should be established for each clinical trial .
  - 11.2.5.1 All cases of adverse and serious adverse events (AEs/SAEs) should be reported by the investigator/clinician/institution to the IEC and CDSCO as defined in the Schedule Y of Drugs and

Cosmetics Act, 1940 and Rules therein. The same should also be reported to NAC-SCRT through IC-SCR.

- 11.2.5.2 Members of the DSMB are expected to have the requisite expertise to monitor trials for AEs/SAEs and their smooth conduct.
- 11.2.5.3 Members of the DSMB shall not have any conflict of interest with the study and should be independent of IC-SCR and IEC.
- 11.2.5.4 The institution and/or sponsor conducting clinical trials shall be responsible for insurance and compensation of the subjects recruited under the trial.
- **11.2.5.5** The medical records of trial participants should be maintained for a period of at least 15 years by head of the institute through investigators and IC-SCR.
- **11.2.6** Follow-up of Participants is required depending on nature of the experimental stem cell-based intervention and the persistence potential of cellular products.
  - **11.2.6.1** Long-term follow-up provides an opportunity to monitor late adverse events, and/or efficacy of the intervention.
  - 11.2.6.2 For each indication, a minimum of two years of post-trial followup is mandatory with respect to the safety data. The same can be extended by one year or more depending on the type/source of the cells and the degree of their manipulation. The same should be appropriately decided by the IC-SCR and IEC on caseto-case basis.
  - 11.2.6.3 Clinical trial participants have to be physically examined/ investigated.
  - 11.2.6.4 The investigator should submit periodic report on follow-up to DSMB.

## 12. Therapeutic Use of Stem Cells

- 12.1 At present, there are no approved indications for stem cell therapy other than the HSCT for conditions stated in *Annexure III*.
- 12.2 Therapeutic use of stem cells other than the above shall be treated as investigational and conducted only in the form of a clinical trial after obtaining necessary regulatory approvals. Hence, their application in the following situations, outside the domain of clinical trials considered unethical and prohibited:

- i. Autologous use of stem cells (HSCs, MNCs, MSCs, iPSCs etc.) for indication/ disease other than those listed in *Annexure III*.
- ii. Allogeneic use of SSCs, hESCs and its derivatives.
- 12.3 An investigator claiming the study outcome to be considered as a possible therapy in a particular indication, shall apply to the Director General, ICMR with the trial data on which such a claim is based, giving full justification for the same. The ICMR will then determine in consultation with experts in the field, whether such a claim is tenable.

## 13. Stem Cell Derived Secretome

Recent research involving proteomic profile and associated functional potency of stem cell derived conditioned medium (CM), also known as secretome (for example, derived from mesenchymal stem cell cultures of bone marrow, adipose tissue, Wharton's jelly or others) has revealed the possibility of its application in developing novel formulations for topical use in cosmetics and wound healing. The biological components of this secretome are categorized into various functional entities. These include an array of growth factors, cytokines, chemokines, extracellular matrix proteins and small molecules.

- 13.1 For use as active ingredient for cosmetic and topical application, data on the following should be provided to the CDSCO:
  - 13.1.1 Physical, chemical, and pharmaceutical properties of the CM.
  - **13.1.2** Quantification of human cytokines or growth factors in the CM for relevant topical application.
  - 13.1.3 Composition of the final product and indications for its application.
  - 13.1.4 Pre-clinical studies for toxicity and allergenicity.
  - 13.1.5 Clinical studies
    - 13.1.5.1 Safety and efficacy of CM PIPT test (Primary Irritation Patch Test).v
    - 13.1.5.2 Human volunteer study.

Based on the data submitted, approval for the use of CM can be granted as an active ingredient for cosmetics on case-to-case basis.

13.2 For use of CM as active ingredient for interventional purpose, guidelines for product development as given in Schedule Y of Drugs and Cosmetics Act 1940 and rules therein to be followed.

## 14. Banking of Biological Tissues as Source of Stem Cells

At present there is no scientific evidence to substantiate clinical benefits with the use of stem cells derived from cord tissue, placenta, tooth extract, adipose tissue, dental pulp, menstrual

blood and olfactory ensheating cells etc. Yet, procurement and banking of these biological is increasingly becoming a commercial activity. Hence, care needs to be taken so that there is no exploitation and commoditization of the resources.

As of now, only UCB banking is permitted and licensed by CDSCO. Accordingly, commercial banking of all other biological materials not permitted until further notification.

## 14.1 Banking of Umbilical Cord Blood

UCB is a rich source of CD34<sup>+</sup> hematopoietic and mesenchymal (stromal) stem cells. Use of UCB derived HSCs for treatment of various haematological and immunological disorders is currently well established, particularly where an HLA-matched sibling is not available. However, there is a paucity of public funded UCB banks in India. On the other hand several private banks have come-up, that engage themselves in promotional advertisements offering storage of cord blood with the promise of future therapeutic use. Such advertisements are often misleading for the public and lack comprehensive and accurate information. So far there is no scientific basis for preservation of cord blood for future self-use and this practice therefore raises ethical and social concerns. Private storage of the cord blood HSCs is advisable when there is an elder child in the family with a condition treatable with these cells and the mother is expecting the next baby. In other situations, the parents should be educated about the limitations of banking at this point of time.

On the other hand, public cord blood banks across the world, for several decades, are playing an important role as a source of HSCs for transplant in selected haematological conditions (*Annexure III*). Hence, parents should be encouraged for voluntary donation to public cord blood banks for allogeneic use based on HLA matching and for research purposes. Obstetricians must educate parents to be, about the options available, especially donating cord blood to a public bank.

- 14.1.1 UCB banks are permitted only under license and monitoring by the CDSCO. These are expected to follow the Drugs and Cosmetics (3<sup>rd</sup> Amendment) Rules, Gazette Notification No. GSR 899(E) dated 27/12/2011 for collection, processing, testing, storage, banking, and release of stored units (Available at: http://cdsco.nic.in/html/GSR%20899.pdf).
- 14.1.2 Therapeutic use of stem cells derived from UCB for indications other than those listed in *Annexure III* is not permitted. These can be used only as a clinical trial after obtaining approval of IC-SCR, IEC and CDSCO.
- 14.1.3 Cord blood banks involved in basic research or clinical trials should constitute an IC-SCR and register the same with NAC-SCRT.

14.1.4 The release of UCB units for research and/or clinical trials should be to only those institutions that have a registered IC-SCR and IEC.

#### 14.1.5 Procedure For Collection of Umbilical Cord Blood

- 14.1.5.1 Parents should be fully informed regarding risks and benefits involved. Voluntary informed consent should be obtained from both parents well before the scheduled delivery date, but in no case at the time of delivery or subsequently. If there is disagreement between parents, the mother's wish shall prevail.
- 14.1.5.2 Period of preservation for self-use later in life should be clearly defined
- 14.1.5.3 SOPs for collection, transportation, processing, storage (cryopreservation) and release of UCB/cells for clinical application should be clearly laid down and approved by IC-SCR and IEC.
- 14.1.5.4 Exact timing of clamping the umbilical cord should be defined in the SOPs and recorded in the case file. No harm should occur to the neonate and the mother.
- 14.1.5.5 Donor families should be compensated by providing them *Donor Cards* to enable them preferential access during emergency and for any other benefits to donor/relatives in future.
- 14.1.5.6 SOPs for release of UCB units should be in place.

### 14.2 Banking and Distribution of Human ESC/iPSC Lines

As human ESC/iPSC research advances, it is important for institutions that obtain store and use stem cell lines to have proper SOPs in place. They should ensure that the stored cells are well characterized and screened for infectious disease markers. It is also essential that these are maintained and stored as per current standards of GLP and GTP.

The following guidelines are specifically adapted for human ESC/iPSC lines. However, researchers are advised and expected to keep track of advances in the field.

- 14.2.1 An institution/repository engaged in receiving and storing human ESC/iPSC lines should follow the standard practices as listed below:
  - 14.2.1.1 SOPs for banking and release.
  - 14.2.1.2 Documentations to be obtained from the investigators and/or institutions that deposit cell lines:

- a. A copy of the donor consent form.
- b. Proof of IC-SCR and IEC approval for the procurement process.
- c. Available medical information on donors, along with details on screening of infectious disease.
- d. Available clinical, observational or other diagnostic information about the donor.
- e. Personal information anonymized (such that the identity cannot be frivolously disclosed), but traceable if required.
- f. Critical information about culture conditions (such as media, additives, cell passage, and safety information).
- g. Cell line characterization (such as but not limited to cluster differentiation (CD) phenotyping, karyotyping and genetic markers).
- 14.2.1.3 A repository has the right of refusal if prior culture conditions or other items do not meet its standards.
- 14.2.2 A secure system for protecting the privacy of donors where the material is assigned a unique code and all other identifiable information is stored securely at the source of origin, with details on the following:
  - 14.2.2.1 Plans for maintaining confidentiality (such as a coding system).
  - 14.2.2.2 A secure system for inventory track from primary cell lines to those submitted to the repository and their subsequent use.
  - 14.2.2.3 A policy governing whether and how to deliver clinically significant information obtained through research/investigations back to donors.
- 14.2.3. The following SOPs/Standard of practices should be defined and maintained:
  - 14.2.3.1 Assignment of a unique identifier to each cell line.
  - 14.2.3.2 System for quality assurance and control.
  - 14.2.3.3 Website that contains scientific descriptions and data related to the available stem cell lines.
  - 14.2.3.4 Procedure for reviewing applications for deposit/procurement of cell lines.
  - 14.2.3.5 Process for tracking disbursed cell lines and recording their status when shipped (such as number of passages, population doubling).
  - 14.2.3.6 System for auditing compliance.

- 14.2.3.7 Schedule of charges.
- 14.2.3.8 Statement of intellectual property policies.
- 14.2.3.9 When appropriate, creation of a clear MTA or user agreement.
- 14.2.3.10 Liability statement.
- 14.2.3.11 System for disposal of material.
- 14.2.3.12 Clear criteria for distribution of cell lines
- 14.2.3.13 Release certificate to be issued with each dispatch.

## 15. Procurement of Biological Material for Research

The biological material includes gametes, blastocysts, embryos, fetal and placental tissues, as well as somatic cells. Procurement of biological material as a source of stem cells for basic or translational research is permissible subject to approval by IC-SCR and IEC. If the source of the tissue is from hospital/clinic/entity other than the institute utilizing it for research, then the IEC clearance from the source institute is mandatory.

## 15.1 Fetal /Placental Tissue

For procurement of fetal or placental tissue as a source of stem cells, the following should be adhered to:

- 15.1.1 Termination of pregnancy (TOP) should comply with all obligations under the MTP Act. However, TOP with a view to donate fetal tissue in return for financial or any other inducement is not permissible.
- 15.1.2 Informed consent for donation:
  - 15.1.1.1 Voluntary informed consent should be obtained for termination of pregnancy and for donation of the fetal material for research.
  - 15.1.2.2 The consent for donation of fetal tissue should be obtained in advance and not just before or at the time of the procedure. The parents should be given sufficient time to take decision regarding the donation. If there is disagreement between parents, the mother's wish shall prevail.
  - 15.1.2.3 The consent for donation should include permission for screening of the donor for transmissible diseases and obtaining family history of genetic disorders.
- 15.1.3 The purpose and use of donated fetal tissue should be fully explained to the parents. It should not be vague and open ended. The information sheet for the purpose should be carefully scrutinized and vetted by the IC-SCR and IEC.

- 15.1.4 The medical person responsible for care of the pregnant woman willing to undergo termination of pregnancy and the investigator using the fetal material shall not be the same.
- **15.1.5** The donor shall not have the option to specify the use of the donated material for a particular person or in a particular manner.
- **15.1.6** The identity of the donor should be kept confidential. Personal information of the donor, however, should be kept available for traceability in situations where the cells derived from the donated fetal tissue are proposed to be used for therapy.

# 15.2. Gametes/Blastocysts/Embryos/Somatic Cells for Generation of Human - ESC/iPSC Lines

- 15.2.1 The IC-SCR and IEC should review and approve the process of procurement of gametes, blastocysts, or somatic cells for the purpose of generating new human ESC/iPSC lines. IC-SCR and IEC should verify that the blastocysts obtained from infertility clinics are in excess (spare embryos) of the clinical needs of the couple.
- 15.2.2 Creation of human ESC lines from blastocysts and iPSC lines from somatic cells should be approved by IC-SCR and IEC. However, creation of the same through IVF or other methods, specifically for research purposes, should have prior approval of NAC-SCRT through IC-SCR and IEC.
- 15.2.3 Consent for donation of blastocysts for establishment of human ESC lines should be obtained from the donor at least 24 hours in advance and not at the time of the donation. Donors should be informed that they retain the right to withdraw consent until the blastocysts are actually used in cell line derivation.
- 15.2.4 There should be no inducement for donation of gametes or embryos by way of payment or in lieu of medical services, except for reimbursement of reasonable expenses for travel and loss of wages incurred by the person (amount to be decided by IC-SCR/IEC). Similarly, no payments should be made for donation of somatic cells for use in SCNT or creation of iPSC lines except for reimbursement towards travel expenses/wages for attending the clinic.
- 15.2.5 The attending physician responsible for the infertility treatment and the investigator deriving or proposing to use ES cells shall not be the same individual. To facilitate autonomy of the donor, decisions related to the creation of embryos for infertility treatment should be independent of the influence of investigators who propose to derive or use ESC in research.

- 15.2.6 If the research involves collection of biological samples from other institutions/clinics, IEC approval should be taken at the source institution, which shall maintain proper documentation for the same.
- 15.2.7 Informed consent for donation should include the following statements:
  - 15.2.7.1 that the donated material will be used to derive hESC/cell lines for research purposes.
  - 15.2.7.2 that the donation is made without any restriction or direction regarding who may be the recipient of transplants of cells derived from it.
  - 15.2.7.3 an assurance that the investigator will follow the ethical practices for procurement, culture, and storage of cells and tissues.
  - 15.2.7.4 that the derived hESC line may be used for development of new product(s) that may have a commercial value. However, no direct financial benefit or IPR will accrue to the donors.
  - 15.2.7.5 that derived stem cells or cell lines and the information related to them may be archived for 10 years or more.
  - 15.2.7.6 that research is not intended to provide direct medical benefit to the donor(s) except situations involving autologous transplantation.
  - 15.2.7.7 that neither consenting nor refusing to donate gametes/ embryos/somatic cells for research will affect the quality of present or future medical care provided to potential donors.
  - 15.2.7.8 of the risks involved to the oocyte donor and acceptance of the responsibility to provide appropriate health care and compensation in case any complication arises during/or anytime after the procedure.
- 15.2.8 Identity of the donor shall be kept confidential at all times. Wherever traceability of the stem cells is required, the same shall be kept secured to ensure confidentiality. The investigator shall also document the process of maintenance of the confidentiality of any coded or identifiable information associated with the cell lines.
- 15.2.9 The IC-SCR and IEC while reviewing and approving proposals for gametes/ blastocysts/embryos and somatic cell donation shall ensure that the subjects do not belong to vulnerable groups.
- 15.2.10 There shall be no coercion to undertake human ESC research or any activity related to stem cell research. Autonomy of the researcher/physician must be respected.

# 16. International Collaboration

Stem cell research is an emerging field of biomedical sciences and may require national and international collaboration. Such collaborations help the participating institutions for advancement of the field, capacity building and global competence. Participating institutions should consider the following:

- **16.1** National guidelines and regulations of respective countries shall be followed.
- 16.2 All international collaborations require approvals of the respective funding agencies followed by approval from the Health Ministry's Screening Committee as per Government of India Guidelines (Available at: http://icmr.nic.in/guide.htm).
- 16.3 In situation involving a conflict (scientific and/or ethical) between the collaborators, the existing Indian guidelines, acts and regulations shall prevail for the work to be carried out in India.
- 16.4 Funding agencies/sponsors shall ensure that certification provided by the collaborating country fulfils the requirements as laid down in these guidelines. For example, all ICMR funded international projects are required to obtain clearance from the HMSC. Similar clearances would need to be obtained if the trial/study is supported by other public/ private organizations.

#### 17. Exchange/Procurement of Tissues, Stem Cells and Cell lines

Exchange or procurement of tissues, stem cells or cell lines may be required for basic and clinical research. These may not be currently available in the country and hence may have to be procured from either academic institutions or sourced commercially. A critical limitation of the use of stem cells for research and development is the need to maintain them in a viable state. Since their viability can be affected during transit, appropriate international guidelines should be followed for their packaging, labelling, handling and transport at ports.

- 17.1 Import of stem cell lines for basic research does not require prior approval/No Objection Certificate (NOC) from any government agencies and should be permitted by customs authorities at the port of entry/exit without prior approvals
- **17.2** Traceability of all cell lines including those imported must be maintained by the investigator.
- 17.3 For the purpose of basic stem cell research and its technology development, the investigators can obtain primary cultures of adult stem cells at defined passages and/ or pluripotent stem cell (PSC) lines that are well characterized and having dedicated ID or code.

- 17.4 The purpose of procuring such cells should be clearly defined. These should be used only for the purpose defined complying with laboratory-SOPs. Such cells are not permitted for commercial purposes or for human applications during clinical trials.
  - 17.4.1 For import of cell lines developed by researchers, the investigator must obtain adequate documentation from the source to demonstrate that the cells/cell lines were created following existing guidelines of the country of origin.
  - 17.4.2 For export of indigenously developed cell lines, necessary clearances from IEC and IC-SCR must be obtained and submitted along with the MTA during the review of such research proposals.
  - 17.4.3 All proposals for import/export of stem cells and their derivatives required for research and development including those for clinical trials shall be examined by the IC-SCR and IEC.
  - 17.4.4 Biological material required for clinical trials and originating from countries outside India requires import clearance from CDSCO. The procured material should not be used for any commercial/therapeutic purpose.
  - 17.4.5 Import and export of stem cells and cell lines for commercial use need to be considered on case-to-case basis as per the Government of India guidelines (Circular No. L/950/53/97-H1 (Pt.) dated 19 November, 1997 of the Ministry of Health) on import/export of biological materials. (Available at: http://www.icmr.nic.in/min.htm) and DGFT Notification No. 19 /2015-2020 dated, 4 August, 2016. (Available at: http://dgft.gov.in/Exim/2000/NOT/NOT16/ noti1916.pdf).
  - 17.4.6 Import/export of HLA tested unrelated donor derived BM/PBSCs/cord blood as a source of hematopoietic stem cells for transplantation in approved indications (*Annexure-III*) is exempted for clearance from any authority as per the Govt. of India's guidelines (Circular No. L/950/53/97-H1 (Pt.) dated 19 November, 1997 of the Ministry of Health) (Available at: http://www.icmr. nic.in/min.htm) if this exchange is considered necessary by the physician incharge of the patient.

# 18. Awareness and Education of Stakeholders

18.1 It is the democratic right of the people to be aware of treatment modalities and the risks versus benefit of new/upcoming technologies such as cell based therapies including stem cells. The scientific community including scientists and clinicians working in the field, policy makers including regulators own the responsibility to create awareness and update about the rightful status of the stem cells and their applications on the basis of peer reviewed scientific evidences.

- 18.2 Public awareness need to be created through periodic interactions with the public/ stakeholders held across the country. The focus of such interactive sessions will be to educate the masses so as to avoid their exploitation and to provide a forum for free and frank exchange of views. Different print and electronic media modules can be used to this effect.
- **18.3** Continuous education module need to be introduced for updating the medical and scientific community.
- 18.4 The status of new scientific developments and innovative technologies, ethical issues related to these technologies and regulatory pathways need to be made a part of the curriculum for medical graduates.

# 19. Publicity and Advertisements in All Media

It may be noted that actions can be taken against the erring clinicians/entities as per the following existing rules and regulations.

- 19.1 The advertising and publicity through any mode by clinicians is not permitted as per Chapter 6 of the Indian Medical Council (Professional Conduct, Etiquettes and Ethics) Regulation. It is mandated that the MCI and Medical Councils of respective state should initiate action on the erring clinicians for violation of code of ethics prescribed by it either taking *suo moto* cognizance or acting on any complaint received by them. (Available at: https://www.mciindia.org/documents/rulesAndRegulations/Ethics%20 Regulations-2002.pdf)
- 19.2 The Drugs and Magical Remedies (The Objectionable Advertisements) Act- 1954 prohibits misleading advertisements relating to drugs and magical remedies. DGHS and relevant state authorities are mandated to take necessary action for violation of this act. (Available at: http://lawmin.nic.in/ld/P-ACT/1954/A1954-21.pdf).
- 19.3 The advertisement of treatment of several diseases as listed in Schedule J of Drugs and Cosmetics Act, 1940 and rules therein (*Annexure VII*) is not permissible. Hence publicity claiming available cure for these conditions using stem cells and its derivatives is prohibited. CDSCO, DGHS and relevant state authorities are mandated to take necessary action for violation of this act.
- 19.4 No advertisement which violates the code for self regulation in advertising, as adopted by the Advertising Standards Council of India (ASCI), Mumbai for public exhibition, from time to time, shall be published. (Available at: https://ascionline.org/images/ pdf/code\_book.pdf)

#### 20. Periodic Review of Guidelines

The field of stem cells has seen rapid strides both in basic and translational aspects. With the unfolding of new developments and knowledge, it is essential to periodically review and update the guideline document. Accordingly periodic changes to specific clauses and sections will be notified in the form of amendments. The ICMR will determine from time to time the need and mechanism for implementing revisions to the document.

# **Documents Referred:**

- 1. ICMR National Ethical Guidelines for Biomedical and Health Research Involving Human Participants, 2017.
- 2. Drugs and Cosmetics Act, 1940 and Drugs and Cosmetics Rules, 1945.
- 3. Indian Medical Council (Professional Conduct, Etiquettes and Ethics) Regulation.
- 4. Drugs and Magical Remedies (The Objectionable Advertisements) Act- 1954.
- 5. Guidance for FDA Reviewers and Sponsors Content and Review of Chemistry, Manufacturing, and Control (CMC) Information for Human Somatic Cell Therapy Investigational New Drug Applications (INDs)(April 2008).
- 6. Guidance for Industry: Guidance for Human Somatic Cell Therapy and Gene Therapy (Mar 1998).
- 7. Committee for Human Medicinal Product: Guideline on Human Cell-Based Medicinal Products (Jan 2007).
- 8. Human Cells, Tissues, and Cellular and Tissue-Based Products (HCT/Ps) from Adipose Tissue: Regulatory Considerations Draft Guidance for Industry(Dec 2014)
- 9. Homologous Use of Human Cells, Tissues, and Cellular and Tissue-Based Products Draft: Guidance for Industry and Food and Drug Administration Staff (Oct 2015).
- 10. Minimal Manipulation of Human Cells, Tissues, and Cellular and Tissue-Based Products: Draft Guidance for Industry and Food and Drug Administration Staff (Dec 2014).
- 11. Guidance for Industry: Potency Tests for Cellular and Gene Therapy Products (Jan 2011).
- 12. International Society for Stem Cell Research Guidelines for Stem Cell Research and Clinical Translation (May 2016).
- 13. ISCT Presidential Task Force on the Use of Unproven Cellular Therapies: Reference Guide (Jan 2016).
- 14. Guidance for Industry: E6 Good Clinical Practice: Consolidated Guidance (April 1996).
- 15. Guidance for Industry: Eligibility Determination for Donors of Human Cells, Tissues, and Cellular and Tissue-Based Products (HCT/Ps) (Aug 2007).
- 16. Guidance for Industry : Certain Human Cells, Tissues, and Cellular and Tissue- Based Products (HCT/Ps) Recovered From Donors Who Were Tested For Communicable Diseases Using Pooled Specimens or Diagnostic Tests, CBER, FDA (04/2008).
- 17. Commission Directive 2006/17/EC: Implementing Directive, 2004/23/EC of the European Parliament and of the Council as regards certain technical requirements for the donation, procurement and testing of human cells. OJ, L-38/40 (February 2006).
- Guidance for Industry: Preventive Measures to Reduce the Possible Risk of Transmission of Creutzfeldt-Jakob Disease (CJD) and Variant Creutzfeldt-Jakob Disease (vCJD) by Human Cells, Tissues, and Cellular and Tissue-Based Products (HCT/Ps). June 2002.
- 19. Guidance for Industry: Revised Preventive Measures to Reduce the Possible Risk of Transmission of Creutzfeldt-Jakob Disease (CJD) and Variant Creutzfeldt-Jakob Disease (vCJD) by Blood and Blood Products. May 2010.
- 20. The Code for Self-Regulation of Advertising Content in India by ASCI (Available at: https://ascionline.org/images/pdf/code\_book.pdf).

# Glossary

Adult stem cell: (also known as somatic stem cell): A relatively rare undifferentiated cell found in many organs and differentiated tissues with a limited capacity for both self-renewal (in the laboratory) and differentiation. Such cells vary in their differentiation capacity, but it is usually limited to cell types in the organ of origin. This is an active area of investigation.

*Adventitious agents:* These are microorganisms that have been unintentionally introduced into the manufacturing process of a biological product. Include bacteria, fungi, mycoplasmas, rickettsia, protozoa, parasites, TSE agents, and viruses.

*Blastocyst:* A hollow ball of 50-100 cells reached after about 5 days of embryonic development. It consists of an outer layer of differentiated cells (the trophoectoderm), a fluid-filled cavity (the blastocoel), and a cluster of undifferentiated cells in the interior (the inner cell mass or inner stem cells)

**Bone Marrow:** The soft, spongy tissue found in the centre of most large bones that produces the cellular components of blood which is known as hematopoietic stem cells (white cells, red cells and platelets). It is also a source of mesenchymal and endothelial stem cells.

*Chimera:* An organism, organ, or part consisting of two or more cell types of different genetic composition, produced as a result of organ transplant, grafting, or genetic engineering.

*Cell line:* A cell culture system consisting of identical cell population selected for uniformity from a usually homogeneous tissue source (as an organ)

Clinical grade: Compatible and certified for administration into humans.

*Clinical Research/Trial:* A branch of healthcare science that determines the safety and effectiveness of medications, devices, diagnostic products and treatment regimens intended for human use. These may be used for prevention, treatment, diagnosis or for relieving symptoms of a disease. Clinical Research is different than clinical practice. In clinical practice one uses established treatments, while in clinical research evidence is collected to establish a treatment.

Clone: A cell or organism derived from genetically identical to another cell or organism.

*Clonal:* Cells derived from a single parent cell.

*Cloning:* The process of creating genetically identical copy of a biological unit (e.g. a DNA sequence, cell, or organism) from which it was derived, especially by way of bio-technological methods.

Cloning by somatic cell nuclear transfer: involves replacing an oocyte's nucleus with the nucleus of
the adult cell to be cloned (or from an embryo or fetus) and then activating reconstituted oocyte
for further development. The oocyte genetically reprograms the transferred nucleus, enabling it to
direct development of a whole new organism

- *Reproductive cloning:* The embryo developed after Somatic Cell Nuclear Transfer (SCNT) is implanted into the uterus (of the donor of the ovum or a surrogate recipient) and allowed to develop into a fetus and whole organism. The organism so developed is genetically identical to the donor of the somatic cell nucleus.
- Therapeutic cloning: The development of the embryo after donor-sourced Somatic Cell Nuclear Transfer (SCNT) until the blastocyst stage and embryonic stem cells are derived from the inner cell mass. These stem cells could be differentiated into desired tissue using a cocktail of growth and differentiation factors. The generated tissue/cells could then be transplanted into the original donor of the nucleus avoiding rejection.

*Conflict of Interest*: A situation in which a person is in a position to derive personal benefit from actions or decisions made in their official capacity.

**Consent:** A process by which a subject voluntarily confirms his or her (or their next of kin/legal heir) willingness to participate in a particular study/clinical trial, after having been informed of the aims, methods, required data collection procedures and schedule, anticipated benefits and potential hazards of the study and the discomfort it may entail. Informed consent is documented by means of a written, signed and dated informed consent form. The consent besides being voluntary and informed has to be without any coercion or inducement. It can be withheld, or even withdrawn at any time, without giving any reason or prejudice to present or future treatment of the individual.

*Cord blood stem cell:* Stem cells isolated from the umbilical cord blood collected at the time of birth. Cord blood contains hematopoietic and mesenchymal (stromal) stem cells. Cord blood is currently used to treat patients who have undergone chemotherapy to destroy their bone marrow due to cancer or other blood-related disorders.

**Differentiation:** The process whereby an unspecialized embryonic cell acquires the features of specialized cells of organs such as a heart, liver, or muscle. Differentiation is controlled by the interaction of a cell's genes with the physical and chemical conditions either inside or outside the cell, usually through signalling pathways involving receptor-proteins embedded in the cell surface.

Donor: A person who provides blood, an organ, or tissue or cells for transplantation, transfusion, etc.

Drug: As per Drugs and Cosmetics Act, 1940, drug includes—

- all medicines for internal or external use of human beings or animals and all substances intended to be used for or in the diagnosis, treatment, mitigation or prevention of any disease or disorder in human beings or animals, including preparations applied on human body for the purpose of repelling insects like mosquitoes;
- ii. such substances (other than food) intended to affect the structure or any function of the human body or intended to be used for the destruction of 6 [vermin] or insects which cause disease in human beings or animals, as may be specified from time to time by the Central Government by notification in the Official Gazette;

- iii. all substances intended for use as components of a drug including empty gelatin capsules; and
- iv. such devices intended for internal or external use in the diagnosis, treatment, mitigation or prevention of disease or disorder in human beings or animals, as may be specified from time to time by the Central Government by notification in the Official Gazette, after consultation with the Board

*Early embryo:* The term "early embryo" covers stages of development upto the appearance of primitive streak i.e., until 14 days after fertilization.

*Embryonic germ cell:* Embryonic germ cells are primordial germ cells isolated from the gonadal ridge of 5-10 weeks fetus (which are capable of becoming sperm and eggs).

*Embryonic stem cell:* Cells derived from the inner cell mass up to the stage of blastocysts. These cells can be cultured indefinitely under in vitro conditions that allow proliferation without differentiation, but have the potential of differentiating into any cell of the three embryonic germ layers (ectoderm, mesoderm and endoderm).

Feeder layer: A monolayer of cells used in co-culture to maintain pluripotent nature of the stem cells

*Fetus:* In humans, it is a developing stage from eight weeks, post fertilization, till birth.

*Fetal stem cell:* Stem cells derived from fetal tissue including placenta that retain the ability to divide, proliferate and provide progenitor cells that can differentiate into specialized cells. A distinction is drawn between the fetal germ cells, from which the gametes develop, and fetal somatic cells, from which rest of the organism develops.

*Gamete:* A mature male or female reproductive cell usually possessing a haploid set of chromosomes and capable of initiating formation of a new diploid individual by fusion with a gamete of the opposite sex. An egg (in the female) and a sperm (in the male).

Germ cells: Ova and sperm, and their precursors.

*Germline Editing:* It is a form of genetic modification that involves changing genes in eggs, sperm, or very early embryos. This type of genome modification is heritable, meaning that the modified genes could appear not only in the offspring that result from the procedure, but also in the subsequent generations.

Hematopoietic stem cell: A stem cell that gives rise to all red and white blood cells and platelets.

*Human Embryo:* It is developing stage from time of fertilization until the end of the eighth week of gestation, after which it is known as a fetus.

*Implantation:* The embedding of a blastocyst into the uterine endometrium. In humans implantation takes place between 7-9 days after fertilization.

*Induced Pluripotent Stem Cell (iPSC):* These are adult differentiated cells that have been genetically reprogrammed to become an embryonic stem cell–like cell by being forced to express genes and factors important for maintaining the properties of pluripotent stem cells.

Investigator: A person who carries out a formal inquiry or investigation.

*In vitro:* Of processes or reactions taking place in a test tube, culture dish, or elsewhere outside a living organism.

In vivo: Of processes taking place in a living organism.

*Legal Guardian:* A person who has the legal authority (and the corresponding duty) to care for the personal and property interests of another person, called a ward.

*Mesenchymal stem cells:* These are multi-potent progenitor cells originally identified in the bone marrow stroma and now isolated from different sources including umbilical cord blood, cord tissue, adipose tissue, dental pulp and other sources etc.

*Multipotent stem cells:* The cells have the potential to differentiate into different types of specialized cells constituting a specific tissue or organ.

*Pluripotent stem cell:* Having the ability to give rise to all of the various cell types of the body. Pluripotent cells cannot make extra-embryonic tissues such as the amnion, chorion, and other components of the placenta. Scientists demonstrate pluripotency by providing evidence of stable developmental potential, even after prolonged culture, to form derivatives of all three embryonic germ layers from the progeny of a single cell. They are capable of generating chimeric embryo/offspring and can generate a teratoma after injection into an immune-suppressed mouse.

*Primitive streak:* A collection of cells, which appears at about 14 days after fertilization from which the fetal body develops.

**Regenerative medicine:** A field of medicine devoted to treatments in which stem cells are induced to differentiate into the specific cell type in an organism required to repair damaged or destroyed cell populations or tissues.

*Somatic cell:* A cell of the body other than gamete.

*Somatic stem cell:* An undifferentiated cell found among differentiated cells in a tissue or organ, which can renew itself and can differentiate to yield the major specialized cell types of the tissue or organ.

Somatic cell nuclear transfer: see cloning.

*Spare' embryo:* An embryo created during the course of IVF treatment of the infertile couple which is not utilized for the purpose also known as supernumerary embryo.

*Spongiform encephalopathy*: Is kind of degenerative diseases of the brain characterized by the development of porous spongelike lesions in brain tissue and by deterioration in neurological functioning; specifically: prion disease.

*Stem cells:* Stem cells are undifferentiated cells with a capacity for self-renewal, proliferation and differentiation into many different types of functional cell.

*Stem cell Bank:* A facility that is responsible for accessioning, processing, packaging, labelling, storage and delivery of appropriately defined different kinds of stem cells.

*Teratoma:* A tumour derived from more than one embryonic layer and made up of a heterogeneous mixture of tissues (as epithelium, bone, cartilage, or muscle).

*Totipotent:* Having the ability to give rise to all the cell types of the body plus all of the cell types that make up the extra embryonic tissues such as the placenta.

*Vulnerable/special population:* It simply implies the disadvantaged sub-segment of the community requiring utmost care, specific ancillary considerations and augmented protections in research. The vulnerable individuals' freedom and capability to protect one-self from intended or inherent risks is variably abbreviated, from decreased freewill to inability to make informed choices. Vulnerable communities need assiduous attention during designing studies with unique recruitment considerations and quality scrutiny measurements of overall safety and efficacy strategies ensuing research. Vulnerable population and methods for their safeguard) include the economically disadvantaged, racial and ethnic minorities, the uninsured, low-income children, the elderly, the homeless, those with human immunodeficiency virus (HIV), and those with other chronic health conditions, including severe mental illness.



#### Annexure - I

# **Composition and Functioning of NAC-SCRT and IC-SCR**

The NGSCR have been formulated to encourage research involving stem cells and regenerative medicine leading to a pool of scientists in the country in this ever growing area of biomedical research. Because of the special characteristics of the stem cells, it is important that such research is conducted under strict compliance of NGSCR, National Ethical Guidelines for Biomedical and Health Research Involving Human Participants, 2017 and the existing regulatory framework.

Two levels of monitoring mechanism have been established: one at the national level focussing primarily on policy and the other, a more self-regulatory system of review at the institutional level. The National Apex Committee for Stem Cell Research and Therapy (NAC-SCRT) has been constituted and notified by Department of Health Research (DHR), Ministry of Health and Family Welfare, Govt. of India as an independent body of experts representing diverse areas of biomedical research, concerned government agencies and other stakeholders.

The Institutional Committee of Stem Cell Research (IC-SCR), on the other hand, operates at the institutional level with members having specific expertise as per these guidelines. It is mandatory for them to register with NAC-SCRT and submit periodic report on their scientific activities for effective functioning.

# 1. National Apex Committee for Stem Cell Research and Therapy (NAC-SCRT)

This is a multi-disciplinary committee with its Secretariat at the ICMR Headquarters, New Delhi. Main objectives of the committee are i) to serve as an advisory body to promote and facilitate stem cell research in the country; ii) to perform a comprehensive review of the therapeutic use of stem cells and formulate policies to curb unethical practices; iii) to review specific controversial or ethically sensitive issues referred to the committee.

The committee periodically assesses the adequacy of the document in light of advancements in the field and also provides a forum for discussion of issues involved in basic and clinical research. The committee reviews specific concerns referred by the IC-SCR including studies falling under the 'restrictive category'. Further, all unforeseen issues of public interest are referred to it from time to time.

# 1.1 Scope

**1.1.1** Examine scientific, technical, ethical, legal and social issues in the area of stem cells and/or of their derivatives.

- 1.1.2 Maintain a register of all institutions involved in any type of stem cell research and clinical trials undertaken. Accordingly all IC-SCRs are mandated to register with NAC-SCRT.
- **1.1.3** Review annual reports of the IC-SCRs for compliance with national guidelines and ethical practices.
- **1.1.4** Approve, monitor and oversee research in 'restrictive areas' as defined in this document.
- **1.1.5** Periodically review and update the National Guidelines for Stem Cell Research and possible therapeutic applications of stem cells keeping pace with global scientific developments in the field.
- 1.1.6 In co-ordination with the CDSCO and keeping in view other existing regulations, set-up standards for safety and efficacy, quality control, procedures for collection of human stem cells or their derivatives and their schedule, processing or preparation, expansion, differentiation, preservation for storage, removal from storage to assure quality.
- 1.1.7 Respond to queries and representations from stakeholders in the community (investigators, industry, R&D Institutions, entrepreneurs, media, patient groups, government agencies etc.).
- **1.1.8** Address suggestions and feedback received from other government agencies and stakeholders.
- 1.1.9 Review unethical practices related to stem cell research (and/or therapy) being undertaken at an organization or by an individual and bring the same to the notice of competent authorities for necessary action.
- 1.1.10 NAC-SCRT may sent their nominee as an observer on IC-SCR.

#### 1.2 Composition

The committee is constituted of the following:

Chairman, Alternative Chairman, Member Secretary, nominees from DBT, DST, CSIR/ DSIR, ICMR, DGHS, CDSCO, DAE, DRDO, RHS, MCI, IMA, and biomedical experts drawn from appropriate disciplines such as Hematology, Pharmacology, Immunology, Cell Biology, Microbiology, Genetics, Developmental biology, Clinical medicine and Nursing. Other members include a legal expert, social scientist, and women's representative. Additional subject experts could be consulted for specific topics and advice.

#### **1.3 Frequency of meetings**

The meeting may take place quarterly, but can be more frequent, as per the needs and requirements.

# 2. Institutional committee for Stem Cell Research (IC-SCR)

This is a multi disciplinary self regulatory, independently functioning body at the institutional level that oversees all stem cell related research activities and/or clinical trials in compliance with the NGSCR and existing regulatory framework. Institutions involved in stem cell research (basic science and clinical) are required to establish IC-SCR as per NGSCR and register the same with NAC-SCRT.

IC-SCR approval is mandatory for undertaking any stem cell research including clinical trials.

#### 2.1. Scope

- 2.1.1 Review and approve the scientific merit of research protocols.
- 2.1.2 Function in compliance with the existing regulations and guidelines for stem cell research.
- 2.1.3 Maintain a record of all research activities involving stem cells conducted at the institution.
- 2.1.4 Maintain a registry of pluripotent stem cell lines (hESC/iPSC) derived or imported by individual investigators and notify the same to NAC-SCRT.
- 2.1.5 Submit report of the institutional stem cell research activities to NAC-SCRT annually.
- 2.1.6 Report all AEs/SAEs to NAC-SCRT.
- 2.1.7 Seek advice from NAC-SCRT on any contentious issue.
- 2.1.8 Facilitate training of investigators and other stakeholders engaged in stem cell research about current knowledge, international status, relevant guidelines and regulations through regular Continuing Medical Education (CME) programs, public lectures and seminars.

#### 2.2. Composition

The committee includes representatives of the public and persons with expertise in clinical medicine, hematology, immunology, developmental biology, stem cell research, molecular biology, assisted reproduction technology, toxicology, other related disciplines (as per the institutional research mandate), and ethics, social sciences and law. The experts should be invited as per the subject area of the projects under consideration for review.

#### 2.3. Membership

2.3.1 The IC-SCR shall have a minimum of 11 members. Other experts as per study requirements should be included.

- 2.3.2 Presence of the following members is mandatory for quorum and for decision making: Chairperson/Vice-Chairperson, Member Secretary, experts from law, ethics and social sciences, community/lay-person and two stem cell/cell and molecular biology expert with appropriate expertise and no COI. In the absence of Chairperson, the Vice-Chairperson can conduct the meeting. The members of quorum except the Member Secretary should never have been affiliated to the institution.
- 2.3.3 Persons affiliated to the institution, except the Member-Secretary, cannot be members of IC-SCR. Ex-employees of the institute can become a member only after two (2) years of leaving the institution.
- 2.3.4 The Chairperson/Vice-Chairperson should have biomedical qualification with a postgraduate (medical)/doctorate degree (non-medical) with minimum of ten (10) years' experience after obtaining the postgraduate/doctorate degree.
- 2.3.5 Members from law, ethics, social sciences and community/lay-person must be from outside the institute and with no COI.
  - 2.3.5.1 All members should have a minimum of five (5) years' experience after postgraduation in their respective areas of proficiency except for community/lay-person.
  - 2.3.5.2 The legal expert should be a law graduate with five (5) years of experience. S/he should be well versed with the existing acts, rules, regulations and guidelines.
  - 2.3.5.3 The social scientist should have a postgraduate/doctorate degree in social sciences/social work.
  - 2.3.5.4 The ethics expert should have a minimum six months training or demonstrable experience in bioethics.
- 2.3.6 IC-SCR should have at least two stem cell/cell and molecular biology experts who should be from outside the institution. They should have a postgraduate (medical)/doctorate degree (non-medical) with a minimum of five (5) years' experience in the field of stem cell research after obtaining postgraduate/ doctorate degree.
- 2.3.7 The Member Secretary should be affiliated to the institute but should not be a part of the scientific/clinical management team and must not have any COI related to stem cell research activities.
- 2.3.8 Persons affiliated to the institute/company such as President/Vice-President/ Chairperson/Director/CEO/Dean/CSO/MD/Financial and Legal Advisers/ Administrative Heads/etc. cannot be members of the IC-SCR. They cannot attend meetings of IC-SCR in any capacity.
- 2.3.9 Any member having COI with a particular proposal must abstain from the discussion and decision making process of that proposal.

- 2.3.10 IC-SCR members must be familiar with the current bioethical guidelines and those for stem cell research.
- 2.3.11 Subject experts with no COI and not affiliated to the same institute may be invited for specific projects. The invitee will not have voting rights.
- 2.3.12 NAC-SCRT may nominate an observer on the IC-SCR to educate and to create awareness regarding existing guidelines and regulations.
- 2.3.13 The IC-SCR shall not act as an IEC. Separate approvals must be obtained from both committees for human stem cell related projects.

# 2.4. SOPs for functioning of IC-SCR

SOPs for functioning of IC-SCR must be framed including, but not limited to the following information:

- 2.4.1 Composition of IC-SCR
- 2.4.2 Terms of reference of members
- 2.4.3 Review and approval process
- 2.4.4 Quorum and frequency of meetings
- 2.4.5 Monitoring and progress review of on-going research activities
- 2.4.6 Maintenance of records
- 2.4.7 Record of Conflict of Interest (COI)
- 2.4.8 Record of confidentiality agreement

#### 2.5 Registration of IC-SCR

Registration of IC-SCR with NAC-SCRT is mandatory. NAC-SCRT website (Available at: http://bic.icmr.org.in/nacscrt/IC-SCR\_Registration.html) should be consulted for further details. The application along with supporting documents should be submitted to NAC-SCRT Secretariat. This will be reviewed by the committee and if satisfactory, a registration certificate is issued. The validity of certification is three years subject to compliance with the National Guidelines for Stem Cell Research.

It may be noted that the certificate is issued for the sole purpose of registration of IC-SCR with NAC-SCRT. The committee should ensure that the investigator/institution is not misusing the certificate for undue publicity or commercial gains. The registration may be withdrawn if the practices of investigator/institute/IC-SCR are not in compliance with the NGSCR requirements.

The IC-SCR shall inform the Secretariat in writing of any alterations in the committee composition/functioning/category of stem cell research undertaken/any other information/concerns.

Representatives of the NAC-SCRT/regulatory authorities can inspect records, data or documents related to research activities of the institute and seek clarifications/ explanation to the queries, if any.

# Annexure- II

# **Clinical Trial Protocol Template**

Section	Description	
1.	Study title:	
	Protocol ID: Phase of the study: Sponsor: Contract Research Organization (CRO)	
	Investigator/s and Institution/s	
2.	Synopsis of the protocol (Summary)	
3.	Introduction (including preclinical and clinical experience)	
4.	Study rationale (including potential risks and benefits)	
5.	Study objectives (primary and secondary objectives)	
6.	Study design	
	Number of patients	
	Eligibility criteria a. Inclusion b. Exclusion	
	Study activities: Phase a. Screening b. Treatment c. Post –treatment d. Follow-up	
	Schedule of visits and activities at each visit	
7.	Withdrawal of patients prior to study completion	
8.	Safety assessment a. Definitions b. Documentation of adverse events c. Reporting of serious adverse events	

9.	Efficacy assessment: Outcome	
	a. Primary efficacy	
	b. Secondary efficacy	
10.	Concomitant Medications	
	a. Documentation of medications – name, dose, duration	
	b. Intercurrent illness	
	c. Prohibited medications	
11.	Investigational New Entity	
	a. Chemistry Manufacturing and Control (CMC) information	
	b. Dosage	
	c. Route of administration	
	d. Cell preparation and administration instructions	
	e. Accountability of Investigational drug/product	
12.	Data evaluation/statistics	
	a. Sample size determination	
	b. Study population analyses	
	c. Efficacy analysis/methods	
	d. Safety analysis/methods	
	e. Adverse events	
	f. Clinical laboratory studies	
13.	Ethical and Administrative Issues	
	a. Informed consent including audio video consent from Patient /Parent/	
	Relative	
	b. Risks and benefits	
	c. Approval of IEC, IC-SCR and CDSCO	
14.	Data Safety Monitoring Board (DSMB)	
15.	Adherence to the protocol	
	a. Protocol deviation/amendment	
16.	Data collection, source documentation and retention of patient records	
17.	Monitoring of the study and audit	
18.	Intellectual Property Rights (IPR) issues (patent obtained/filed)	
19.	Confidentiality	
20	References	

21.	Enclosures
	<ul> <li>CMC in case of stem cell or cell based product (if not included in Investigator brochure)</li> </ul>
	<ul> <li>Investigator brochure including background, rationale, product details, pre-clinical study results, human trials, references and publication list and reprints</li> </ul>
	c. Case Record Form
	<ul> <li>Manual for efficacy assessments, safety assessments, laboratory procedures etc.</li> </ul>
	<ul> <li>Approved patient information sheet and consent form (including audio video consent)</li> </ul>
	<ul> <li>MOU/MTA in case of National/International collaboration with transfer of biological materials</li> </ul>
	g. Funding of the project/sponsor
	h. Conflict of interest declaration
	i. Clearances of IEC, IC-SCR and CDSCO
	j. Charter of DSMB
	k. Certificate of Registration of IEC and IC-SCR

#### Annexure- III

# Approved Indications for Hematopoetic Stem Cell Transplantation (HSCT)

# I. Adults (generally ≥18 years of age):

S. No	Indication	
1.	Acute Myeloid Leukemia (AML)	
2.	Acute Promyelocyte Leukemia (APML)	
3.	cute Lymphoblastic Leukemia (ALL)	
4.	hronic Myeloid Leukemia (CLL)	
5.	lyelodysplastic Syndromes (MDS)	
6.	Therapy related AML/MDS	
7.	Myelofibrosis & Myeloproliferative diseases	
8.	Plasma Cell Disorders 8.1 Myeloma 8.2 Plasma Cell Leukemia 8.3 Relapse after autologous transplant	
9.	Hodgkin Lymphoma (HL)	
10.	Diffuse Large B-cell Lymphoma	
11.	Follicular Lymphoma	
12.	Mantle Cell Lymphoma	
13.	T-cell Lymphomas	
14.	Lymphoplasmacytic Lymphomas 14.1 Primary refractory, sensitive 14.2 Primary refractory, resistant 14.3 First or greater relapse, sensitive 14.4 First or greater relapse, resistant 14.5 Relapse after autologous transplant	
15.	Burkitt's Lymphoma	
16.	Cutaneous T-cell Lymphoma	
17.	Plasmablastic Lymphoma	
18.	Chronic Lymphocytic Leukemia (CLL)	
19.	Solid tumors 19.1 Germ cell tumor, relapse 19.2 Germ cell tumor, refractory 19.3 Ewing's sarcoma, high risk	

20.	Non – Malignant diseases
	20.1 Severe Aplastic Anemia, new diagnosis
	20.2 Severe Aplastic Anemia, relapse/refractory
	20.3 Fanconi'sAnemia (FA)
	20.4 Dyskeratosis Congenita
	20.5 Sickle Cell Disease (SCD)
	20.6 Hemophagocytic Syndromes, refractory
	20.7 Mast Cell Diseases
	20.8 Common Variable Immunodeficiency(CVID)
	20.9 Wiskott-Aldrich Syndrome (WAS)
	20.10 Chronic Granulomatous Disease (CGD)

# II. Pediatric (generally <18 years of age)

S. No.	Indications	
1.	Acute Myeloid Leukemia (AML)	
3.	Acute Lymphoblastic Leukemia (ALL)	
4.	Chronic Myeloid Leukemia (CML)	
5.	Myelodysplastic Syndromes (MDS)	
7.	T-cell Non-Hodgkins' Lymphoma (T-NHL)	
8.	Lymphoblastic B-cell Non-Hodgkins' Lymphoma (non-Burkitt)	
9.	Burkitt's Lymphoma	
10.	Hodgkins'Lymphoma	
11.	Anaplastic Large Cell Lymphoma	
12.	Solid tumors 12.1 Germ cell tumor, relapse 12.2 Germ cell tumor, refractory 12.3 Ewing's sarcoma, high risk or relapse 12.4 Neuroblastoma, high risk or relapse 12.5 Wilm's tumor, relapse 12.6 Osteosarcoma, high risk 12.7 Medulloblastoma, high risk 12.8 Other malignant brain tumors	

13.	<u>Non – Malignant diseases</u>	
	13.1 Severe Aplastic Anemia, new diagnosis	
	13.2 Severe Aplastic Anemia, relapse/refractory	
	13.3 Fanconi's Anemia (FA)	
	13.4 Dyskeratosis Congenita	
	13.5 Blackfan-Diamond Anemia	
	13.6 Sickle Cell Disease (SCD)	
	13.7 Thalassemia Major	
	13.8 Congenital Amegakaryocytic Thrombocytopenia	
	13.9 Severe Combined Immunodeficiency (SCID)	
	13.10 T Cell Immunodeficiency, SCID variants	
	13.11 Wiskott-Aldrich Syndrome (WAS)	
	13.12 Hemophagocytic Disorders	
	13.13 Lymphoproliferative Disorders	
	13.14 Severe Congenital Neutropenia	
	13.15 Chronic Granulomatous Disease (CGD)	
	13.16 Other Phagocytic Cell Disorders	
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	Syndrome	
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*Source:* Majhail NS, Farnia SH, Carpenter PA, Champlin RE, Crawford S, Marks DI, Omel JL, Orchard PJ, Palmer J, Saber W, Savani BN, Veys PA, Bredeson CN, Giralt SA, LeMaistre CF; American Society for Blood and Marrow Transplantation. Indications for Autologous and Allogeneic Hematopoietic Cell Transplantation: Guidelines from the American Society for Blood and Marrow Transplantation. Biol Blood Marrow Transplant. 2015 Nov;21(11):1863-9

#### Annexure IV

# Screening of Donors for Allogeneic Transplantation

# 1. Cell Source and Traceability

The cells can be obtained from the following two sources:

- a) *Autologous:* These include mononuclear, CD34<sup>+</sup> enriched cells or mesenchymal stromal cells (MSCs) or iPS cells or stromal vascular fragment (SVF) from adipose tissue obtained from the same individual, and
- b) *Allogeneic:* These include mononuclear cells, preferably HLA matched CD34<sup>+</sup> HSCs or MSCs that have been isolated from various tissues under GTP practices from any healthy individual other than the recipient.
- 1.1 *Cell Source*: The starting cell source is bone marrow/Wharton's jelly/UCB/lipoaspirate/ peripheral blood mobilized stem cells/embryos or other appropriate cell sources from healthy donors.
- 1.2 Screening Requirements: Donor screening and testing can be done only after obtaining written informed consent including audio video consent from the donor. The overall procedure for cell/tissue donation should be conducted as per the Ethics Committee approved standard operating procedures (SOPs).
- **1.3** *Genetic and Travel History*: Detailed travel and genetic history of the donor should be recorded before initiating screening and testing.
- 1.4 *Testing:* In addition to infectious disease markers (Table 4.1), the donors are screened for complete hemogram, coagulation studies, blood sugar, liver function tests, renal function tests, routine urine examination, echocardiogram, and chest X-ray as given in Table 4.2.

Note: Stem cells/tissues obtained from sources such as embryos/fetuses/fetal tissues/umbilical cord and blood/placenta and others must be free from HPV/EBV/TORCH/ Parvo virus B19, and any other emerging infectious agents in addition to those listed in Table 4.1.

# 2. Inclusion criteria:

- a. Healthy individuals of both sexes in the age group of 18-40 yrs.
- b. Willingness and ability of the donor to comply with the program.
- c. The donor should be able to comprehend the Institutional Ethics Committee (IEC) approved information, need for informed consent including audio-video consent, donor rights, voluntary nature of donation and then sign the informed consent form (ICF).

#### 3. Exclusion criteria:

- a. Refusal or inability to give informed consent.
- b. An illness that precludes the use of general anesthesia/local anesthesia (whichever applicable).
- c. Illness like tuberculosis, malaria or any other infection.
- d. Autoimmune disorders (diabetes mellitus), hypertension, heart disease.
- e. Past history of any malignancy.
- f. Features of any genetic or chromosomal disorders.
- g. Family history of any inherited disorders.
- h. Abnormal laboratory investigations: Hb  $\leq$  11.0 gm%, serum creatinine  $\geq$  2.0 mg%, serum total bilirubin  $\geq$  1.0 mg%.
- i. Pregnant and nursing women.
- j. Donors found positive for any of the infectious disease markers (Table 4.1).
- k. Participation in a similar donation program within the last six months.
- **4.** Follow up Interviews: Should be conducted with every donor at six monthly intervals after the first donation for a period of at least five years so as to record general well-being of the donor.
- 5. Traceability: All donors must be anonymized, although under special circumstances, their traceability may be needed. There should be a system in place allowing traceability of the final product to the original donor, thus facilitating tracing of cells and final disposition of each tissue derived from the donor.
- 6. Cell/tissue Collection: Procedure to obtain cells/tissues along with the name and location of the collection facility, and transport conditions (if shipped to a processing facility for further manufacturing) should be documented.
- 7. Management of Records: Records to be maintained concurrently with the performance of each required step in determining donor eligibility so that all steps can be clearly traced if needed. Compliance with the GTP requirements, records pertaining to cell source are to be retained at least 15 years from the date of administration to the recipient.

Table 4.1: Screening for Communicable Diseases (To be performed in NABL/CAP accredited laboratory)

S. No	Infectious agents	Tests to be done
1.	HIV, type 1& 2	Anti-HIV-1& 2
		HIV-1 Polymerase chain reaction (PCR) test or HIV-1 and HBV and HCV combination PCR test (Combination NAT)
2.	HBV (HBsAg + anti-HBc)	HBsAg
		Total anti-HBc (IgG and IgM)
		HBV nucleic acid assay (HBV deoxyribonucleic acid [DNA] by PCR) or HIV-1 and HBV and HCV combination PCR test (Combination NAT)
3.	HCV	Anti-HCV
		HCV NAT (HCV ribonucleic acid [RNA] by PCR) or HIV-1 and HBV and HCV combination PCR test (Combination NAT)
4.	Treponemapallidum	TPHA test
5.	Human T-lymphotropic virus (HTLV), types I and II	Anti – HTLV I/II
6.	CMV (Cytomegalovirus)	Anti – CMV (IgM)
		CMV PCR qualitative

Note: Emerging infectious agents should be included as and when notified.

# Table 4.2: Hematological and Biochemical Investigations (To be performed in NABL/CAP accredited laboratory)

S. No.	Test	Method
1.	Blood grouping	1. ABO grouping and Rh typing
2.	Complete Haemogram	<ol> <li>Hemoglobin (Hb)</li> <li>Total Leucocyte Count (TLC)</li> <li>Differential Leucocyte Count (DLC)</li> <li>Platelet count</li> <li>Peripheral smear examination</li> </ol>
3.	Blood Sugar	<ol> <li>Fasting Blood Sugar (FBS),</li> <li>Post-prandial blood sugar (PPBS) – 2 hours after meals</li> </ol>
4.	HbA1c	1. Blood –Glycosylated Hemoglobin (HbA1c)
5.	Renal function tests	<ol> <li>BUN</li> <li>Serum creatinine</li> <li>Serum Sodium</li> <li>Serum Potassium</li> </ol>
6.	Liver function Tests	<ol> <li>Total bilirubin</li> <li>Direct bilirubin</li> <li>Total proteins</li> <li>Serum albumin</li> <li>Serum globulin</li> <li>A:G ratio</li> <li>Alanine Aminotransferase (ALT)</li> <li>Aspartate Aminotransferase (AST)</li> <li>Alkaline Phosphatase (ALP)</li> </ol>
7.	Lipid Profile	<ol> <li>Lipid Profile</li> <li>Total Cholesterol</li> <li>Triglycerides</li> <li>High density lipoproteins (HDL)</li> <li>Low density lipoproteins (LDL)</li> <li>Very low density lipoprotein (VLDL)</li> </ol>
8.	Coagulation Studies	<ol> <li>Prothrombin time (PT)</li> <li>International Normalized Ratio (INR)</li> <li>Activated Partial Thromboplastin Time (aPTT)</li> </ol>
9.	Urine Routine	Microscopy and Urine routine examination (Urine pregnancy test for female donors of child bearing potential during the screening)

S. No.	Test	Method
10.	ECG	12 Lead ECG (Electrocardiogram)
11.	Chest X ray	Posterio-anterior (PA) view

*Source:* Eligibility Determination for Donors of Human Cells, Tissues, and Cellular and Tissue-Based Products (HCT/Ps). U.S. Department of Health and Human Services. Food and Drug Administration, Center for Biologics Evaluation and Research, May 2004 & August 2007

#### Annexure V

# Manufacturing of Stem Cells and /or their Derivatives

Institutions/entities involved in clinical research/trials using stem cells and/or their derivatives should prepare detailed SOPs on the development and manufacturing processes involved and validate the same. All requirements should be defined and justified as per the Drugs and Cosmetics Act, 1940 and rules therein.

A flow diagram explaining the entire process starting from biological specimen indicating critical steps and intermediate products (e.g. intermediate cell batches), helps to provide the above information in a succinct manner. The Chemistry, Manufacturing and Control (CMC) requirements of the product are summarized below:

- a) Describe the degree of manipulation(s) required for cell processing and document the physiological function of cells.
- b) Document information on procedures used for transportation/shipment of the materials during the manufacturing process of the product, including storage conditions and holding times.
- c) Attention should be paid to biodegradable materials, which may have the potential for undergoing environmental changes (raised pH, temperature, humidity, specific handling etc.) for the cells during the manufacturing process.
- d) The manufacturing area should be separated from the procurement area so as to avoid the risk of cross contamination during each step of the procedure, e.g. via processing equipment or in storage containers such as liquid nitrogen tanks.
- e) Facility requirements should be complied with the GMP, prescribed for aseptic manufacturing as per Schedule M of Drugs and Cosmetics Act, 1940 and Rules therein.
- f) Equipment and premises used for manufacturing should fulfil conditions of aseptic production. It is recommended that dedicated, product-specific or single-use equipment be used in the production process, whenever possible.

The following procedures should be included in the CMC:

# 1. Cell Collection/Processing/Culture Conditions:

- i. The volume and number of cells/tissue collected.
- ii. Detailed procedure for collection (with respect to the type of enzyme, media, etc.) along with validation.
- iii. Procedure(s) used to isolate and/or purify the cell population of interest along with validation for the intended use.

- iv. Use of cell selection or separation device, including density gradient, magnetic beads, or fluorescence activated cell sorting (FACS) systems.
- v. Culture systems whether closed or open along with use of flasks, bags etc.
- vi. All in-process quality control testing parameters and procedures. Consideration should be given to the degree of disruption applied to the tissue in order to preserve the intended functional integrity of the cellular preparation and to minimize cell-derived impurities in the product (cell debris, cross contamination with other cell types).

# 2. Cell culture

During *in vitro* cell cultures, consideration should be given to the use of clinical grade reagents and culture media. Ensure acceptable kinetic growth and manipulation of the isolated cells. Level of manipulation of cells through physical, chemical and/or genetic treatments, if any, should be documented.

- i. Processing steps required to preserve the integrity and function of the cells.
- ii. Detailed procedures employed for any manipulation, with close monitoring as per the specific process controls.
- iii. Duration of cell culture and the number of cell passages along with validation.
- iv. Relevant genotypic and phenotypic characteristics of the primary cell cultures, of the established cell lines and of the derived cell clones and their stability with respect to culture longevity.
- v. Consistency/reproducibility of the cell culture process and culture conditions including the media and duration with respect to the intended clinical function of the cells.
- vi. Special consideration should be given to the growth potential of cells in response to growth factors since cell sub-populations may gain a growth advantage under defined *in vitro* culturing conditions.

# 3. Final Cell Harvest

- i. If the final cell harvest is centrifuged prior to final formulation, description of the wash conditions and media used.
- ii. Whether cells/products are manufactured for immediate use or cryopreserved after formulation.
- iii. If the final harvest is stored, description of the storage conditions, length of storage, and appropriate supporting data.

# 4. Process Timing and Intermediate Storage

Approximate time elapsed for each step from cell collection to final harvest to be recorded

- i. Time limit of each step involved in production to be noted to determine inprocess checks, if any.
- ii. If cells are cryopreserved, this information to be included along with stability and viability data.
- iii. Time and conditions of storage of the product prior to patient administration.

# 5. Final Formulation

Describe formulation of the final product, including excipients such as growth factors or human serum albumin. List of all excipients/components with defined specifications and source used during manufacturing of the final product that are intended to be present in the final product should be provided.

- i. State the source of these components.
- ii. Identify the vendor and final concentration of excipients and describe the cell density or cell concentration used in the final product.
- iii. If the final product is delivered to the clinical site in frozen state, before administration to the patient, mention procedures/instructions about shipment and thawing before use. Data generated about the stability/viability of product during such processes should be released.

#### Annexure -VI

# **Release Criteria for Stem Cells and/or Their Derivatives**

The release criteria for stem cells and derivatives are of critical importance and researchers/ stakeholders are required to follow the specifications under which the final product is considered for their intended use. The characteristics of the final product as mentioned in the release criteria must be complied with and which includes –

# 1. Product Identity

For the final product, identity testing is important to ensure that the contents of the vial are labeled appropriately. It is recommended to verify the identity of the Master Cell Bank, Working Cell Bank, and the final product by assays that will determine the identity of the product and distinguish it from others being processed in the same facility. The identity of the cells should be confirmed by appropriate genotypic and/ or phenotypic markers, and the fraction of the cell population having such identity markers measured as an indication of purity.

- a) Quantitative assessment of product identity by monitoring cell surface antigens or biochemical markers. Method of identification should be able to detect contamination or replacement by other cells in use in the facility.
- b) Define acceptable limits for culture composition.
- c) Identify and validate quantitative assays for functional potency.
- d) Monitor the desired function when the cells are subjected to manipulation. Tests should be carried out periodically to assure that the desired trait is retained.

# 2. Cellular Component

Identity of the cellular components in relation to phenotypic and/or genotypic profile should be carried out depending on the cell population and origin.

- a) Employ relevant markers for cell phenotyping. These markers are based on gene expression, antigen presentation, biochemical activity, response to exogenous stimuli, capability to produce biologically active or otherwise measurable molecules.
- b) For adherent cells, morphological analysis may be a useful tool in conjunction with other tests. Where applicable, provide detailed description of the procedures that could lead to modification of the product characteristics including adhesion, absorption, degradation, and components of the culture media.

- c) For identity of cellular components of allogeneic origin, include histocompatibility testing, wherever applicable, and perform other genetic polymorphisms with specific reference to the intended use.
- d) Define essential characteristics of the cultured cell population (phenotypic markers such as cell surface antigens, functional properties, activity in bioassays, as appropriate), and establish stability of thesewith respect to time in culture. This profile should be used to define limits of the culture period.

# 3. Non-cellular Components or the Active Substance

All non-cellular components should be appropriately characterized and identity parameters established:

- a) If the finished product contains a distinct active substance in addition to the cellular component, the same should be characterized with respect to identity in accordance to relevant guidelines, depending on the nature of the active substance, whether chemical or of biological origin.
- b) Structural components designed to support the cellular components such as scaffolds or membranes should be identified and characterized with respect to their composition and structural characteristics.

# 4. Product Purity

Product purity is defined as relative freedom from extraneous material in the finished product, whether or not harmful to the recipient or deleterious to the product. Purity testing includes assays for pyrogenicity/endotoxin, residual proteins or peptides used to stimulate or pulse cells, reagents/components used during manufacture, such as cytokines, growth factors, antibodies and serum and unintended cellular phenotypes.

- a) The cell population of interest could contain other cells that are of different lineages and/or differentiation stage or that may be unrelated to the intended population.
- b) Where a specific cell type is required for the indication, the unwanted cells (such as cell debris, or based on CD markers) should be defined and their amount in the final product controlled by appropriate specifications. Acceptance criteria for the amount of contaminating cells should be set.
- c) Where the desired biological activity and efficacy of the product requires a complex mixture of cells, the same should be characterized and its composition controlled by appropriate in-process controls and release testing.

d) Irrespective of the cell type, the cell population can get contaminated with non-viable cells. Since cell viability is an important parameter for product integrity and is directly correlated to the biologic activity, the ratio between viable and non-viable cells should be determined and specification limits should be defined.

# 5. Impurities

The appropriate purity testing should include assays for residual peptides and proteins used during production and purification, and reagents used during manufacture, such as cytokines, growth factors, antibodies, beads, and serum. Appropriate purity testing should include a measurement of contaminating cell types or cell debris.

- a) Product or Process-Related: During the production of stem cells and/or derivatives, variable amounts of impurities, product and process-related, may be introduced into the final product. Any reagents known to be harmful in humans should be analyzed in the final product (or in individual components if otherwise not possible) and acceptance criteria should be defined. Specification limits should be justified by levels detected in batches used for toxicological and/or clinical studies. Any material capable of introducing degradation products into the product during production (e.g. biodegradable materials), should be thoroughly characterized and the impact, if any, of the degradation products to the cell component(s) should be addressed.
- b) Adventitious Agents: A critical aspect is to establish that the product is free from adventitious microbial agents (viruses, mycoplasma, bacteria, and fungi). The contamination could originate from the starting or raw material stage or adventitiously introduced during the manufacturing process.
  - i. A risk assessment should be performed to evaluate the possibility of reactivation of cryptic (integrated, quiescent) forms of adventitious agents.
  - ii. A thorough testing for the absence of bacteria, fungi and mycoplasma should be performed at the level of finished product.
  - iii. In cases where the short shelf life of the product is prohibitive for the testing of absence of bacteria, alternative validated testing methods may be acceptable, if justified.
- c) Pyrogenicity/Endotoxin: Define the pyrogenicity/endotoxin testing conducted, and the acceptance criterion for release.
  - i. The Limulus Amebocyte Lysate test method (LAL) is the required method for testing biological products for pyrogenic substances (validated prior to licensure).

- ii. The rabbit pyrogen test method is also one of the methods for testing biological products for pyrogenic substances.
- **6. Viability:** The viability of the cells should be quantitated and a lower limit for acceptability established.

# 7. Potency

Potency is the quantitative measure of biological activity based on the attribute of the product, which is linked to the relevant biological properties. The assay demonstrating the biological activity should be based on the intended biological effect which should ideally be related to the clinical response. If development of a quantitative biological assay is not possible, then a quantitative physical assay which correlates with and is used in conjunction with a qualitative biological assay can be used.

- i. A suitable potency assay should already be in place when material for the first clinical trial is produced and it should be validated prior to pivotal clinical trials.
- ii. Lot release and shelf life specifications for potency should be determined and amended during product development, if appropriate.
- iii. Major cellular functions such as viability, self renewal, death and differentiation are pivotal to the quality, function and sustainability of the product. The product needs to be monitored during production and at release using surrogate markers and appropriate technology (e.g. gene expression profiles by microarrays, flow cytometric immune fluorescent analysis, cell cloning, PCR and many others).
- iv. Markers for purity and those for potency should not be mixed in the same assay.
- v. A combination of multiple methods may be needed to adequately define the potency of cell-based products during development. Certain assays may be needed to control process changes, whereas others are more suitable for release testing.
- vi. Potency assays of stem cell based pharmaceutical product intended for immunotherapeutic use will be based on complex immune mechanisms which may be complicated by multi-antigen formulations and inherent variability of the starting material.

# 8. Tumorigenicity

The tumorigenicity of stem cell product differs from the classical pharmaceutics. The transformation can happen due to chromosomal instability of stem cell and its derivatives and due to host factors in the treated individual. Therefore testing of chromosomal integrity and tumorigenicity of product is necessary before final product release.

Certain release tests can be performed only on key intermediates and/or as inprocess tests. In all such cases, an adequate quality control should be in place from the manufacturing process, supported by the results of the clinical studies. These exceptions may include the following:

- i. Some release tests might not be feasible on the combined components of the active substance/ finished product for technical reasons.
- ii. A complete release testing cannot be finalized before the product is administered to the recipient due to time restrictions (e.g. in case of autologous products, which are administered immediately after completion of the production and initial testing). However, a critical set of essential tests that can be performed in the limited time prior to clinical use must be defined and justified. Whenever feasible, retention samples should be stored for future analysis.
- iii. In case of allogeneic stem cells, product can be released only after complete testing as per defined specifications.
- iv. The amount of available product is limited to the clinically necessary dose (e.g. due to very limited cell numbers at collection or low proliferation rates). Release of the product should be justified by the validation of cell manipulation process and in-process controls.

The release criteria specifications for the final product (tests for safety, purity, potency, and identity and acceptance criteria) should be provided in format as given in Table 6.1:

S. No.	Test Description	Test Method	Specification
1	Morphology	Microscopic observation	Description of cells seen
2	Cell count	Automated dye exclusion (done by automated counter)	Cell numbers to be specified
3	Viability	DNA staining by 7AAD (Flow cytometry)	≥ 70 %
4	Bacterial endotoxins	Gel clot	Specification to be set
5	Mycoplasma	PCR ELISA	Not detected
6	Sterility test	Direct inoculation	Must comply
7	Purity	Immunophenotyping (Flow cytometry)	<ul> <li>≥ 80% of final cell population to express appropriate cell surface markers,</li> <li>≤ 10% of undesirable cell types</li> </ul>
8	DNA ploidy	Propidium lodide staining (Flow cytometry)	Normal
9	Differentiation assay (if applicable)	Monolayer culture and staining	Description
	Adipocyte		
	Osteocyte		
	Chondrocyte	Micro mass culture and staining	
10	Karyotyping	GTG-banding	Normal
11	Infectious Disease Testing HIV – I	Quantitative real time PCR	Negative
	HIV – II	Qualitative real time PCR	-
	HBV		-
	HCV	Quantitative real time PCR	
	CMV		
	EBV	PCR	
	Parvo virus B 19		

### Table 6.1: Release criteria for stem cell products for clinical applications

S. No.	Test Description	Test Method	Specification
	Appropriate potency assay	Method to be described	Limits to be specified
	BSA estimation (if fetal calf serum used)	ELISA	
	Trypsin estimation (if used)	1	

### 9. Labelling and Packaging

The product labelling should be maintained throughout the manufacturing process and should be described on the final product container.

- i. The label for an investigational product must contain the following statement: "Caution: New Drug – Only for Investigational Use."
- ii. To minimize the potential mix-ups, label should contain the date of manufacture, storage conditions, expiry date and time (if appropriate), product name, and two non-personal patient identifiers For autologous donors and other situations for which a donor eligibility determination is not required, appropriate applicable labelling is to be done. For example, for autologous cells intended for autologous use one must label the product "FOR AUTOLOGOUS USE ONLY" and "NOT EVALUATED FOR INFECTIOUS SUBSTANCES" if donor testing and screening is not performed.

### **10.** Shipping and Transport

- If the product is shipped from the manufacturing to the clinical site, specify the time and describe shipping conditions (e.g., packaging, temperature). The stability protocol should be adequate to demonstrate that product integrity, sterility, and potency are maintained under the proposed shipping conditions.
- ii. If the final product is delivered in frozen state to the clinical site, it is recommended to include a description of how the product will be shipped and data to show that the product can be thawed with consistent results.

#### Annexure VII

### SCHEDULE J of Drugs and Cosmetics Rules, 1945

Diseases and ailments (by whatever name described) which a drug may not purport to prevent or cure or make claims to prevent or cure.

- 1. AIDS
- 2. Angina Pectoris
- 3. Appendicitis
- 4. Arteriosclerosis
- 5. Baldness
- 6. Blindness
- 7. Bronchial Asthma
- 8. Cancer and Benign tumour
- 9. Cataract
- 10. Change in colour of the hair and growth of new hair.
- 11. Change of foetal sex by drugs.
- 12. Congenital malformations
- 13. Deafness
- 14. Diabetes
- 15. Diseases and disorders of uterus.
- 16. Epileptic fits and psychiatric disorders
- 17. Encephalitis
- 18. Fairness of the skin
- 19. Form, structure of breast
- 20. Gangrene
- 21. Genetic disorders
- 22. Glaucoma
- 23. Goitre
- 24. Hernia
- 25. High/low Blood Pressure
- 26. Hydrocele
- 27. Insanity
- 28. Increase in brain capacity and improvement of memory.

- 29. Improvement in height of children/adults.
- 30. Improvement in size and shape of the sexual organ and in duration of sexual performance
- 31. Improvement in the strength of the natural teeth.
- 32. Improvement in vision
- 33. Jaundice/Hepatitis/Liver disorders
- 34. Leukaemia
- 35. Leucoderma
- Maintenanceor improvement of the capacity of the human being for sexual pleasure.
- 37. Mental retardation, subnormalities and growth
- 38. Myocardial infarction
- 39. Obesity
- 40. Paralysis
- 41. Parkinsonism
- 42. Piles and Fistulae
- 43. Power to rejuvenate
- 44. Prematureageing
- 45. Premature greying of hair
- 46. Rheumatic Heart Diseases
- 47. Sexual Impotence, Premature ejaculation and spermatorrhoea
- 48. Spondylitis
- 49. Stammering
- 50. Stones in gall-bladder, kidney, bladder
- 51. Vericose Vein

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## **ICMR-DBT**

# GUIDELINES FOR EVALUATION OF PROBIOTICS IN FOOD

**Indian Council of Medical Research** 

(Department of Health Research, Ministry of Health & Family Welfare)

**Department of Biotechnology** 

(Ministry of Science and Technology)

New Delhi

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### FOREWORD

Probiotics are bacteria that help maintain the natural balance of microflora in the intestines. The normal human digestive tract contains about 400 types of probiotic bacteria that reduce the growth of harmful bacteria and promote a healthy digestive system. Experiments into the benefits of probiotic therapies suggest a range of potentially beneficial medicinal uses for probiotics. Recent research on the molecular biology and genomics of *Lactobacillus* has focused on the interaction with the immune system, anti-cancer potential, and potential as a biotherapeutic agent in cases of antibiotic-associated diarrhoea, travellers' diarrhea, paediatric diarrhoea, inflammatory bowel disease and irritable bowel syndrome.

The increasing globalization of food trade has resulted in India being a fast emerging market for probiotic products. With the availability of these products increasing exponentially and the multiple claims made regarding the beneficial health effects, there is the need to put in place sufficient safeguards to protect the consumers from any adverse effects, ensure standardization of commercial products and their efficacy.

The present ICMR-DBT guidelines comprehensively address the various concerns regarding safety, efficacy and reliability as well as labeling of probiotic products being sold in India.

I hope the scientific community, the regulatory agencies and the public at large will be benefited by these guidelines.

-sd-(M.K Bhan) **Dr. Vishwa Mohan Katoch** MD, FNASc, FAMS, FASc, FNA Secretary to Government of India Department of Health Research Ministry of Health & Family Welfare & Director General, Indian Council of Medical Research

### PREFACE

The concept of probiotics was introduced in early 20<sup>th</sup> century, however they gained importance in recent years with the emerging scientific evidences suggesting their role in digestive and immunological functions.

During the last decade there has been increased influx of probiotic products in Indian market. However, there was no systematic approach for evaluation of probiotics in food to ensure their safety and efficacy.

Being the apex body in India for the formulation, coordination and promotion of biomedical research, Indian Council of Medical Research (ICMR) along with Department of Biotechnology (DBT) took the initiative to formulate the guidelines for evaluation of probiotics in food in India. A Task Force was constituted to examine various guidelines available in different parts of the world and deliberate on the relevant issues keeping in view the local conditions. The guidelines formulated and presented in this document define a set of parameters required for a product/strain to be termed as 'probiotic'. These include identification of stain, *in vitro* screening for probiotic characteristics, animal studies to establish safety and *in vivo* animal and human studies to establish efficacy. These also include requirements for labeling of the probiotic products with strain specification, viable numbers at the end of shelf life, storage conditions etc which would prevent misleading the consumer.

These guidelines have been developed for scientific purpose with the main aim to guide the regulatory authority for evaluating probiotic products in our country. I hope that these will also stimulate thinking among scientists interested in developing this area in India.

-sd-(V.M Katoch)

## ACKNOWLEDGEMENTS

We gratefully acknowledge the help rendered by all the people involved in the formulation of guidelines.

We are grateful to Prof. N.K. Ganguly, Chairperson of the Task Force on 'Guidelines for evaluation of Probiotics in Food' and Former Director General, Indian Council of Medical Research for identifying the need and significance of guidelines on probiotics in food. The Task force has met thrice to formulate and thoroughly discuss every aspect of the guidelines. Further, Core group and follow up meetings were also held to go over certain technical details of the document. We are grateful to all the Task Force member for their contributions in preparing guidelines and refinement of the manuscript.

We also acknowledge the inputs received from the NGOs/Industry representatives present in the scientific deliberations and the suggestions received from others following posting of draft guidelines on ICMR website.

Efforts of ICMR and DBT secretariat for putting together the available information and co-ordinating the activities of the Task Force is also acknowledged.

-sd-

(Dr. K. Satyanarayana) Head Division of Reproductive Health & Nutrition and Publication and Information ICMR Hqrs, New Delhi

### TASK FORCE ON 'GUIDELINES FOR EVALUATION OF PROBIOTICS IN FOOD'

#### Chairperson

Dr. N.K. Ganguly President, JIPMER, Puducherry Former Director-General, ICMR, New Delhi Former Director In-charge, PGIMER, Chandigarh

#### Members

**Dr. S.K. Bhattacharya** Former Addl. Director General ICMR, New Delhi

**Dr. B. Sesikeran** Director National Institute of Nutrition Hyderabad

**Dr. G.B.Nair** Director, National Institute of Cholera & Enteric Diseases Kolkata

**Dr. B.S. Ramakrishna** Professor & Head Clinical Gastroenterology & Hepatology Christian Medical College, Vellore

**Dr. H.P.S. Sachdev** Senior Consultant Department of Pediatrics Sitaram Bhartiya Institute of Sciences & Research, New Delhi **Dr. V.K. Batish** Former Head, Dept of Microbiology National Dairy Research Institute Karnal

**Dr. A.S. Kanagasabapathy** Consultant Biochemist Kam Neni Hospitals Andhra Pradesh

**Dr. Vasantha Muthuswamy** Former Head (RHN & BMS) ICMR Hqrs, New Delhi

**Dr. S.C. Kathuria** Deputy Assistant Director General (PFA) Food Safety & Standards Authority of India New Delhi

#### **Co-ordinating unit**

Indian Council of Medical Research, New Delhi

**Dr. V.M. Katoch** Secretary, DHR & DG, ICMR

Dr. K. Satyanarayana Head RHN and P&I

**Dr. G.S. Toteja** Scientist 'F' *Member Secretary & Convener* 

Dr. Manju Rahi Scientist 'C'

Ms. Spriha Rao Research Scholar Department of Biotechnology, New Delhi

**Dr. M.K. Bhan** Secretary, Department of Biotechnology

**Dr. Rajesh Kapur** Advisor (Food & Nutrition)

## ABBREVIATIONS

BMS	:	Basic Medical Sciences
CFU	:	Colony Forming Units
DBT	:	Department of Biotechnology
DHR	:	Department of Health Research
DNA	:	Deoxyribonucleic Acid
FAO	:	Food and Agricultural Organization
GCP	:	Good Clinical Practices
GMO	:	Genetically Modified Organisms
GMP	:	Good Manufacturing Practices
GRAS	:	Generally Recognized as Safe
HACCP	:	Hazard Analysis and Critical Control Point
ICMR	:	Indian Council of Medical Research
ICPS	:	International Committee on Systematics of Prokaryotes
JIPMER	:	Jawaharlal Institute of Post Graduate Medical Education and Research
PCR	:	Polymerase Chain Reaction
PFGE	:	Pulsed Field Gel Electrophoresis
PGIMER	:	Postgraduate Institute of Medical Education & Research
PI	:	Publication & Information
RNA	:	Ribonucleic Acid
RHN	:	Reproductive Health & Nutrition
SOPs	:	Standard Operating Procedures
WHO	:	World Health Organization

### ICMR-DBT GUIDELINES FOR EVALUATION OF PROBIOTICS IN FOOD

### 1. INTRODUCTION

The concept of probiotics (which means, "for life") was introduced in early 20th century by Elie Metschnikoff (1), it however gained momentum only recently with considerable and significant advances in functional and health food market across the world. India is also fast emerging as a potential market for probiotics in food. The global probiotic market generated US \$15.9 billion in 2008 and is expected to be worth US\$ 32.6 billion by 2014 with a compound annual growth rate of 12.6% from 2009 to 2014 (2). On the other hand the probiotic product industry in India was estimated to be around Rs 20.6 million with a projected annual growth rate of 22.6% until 2015 (3).

Probiotics, especially *Lactobacillus* and *Bifidobacterium* have been suggested to be associated with alleviation of lactose intolerance (4); prevention and cure of viral, bacterial and antibiotic or radiotherapy induced diarrhoeas (5,6.7); immunomodulation (8); antimutagenic (9) and anticarcinogenic effects (10); and even blood cholesterol reduction (11). The optimism associated with probiotics is, however, counter-balanced by skepticism as many "probiotic" products in the market are unreliable in content and unproven clinically (12-15).

Also, Lactobacilli and Bifidobacteria have been rarely associated with human clinical infections which are likely to be a result of opportunistic infections especially in immunocompromised individuals (16-17). Many probiotic strains in use for several decades have been validated for their safety and efficacy and are therefore, safe to use (18,19). Any new strain used as a probiotic should be evaluated for safety and efficacy.

However, *Enterococcus* is emerging as an important cause of nosocomial infections and isolates are increasingly becoming vancomycin resistant (20). Some side

1

effects, though rare with probiotics are i) systemic infections ii) deleterious metabolic activities iii) excessive immune stimulation in susceptible individuals and iv) gene transfer (21). The absence of pathogenicity and infectivity thus is an essential pre-requisite of probiotic safety (22).

International guidelines (23,24) on probiotics in food broadly specify the kind of tests that may be required to determine the safety and to assess the health claim of a probiotic product in food. Such tests are based on the current understanding of the subject.

The regulatory mechanism for probiotics differs from country to country and also even within a country (23,25).

In India there are no regulatory guidelines for probiotic foods. In the absence of any such standards and guidelines, there is great scope for spurious products with false claims being marketed. It therefore, becomes imperative that these products fulfill some essential prerequisite conditions before being labeled as a 'probiotic product'. A holistic approach is therefore needed for formulating guidelines and regulations for evaluating the safety and efficacy of probiotics in India which should be in consonance with current international standards.

Keeping in view the above, a Task Force was constituted by ICMR, comprising of experts from varied fields to develop guidelines for evaluation of probiotics in food in India. The Task Force took into consideration the guidelines available in different parts of the world (20, 26-31) and deliberated on the various aspects to be covered (32-36). The guidelines set forth in this document are meant to be followed for a strain or food to be termed as 'probiotic' for marketing in India.

### 2. GUIDELINES AND REQUIREMENTS FOR PROBIOTIC PRODUCTS

**2.1. Scope:** The guidelines deal with the use of probiotics in food and provides requirements for assessment of safety and efficacy of the probiotic strain and health claims and labeling of products with probiotics.

Note: These guidelines are not meant for probiotics which by definition would come under drugs, beneficial microorganisms not used in foods or genetically modified microorganisms (GMOs).

- 2.2 Definition of Probiotics: Probiotics are 'live microorganisms which when administered in adequate amounts confer a health benefit on the host' (FAO/WHO, 2002) (20).
- 2.3 Genus, species and strain identification: Effects of probiotics are strain specific. Strain identity is important to link a strain to a specific health effect as well as to enable accurate surveillance and epidemiological studies. Both phenotypic and genotypic tests should be done using validated standard methodology. Nomenclature of the bacteria must conform to the current, scientifically recognized names as per the International Committee on Systematics of Prokaryotes (ICPS) (available at http://www.the-icsp.org/).

The current molecular techniques used for identification include PCR based techniques, 16S rRNA sequencing and DNA finger printing techniques like ribotyping and Pulsed Field Gel Electrophoresis (PFGE).

It is recommended that probiotic strains in use in India should be deposited in an internationally recognized culture collection/repositories.

- **2.4** *In vitro* tests to screen potential probiotic strains: The following *in vitro* tests\* with standard methodology are recommended for screening putative probiotic strains:
  - 2.4.1 Resistance to gastric acidity.
  - 2.4.2 Bile acid resistance.
  - 2.4.3 Antimicrobial activity against potentially pathogenic bacteria (acid and bacteriocin production)

<sup>\*</sup> Adherence to mucus and/or human epithelial cells and cell lines has in the past been used to screen candidate probiotics. The Committee debated this and concluded that there are probiotics which are not adherent. Hence this should not be used as a mandatory criterion or to claim superiority of one strain over another in terms of probiotic attributes and functionality.

- 2.4.4 Ability to reduce pathogen adhesion to surfaces
- 2.4.5 Bile salt hydrolase activity

These tests are based on the hostile gut environment which they mimic under in vitro conditions. The cultures evaluated as probiotics based on these tests should be subjected to preclinical validation in appropriate animal models before clinical trials are conducted in human subjects.

- 2.5 In vivo safety studies in animal models: Assessment of the acute, subacute and chronic toxicity of ingestion of extremely large amounts of probiotics should be carried out for all potential strains. Such assessment may not be necessary for strains with established documented use.
- **2.6** *In vivo* efficacy studies in animal models: To substantiate *in vitro* effects, appropriate, validated animal models must be used first, prior to human trials.
- 2.7 Evaluation of safety of probiotics for human use: In recognition of the importance of assuring safety, even among group of bacteria that are Generally Recognized as Safe (GRAS)\*\*, probiotics strains needs to be characterized at a minimum with the following tests:
  - 2.7.1 Determination of antibiotic resistance patterns. It should be ascertained that any given probiotic strain is not at significant risk with regard to transferable antibiotic resistance.
  - 2.7.2 Assessment of undesirable side-effects.
  - 2.7.3 If the strain under evaluation belongs to a species that is a known mammalian toxin producer or of hemolytic potential, it must be tested for toxin production and hemolytic activity respectively.

<sup>\*\*</sup> As defined by Food and Drug Administration (FDA), USA

Assessment of lack of infectivity by a probiotics strain in immunocompromised individuals would be an added measure.

2.8 Evaluation of efficacy studies in humans: The principal outcome of efficacy studies on probiotics should be proven with similar benefits in human trials, such as statistically and clinically significant improvement in condition, symptoms, signs, well-being or quality of life, reduced risk of disease or longer time to next occurrence or faster recovery from illness. Each of the parameter should have proven correlation with the probiotics tested.

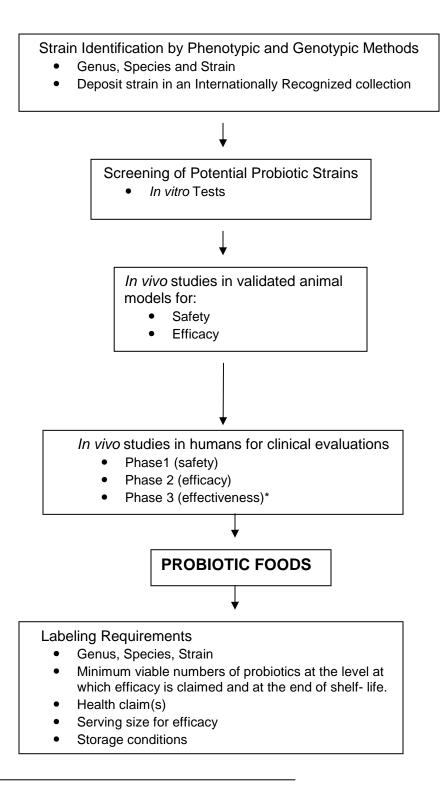
Probiotics delivered in food may not be tested in Phase 3 studies (effectiveness), unless the product makes a specific health claim wherein it becomes imperative to generate the required evidence necessitating carrying out Phase 3 studies.

If a probiotic food has a record of documented long and safe use outside the country, the data regarding this could be reviewed and deemed as sufficient to allow its marketing within the country. However, labeling of health benefits may require evaluation in a different manner. While taking into account studies done abroad, efficacy studies of probiotics (which are of proven benefit in 'other' populations) should also be conducted on Indian subjects. It is recommended that such 'bridging' human trials should comply with the principles laid down by the Drug Regulatory Authority. Adverse effects, if any, should be monitored and incidents reported to the appropriate authority.

- 2.9 Effective dosage of probiotic strain / strains: The minimal effective dose or the level of viable cells of the probiotic strain in terms of cfu/ml/day in the carrier food that demonstrates general health promoting functions or well being or specific health claims in target population should be clearly indicated.
- **2.10 Labeling Requirements:** In addition to the general labeling requirements under the food laws, the following information should also be mentioned on the label (23,37):

- Genus, species and strain designation following the standard international nomenclature.
- The minimum viable numbers of each probiotic strain should be specified at the level at which efficacy is claimed and at the end of shelf- life.
- Evidence-based health claim(s) should be clearly stated.
- The suggested serving size to deliver the minimum effective quantity of the probiotic related to the health claim.
- Proper storage conditions to be mentioned.
- 2.11 Manufacturing and handling procedures: Adequate quality assurance programmes should be in place. Good Manufacturing Practices should be followed in the manufacture of probiotic foods. The Codex General Principles of Food Hygiene and Guidelines for Application of Hazard Analysis and Critical Control Point (HACCP) should be followed.

### Figure 1: Guidelines for evaluation of candidate probiotic strains



\* Only required if a specific health claim is made

### 3. REFERENCES

- Metchnikoff E (1907): Lactic acid as inhibiting intestinal putrefaction. In: The prolongation of life: Optimistic studies. W. Heinemann, London: 161-183. In: Health and Nutritional Properties of Probiotics in Food Including Powder Milk with Live Lactic Acid Bacteria. Report of a Joint FAO/WHO Expert Consultation on Evaluation of Health and Properties of Probiotics in Food Including Powder Milk with Live Lactic Acid Bacteria. Córdoba, Argentina, October 1-4, 2001.
- Probiotic Market- Advanced Technologies and Global Market (2009 2014). By: marketsandmarkets.com. Publishing Date: September 2009. Report Code: FB 1046. Accessed at http://www.marketsandmarkets.com/Market-Reports/probiotic-marketadvanced-technologies-and-global-market-69.html
- 3. Probiotics in Foods and Beverages—Strategic Assessment of the Indian Market. Frost & Sullivan (2009).
- 4. Levri KM, Ketvertis K, Deramo M, Merenstein JH, D'Amico F. Do probiotics reduce adult lactose intolerance? A systematic review. J Fam Pract 2005;54(7):613-20.
- 5. Guandalini S. Probiotics for children: use in diarrhea. J Clin Gastroenterol 2006;40(3):244-8.
- 6. Szajewska H, Mrukowicz JZ. Use of probiotics in children with acute diarrhea, Pediatric drugs 2005;7(2):111-22.
- 7. Parvez S, Malik KA, Ah Kang S, Kim HY. Probiotics and their fermented food products are beneficial for health. J App Microbiol 2006;100(6):1171-85.
- 8. Forsythe P, Bienenstock J. Immunomodulation by commensal and probiotic bacteria. Immunol Invest. 2010;39(4-5):429-48.
- 9. Chalova VI, Lingbeck JM, Kwon YM, Ricke SC. Extracellular antimutagenic activities of selected probiotic Bifidobacterium and Lactobacillus spp. as a function of growth phase. J Environ Sci Health B. 2008;43(2):193-8.
- 10. Liong MT. Roles of probiotics and prebiotics in colon cancer prevention: Postulated mechanisms and in-vivo evidence. Int J Mol Sci. 2008;9(5):854-63.
- 11. Ooi LG, Liong MT. Cholesterol-lowering effects of probiotics and prebiotics: a review of in vivo and in vitro findings. Int J Mol Sci. 2010;11(6):2499-522.
- 12. Hughes VL, Hillier SL. Microbiologic characteristics of *Lactobacillus* products used for colonization of the vagina. Obstet Gynecol 1990;75:244-8.
- 13. Hamilton-Miller JM, Shah S, Winkler JT. Public health issues arising from microbiological and labelling quality of foods and supplements containing probiotic microorganisms. Public Health Nutr 1999;2:223-9.
- 14. Zhong W, Millsap K, Bialkowska-Hobrzanska H, Reid G. Differentiation of *Lactobacillus* species by molecular typing. Appl Environ Microbiol 1998;64:2418-23.

- 15. Consumer Lab.com. Product Review: Probiotic Supplements for Adults, Children and Pets. Accessed at http://www.consumerlab.com/results/probiotics.asp
- 16. Mackay AD, Taylor MB, Kibbler CC, Hamilton-Miller JMT. *Lactobacillus endocarditis caused by a probiotic organism*. Clin Microbiol Infect 1999;5:290-292.
- 17. Rautio M, Jousimies-Somer H, Kauma H, Pietarinen I, Saxelin M, Tynkkynen S et al. Liver abscess due to a Lactobacillus rhamnosus strain indistinguishable from L. rhamnosus strain GG. Clin Infect Dis 1999;28:1159-60.
- Salminen S, von Wright A, Morelli L, Marteau P, Brassart D, de Vos WM et al. Demonstration of safety of probiotics – a review. Int J Food Microbiol 1998;44: 93-106.
- 19. Adams MR, Marteau P. On the safety of lactic acid bacteria. Int J Food Microbiol, 1995;27:263-264.
- 20. Guidelines for evaluation of probiotics in food. Report of a Joint FAO/WHO Working Group on Drafting Guidelines for the Evaluation of Probiotics in Food. London, Ontario, Canada, April 30 and May 1, 2002.
- 21. Marteau P. Safety aspects of probiotic products. Scand J Nutr 2001;45:22-242
- 22. Ishibashi N, Yamazaki S. Probiotics and safety. Am J Clin Nutr 2001;73:465S-470S.
- 23. Reid G. Regulatory and clinical aspects of dairy probiotics. Background paper for FAO/WHO Expert Consultation on Evaluation of Health and Nutritional Properties of Probiotics in Food including Powder Milk and Live Lactic Acid Bacteria. Cordoba, Argentina. 1-4 October 2001.
- 24. Sanders ME, Huis in't Veld J. Bringing a probiotic-containing functional food to the market: microbiological, product, regulatory and labeling issues. Antonie van Leeuwenhoek 1999;76:293-315.
- Patel D, Dufour Y, Domigan N. Functional food and nutraceutical registration process in Japan and China. Similarities and differences. J Pharm Pharmaceut Sci. 2008;11(4):1-11.
- 26. EFFCA Guidelines for Probiotics in Food and Dietary Supplements. European Food and Feed Culture Association, 2008. Accessed at http://bbs.bio668.com/simple/index.php?t35919.html
- 27. Establishing standards for Probiotics: ISAPP's Role. International Scientific Association for Probiotics and Prebiotics, 2005. Accessed at http://www.isapp.net/docs/probiotic%20standards%20justification.pdf
- 28. Evidence for safety and efficacy of finished natural health products, Natural Health Products Directorate, Canada. December 2006.
- 29. IPA releases Guidelines for probiotic supplements. International Probiotics Association, 2008. Accessed at http://www.naturalproductsinsider.com/ hotnews/ipa-guidelines-probiotic-supplements.html

- 30. Introduction of a Qualified Presumption of Safety (QPS) approach for assessment of selected micro organisms referred to EFSA. The EFSA Journal 2007; 587:1-16.
- 31. Guidance for Industry on Complementary and Alternative Medicine Products and their Regulation by the Food and Drug Administration. Draft Guidance. U.S. Department of Health and Human Services. Food and Drug Administration, December 2006
- 32. Health and Nutritional Properties of Probiotics in Food Including Powder Milk with Live Lactic Acid Bacteria. Report of a Joint FAO/WHO Expert Consultation on Evaluation of Health and Properties of Probiotics in Food Including Powder Milk with Live Lactic Acid Bacteria. Córdoba, Argentina, October 1-4, 2001.
- 33. Von Wright A. Regulating the safety of probiotics The European Approach Current Pharmaceutical Design 2005;11:17-23.
- 34. Przyrembel H. Consideration of possible legislation within existing regulatory frameworks. Am J Clin Nutr 2001;73:471S-475S.
- 35. Reid G. The importance of guidelines in the development and application of probiotics. Current Pharmaceutical Design 2005;11:11-16.
- 36. Specifications for the Identity and Purity of Food Additives and their Toxicological Evaluation: Some Antimicrobials, Antioxidants, Emulsifiers, Stabilizers, Flour-Treatment Agents, Acids and Bases. Ninth Report. FAO Nutrition Meetings Report Series, 1966, No. 40; WId HIth Org. techn. Rep. Ser., 1966, No. 339.
- 37. Saldanha LG. US Food and Drug Administration regulations governing label claims for food products, including probiotics. Clin Infect Dis 2008; 46 Suppl 2: S119-121.

### 4. GLOSSARY

**Probiotics:** Probiotics are 'live microorganisms which when administered in adequate amounts confer a health benefit on the host'

**Shelf-life**: Survival of sufficient viable organisms ( $\geq 10^8$  CFU/gram) to confer health benefits to the host when stored at a specified temperature.

**Health Claims**: A statement, which characterizes the relationship of any substance to a disease or health-related condition, and these should be based upon wellestablished, generally accepted knowledge from evidence in the scientific literature and/or recommendations from national or international public health bodies with clinical validation of safety and efficacy.

**HACCP:** Hazard Analysis and Critical Control Point is a management system in which food safety is addressed through the analysis and control of biological, chemical, and physical hazards from raw material production, procurement and handling, to manufacturing, distribution and consumption of the finished product.

**Codex Alimentarius:** The Codex Alimentarius is a collection of internationally recognized standards, codes of practice, guidelines and other recommendations relating to foods, food production and food safety. The Codex Alimentarius Commission was created in 1963 by FAO and WHO with the purpose of protecting health of the consumers, ensuring fair trade practices in the food trade, and promoting coordination of all food standards work undertaken by international governmental and non-governmental organizations.

**GMP:** Good manufacturing practice is that part of quality assurance which ensures that products are consistently produced and controlled to the quality standards appropriate to their intended use and as required by the marketing authorization.





## Proceedings of the meeting held on 20.02.2021 at 3.30 PM in the P.G. Department of Biotechnology, Utkal University to discuss the functionality of the Central Instrumentation Facility (CIF) of the University

C.5

### Members present:

ST.C.

- Prof. J. Dandapat, Director, Research & Development and HOD, Department of £.
- 2 Prof. P.K. Mahapatra, HOD, Department of Zoology
- 3 Dr. D. Beura, HOD, Department of Geology
- 4. Dr. P. K. Panda, HOD, Department of Physics
- 5. Dr. J. Dinda, HOD, Department of Chemistry
- 6. Dr. C. Pradhan, HOD, Department of Botany

## The following resolutions were made in the meeting:

- 1. The newly constructed building for CIF will be taken over at the earliest in order to make it functional. Consequent upon the approval by the Honorable Vice Chancellor for the provision of working space and laboratory development for CoE-IOCB, Public health (RUSA) and tribal studies (WB), first floor of the building will be allotted for the purpose.
- 2. It has been proposed that Dr. P. K. Panda, Head, Dept. of Physics will act as the Coordinator and Dr. G. Sahoo, Dept. of Zoology and Dr. S. N. Pal, Dept. of Chemistry will act as the Associate Coordinators to monitor the overall functioning of the CIF.
- 3. The following members will constitute the advisory committee of the CIF.

  - a. HoDs of Departments of Physics, Chemistry, Botany, Zoology, Biotechnology, Geology and Computer Science b. Coordinator, RUSA
  - c. Director, R & D
  - d. Director, IQAC

  - e. Coordinator, IDP and World Bank
  - f. External members-
    - Prof. Durga Prasad Mahaputra, Retd. Scientist, Institute of Physics, 12 Bhubaneswar
    - ii. Prof. Bibhu Ranjan Nayak, Principal Scientist, CSIR-IMMT, Bhubaneswar
    - iii. Prof. Sanjib Sahoo, Scientist-F. ILS, Bhubaneswar
    - iv. Dr. Sashikanta Das, Facilitator, CIF, OUAT
- 4. Dr. P. K. Panda, HoD, Department of Physics, Coordinator, CIF will be the Convener of the Advisory Committee. The committee will remain functional for two years and will be called at least twice in a year or as and when required.

- 5. The internal members will physically inspect the CIF for allocation of space/rooms for different instruments.
- 6. The following basic infrastructural facilities need to be provided at the earliest i.e. provision of Lab work bench, furniture, safety devices, fire alarming system, automatic smoke detection system, fire extinguishers, fume hood, water supply and Air Conditioners (ACs) and installation of lift to carry heavy instruments to the upstairs.
- 7. Manpower for following services need to be engaged at the earliest i.e. Lab Attendant/ Office Attendant (02 nos.), Lub Technician/ Assistant (02 nos.), Office Assistant/ Stores In-Charge (01 no.) and out sourcing sweepers (2 nos.) for cleaning and maintenance of the CIF.
- 8. Construction of boundary wall and development of connecting roads to different departments need to be done.
- 9. Separate dedicated suitable transformer for power supply and Diesel Generator set for power back up need to be installed.
- 10. Round the clock security should be provided with immediate effect.
- 11. Electric connection and chemical earthling need to be verified before handover of the CIF building.
- 12. Water supply to the building with sinks of variable sizes as per requirement need to be undertaken.

at 20 wet

Prof. J. Dandapat

Prof. P.K. Mahapatra

Dr. D Beura

PUPanda CR: 4

HAR STAT Dr. C. Pradhan



Utkal University, Vani Vihar, Bhubaneswar-751004 India

/2021

No Dev-I/CIF/1209/

16.9.21 Date:

#### OFFICE ORDER

Consequent upon the approval of the Vice Chancellor, Utkal University on 31/03/2021 Dr. P. K. Panda, Head, Dept of Physics will act as the Coordinator and Dr. Gunanidhi Sahoo, Department of Zoology and Dr. S. N. Pal. Department of Chemistry will act as the Associate Coordinators of the Central Instrumentation Facility (CIF) to monitor the overall functioning of the CIF in addition to their own assignments in the respective Departments. They are required to take over the above assignment with immediate effect.

Registrar & Cylroy Date:

No Dev-1/CIF/1209/ 14275 12021

Copy to:

- 1. Persons concerned.
- 2. The Director, R&D, Utkal University,
- 3. The Head of Physics, Zoology and Chemistry ,Utkal University,
- The Comptroller of Finance, Utkal University, for information.
- The PA to the Vice-Chancellor, Utkal University for kind information of the Vice Chancellor

A Lynoy



REGISTRAR



FAX: (0674) 2567055/2567850 <u>Tel:(0674)</u> 2567387(0) UTKAL UNIVERSITY VANI VIHAR BHUBANE5WAR-751004

No R-31/2021

Date 25.06.2021.

### Notification

In pursuance of the approval of the Vice Chancellor dated 25.6.2021, panel for the Institutional Ethics Committee of the Utkal University is constituted as mentioned below.

### 1. Chairperson (External)

Dr. Sanghamitra Pati, Director, ICMR-RMRC, Chandrasekharpur, Bhubaneswar-751004. Phone: 0674-2301322/2301332, Mob: 9437093306, Email: drsanghamitra12/@gmail.com.

## 2. Basic Sciences / Researchers (External)

i. Dr. Sanjeeb Kumar Sahoo, Scientist - F Institute of Life Sciences, Nalco Square, Bhubaneswar-751023, Phone: 674 2304341, Mobile: 9438505320, Email: sanjeebsahoo2005@gmail.com

ii. Dr. Manoranjan Ranjit, Scientist-F, Regional Medical Research Centre (ICMR), Bhubaneswar, PIN-751023. Mobile: 9437488192, Email- ranjit62@gmail.com

## 3. Scientist from Medical Practice/ Clinicians (External)

L. Dr. Trupti Rekha Swain, Associate Professor, Pharmacology, SCB Medical College and Hospital, Cuttack, PIN-753001, Mobile: 9438126333. Email id: dttruptiswain@gmail.com

ii. Dr. Guru Prasad Chhotray (MD, Pathology), Former Deputy Director, RMRC (ICMR), Bhubaneswar, PIN-751023, Mobile: 9437060589, Email: gpchhotray@yahoo.co.in

## 4. Legal Advisor (External)

Prof. Sukanta Kumar Nanda, Professor and Head, P.G Dept of law, Madhusudan Law University, Cuttack-753003, Mobile 437377377, email: nandask97@gmail.com

ii. Mr.Prabhu Prasan Behera, Advocate, Odisha High court , Prabhu Niwas, Nuasahi , Naya Bazar, Cuttack. Mobile: 9438006487, Email: prabhuprasanna89@gmail.com

## 5. Social Scientist / Social Activist (External)

Dr. Ramesh Mohanty, Research Officer, Nabakrushna Choudhury Centre for Development Studies, Bhubaneswar, Odisha-751013, Mobile: 9861162856, Email: ramesh.neds @gov.in

## 6. Philosopher / ethicist / theologian (External)

Mob: 7377074334, Email: pdas@ravenshawuniversity.ac.in



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Date\_

## 7. Lay persons/ Common citizens

REGISTRAR

No

Dr Pravas Acharya; Organ donation and tissue bank in Cuttack, Odisha; Mob: 09437020348, Email:dr.pravasacharya@gmail.com

## 8. Member Secretary (Utkal University)

Prof. Pravati Kumari Mahapatra, Dept of Zoology, Utkal University. Mobile: 9437281982. Email: mahapatra.pk.zool@utkaluniversity.ac.in / mpkzooluu@gmail.com

## Invited / Internal Members ( for discussion and guidance purpose )

## 1. Basic Sciences / Researchers (Internal) invited corresponding

Prof. Jagneswar Dandapat. Dept of Biotechnology. Utkal University. Mobile: 437466087, Email: j.dandpat.nou@gmail.com.

## 2. Social Scientist /Philosopher Social / Activist (Internal)

Prof. Navneeta Rath, Department of Sociology, Utkal University, Mobile: 9437211588, Email: navaneeta.rath @gmail.com

## 3. Philosopher / ethicist / theologian (Internal)

Dr. Alakananda Parida, Department of Philosophy, Utkal University, Mobile: 9439785463, Email: alakanandaparida@gmail.com

### 4. Legal Advisor (Internal)

Sri Tarananda Pattanayak, Advocate, Orissa High Court, 2.laxmi Villa, Pilgrim Road, College Square, Cuttack-753003, Mobile: 9861126941, Email-tripattanayak@gmail.com

## 5. Advisor from another IERB (IIPH/RMRC/AIIMS/ any other)

Dr. Sarit Kumar Rout, Additional Professor, Indian Institute of Public Health, Bhubaneswar, Mobile: 9937162455, Email: sarit.kumar@phfi.org

Applicats { 2) 3) payeholgi



REGISTRAR

No.

FAX: [0674] 2567055/2567850 Tel: (0674) 2567387(O) UTKAL UNIVERSITY VANI VIHAR BHUBANESWAR-751004

Date.

### 6. Convener and Co-Convener

i. Dr Prasnna Kumar Patra, Dept. of Anthropology, Utkal University, Mob: 8763356554, Email: pkpatra@rediffmail.com (Convener) ii. Dr. Sanatan Majhi, Dept. of Biotechnology, Utkal University, Mob: 9938093250, Email: sanatanm@gmail.com (Co-Convener)

icturay Registrar

Dated

### H 25.06-2021.

Copy forwarded to

Memo No R/ 32/ 2021.

- 1. All members of the committee
- 2. Chairman, PG Council, Utkal University
- 3. All Heads of PG Departments
- 4. Director R&D
- 5. Comptroller of Examinations
- 6. Comptroller of Finance
- 7. Chief Librarian , Parija Library
- 8. Secretary to Vice Chancellor, for kind information of the Vice Chancellor
- 9. Director, CDC for information and intimation to affiliated colleges.

as leptory Registrar

## Institutional Ethics Committee (Human) UTKAL UNIVERSITY

Vani Vihar, Bhubaneswar - 751004

Members	Participation
1 Dr. Sanghamitra Pati	
Chairperson, IEC-UIU	
drsanghamitra12@email.com	
2.Dr. Sanjeeb Kumar Sahoo	
Basic Sciences / Researcher	
sanjeebsahoo2005@gmail.com	
3.Dr. Truptirekha Swain	
Medical Practice / Clinician	
druptiswain@gmail.com	
4. Prof. Sukanta Kumar Nanda	
Legal Advisor	
nandask97@gmail.com	
5. Dr. Ramesh Mohanty	-
Social Scientist / Social Activist	
Ramesh.ncds@gmail.com	
6.Dr. Patita Paban Das	
Philosopher / Ethicist	
pdas@ravenshawuniversity.ac.in	
7.Dr. Pravas Acharva	
Lay person/ Common ncitizen	
pravsacharya@gmail.com	
8. Dr. Sarit Kumar Rout	
Advisor from another IERB	
sarit.kumar@phfi.org	
9.Prof. J. Dandapat (Internal)	
Basic Sciences / Researcher	
jdandapat.nou@gmail.com	
10. Prof. Navaneeta Rath (Internal)	
Social Scientist	
navanceta.rath@gmail.com	
11. Dr. Alakananda Parida (Internal)	
r miosopher / Ethicist	
alakanandaparida@gmail.com	
12. Sri Tarananda Pattanayak (Internal)	
regai Muvisor	
tnpattanayak@gmail.com	
13. Prof.Pravati Kumari Mahanatra	
Viember Secretary / Basic Sciences	
npkzooluu@gmail.com	
Best Wishes	

Prof, Pravati Kumari Mohapatra Member Secretary

То	Date: 15/07/2021
Name & Address of the PI:	
**********	

Dear	
Sub:	
Ref:	

Type of review:	
IEC Reference No:	
Project Title:	
Version No. & Date:	
Principal Investigator	

Thank you for submitting your application which was considered at the Institutional Ethics Committee meeting on \_\_\_\_\_\_\_at Utkal University and the below mentioned documents have been reviewed and discussed.

- a. b.
- c.
- d.
- e.

The decision of the IEC : Approved / ......\*

\*The approval letter is valid for one year. The amendments to the proposal, DRC/ reports protocol deviation and violation reports need to be submitted to IEC for review and approval should be sought before implementation. The progress completion report should be submitted to IHEC for review before expiry of this approval failing which the approval stands withdrawn.

Dr.Sanghamitra Pati Chairperson



REGISTRAR

FAX: (0674) 2567055/2567850 Tel:(0674) 2567387(0) UTKAL UNIVERSITY VANI VIHAR BHUBANE5WAR-751004

No R-31/2021

## Date 25.06.2021.

### Notification

In pursuance of the approval of the Vice Chancellor dated 25.6.2021, panel for the Institutional Ethics Committee of the Utkal University is constituted as mentioned below.

### 1. Chairperson (External)

Dr. Sanghamitra Pati, Director, ICMR-RMRC, Chandrasekharpur, Bhubaneswar-751004. Phone: 0674-2301322/2301332, Mob: 9437093306. Email: drsanghamitra12/@gmail.com.

## 2. Basic Sciences / Researchers (External)

i. Dr. Sanjeeb Kumar Sahoo, Scientist - F Institute of Life Sciences, Nalco Square, Bhubaneswar-751023, Phone: 674 2304341, Mobile: 9438505320, Email: sanjeebsahoo2005@gmail.com

ii. Dr. Manoranjan Ranjit, Scientist-F, Regional Medical Research Centre (ICMR), Bhubaneswar, PIN-751023. Mobile: 9437488192, Email- ranjit62/digmail.com

## 3. Scientist from Medical Practice/ Clinicians (External)

 Dr. Trupti Rekhn Swain, Associate Professor, Pharmacology, SCB Medical College and Hospital, Cuttack, PIN-753001, Mobile: 9438126333. Email id: drtruptiswain@gmail.com

ii. Dr. Guru Prasad Chhotray (MD, Pathology), Former Deputy Director, RMRC (ICMR), Bhubaneswar, PIN-751023, Mobile: 9437060589, Email: gpchhotray@yahoo.co.in

### 4. Legal Advisor (External)

Prof. Sukanta Kumar Nanda, Professor and Head, P.G Dept of law, Madhusudan Law University, Cuttack-753003, Mobile \$437377377, email: nandask97@gmail.com

ii. Mr. Prabhu Prasan Behera, Advocate, Odisha High court , Prabhu Niwas, Nuasahi , Naya Bazar, Cuttack. Mobile: 9438006487, Email: prabhuprasanna89@gmail.com

## 5. Sozial Scientist / Social Activist (External)

Or. Ramesh Mohanty, Research Officer, Nabakrushna Choudhury Centre for Development Studies, Bhubaneswar, Odisha-751013, Mobile: 9861162856, Email: ramesh.neds @gov.in

## 6. Philosopher / ethicist / theologian (External)

Or Patita Paban Das, Asst Professor, Dept. of Philosophy, Ravenshaw University, Mob: 7377074334, Email: pdas@ravenshawuniversity.ac.in



REGISTRAR

Na

FAX: (0674) 2567055/2567850 <u>Tel.(0674)</u> 2567387(O) UTKAL UNIVERSITY VANI VIHAR BHUBANESWAR-751004

Date.

### Lay persons/ Common citizens

Dr Pravas Acharya; Organ donation and tissue bank in Cuttack, Odisha; Mob: 09437020348, Email.dr.pravasacharya@gmail.com

### 8. Member Secretary (Utkal University)

Prof. Pravati Kumari Mahapatra, Dept of Zoology, Utkal University, Mobile: 9437281982. Email: mahapatra.pk.zool@utkaluniversity.ac.in / mpkzooluu@gmail.com

## Invited / Internal Members ( for discussion and guidance purpose )

## 1. Basic Sciences / Researchers (Internal) invited corresponding

Prof. Jagneswar Dandapat. Dept of Biotechnology, Utkal University, Mobile: 437466087, Email: j.dandpat.nou@gmail.com.

## 2. Social Scientist /Philosopher Social / Activist (Internal)

Frof. Navneeta Rath, Department of Sociology, Utkal University, Mobile: 9437211588. Email: navaneeta.rath @gmail.com

### 3. Philosopher / ethicist / theologian (Internal)

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Dr. Sarit Kumar Rout, Additional Professor, Indian Institute of Public Health, Bhubaneswar, Mobile: 9937162455, Email: sarit.kumar@phfi.org

Applicary 3) Psychologi



No.

FAX: (0674) 2567055/2567850 Tel:(0674) 2567387(0) UTRAL UNIVERSITY VANI VIHAB BHUBANESWAR 751004

Dote\_

#### 6. Convener and Co-Convener

i. Dr Prasnna Kumar Patra, Dept. of Anthropology, Utkal University, Mob: 8763356554, Email: pkpatra@rediffmail.com (Convener) ii: Dr. Sanatan Majhi, Dept. of Biotechnology, Litkal University, Mob: 9938093250, Email: sanatanm@gmail.com (Co-Convener)

stepay Registrar

Dated

## H-25-06-2021.

## Memo No R/ 32 / 2021

#### Copy forwarded to

- All members of the committee Ι.
- 2. Chairman, PG Council, Utkal University
- 3. All Heads of PG Departments
- 4. Director R&D
- 5. Comptroller of Examinations
- 6. Comptroller of Finance
- 7. Chief Librarian , Parija Library
- 8. Secretary to Vice Chancellor, for kind information of the Vice Chancellor 9. Director, CDC for information and intimation to affiliated colleges.

5 lyroy Registrar

# Institutional Ethics Committee (Human)

UTKAL UNIVERSITY

Vani Vihar, Bhubaneswar - 751004

Members	Participation
1 .Dr. Sanghamitra Pati	
Chairperson, IEC-UU	
drsanghamitra 12@gmail.com	
2.Dr. Sanjeeb Kumar Sahoo	
Basic Sciences / Researcher	
sanjeebsahoo2005@gmail.com	
3.Dr. Truptirekha Swain	
Medical Practice / Clinician	
drtruptiswain@gmail.com	
4. Prof. Sukanta Kumar Nanda	-
Legal Advisor	
nandask97@gmail.com	
5. Dr. Ramesh Mohanty	
Social Scientist / Social Activist	
Kamesh_ncds@gmail.com	
6.Dr. Patita Paban Das	-
Philosopher / Ethicist	
pdas@ravenshawuniversity.ac.in	
/.Dr. Pravas Acharva	
Lay person/ Common ncitizen	
praysacharya@gmail.com	
8. Dr. Sarit Kumar Rout	
Advisor from another IERB	
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9.Prof. J. Dandapat (Internal)	
Basic Sciences / Researcher	
jdandapat.nou@gmail.com	
10. Prof. Navanceta Rath (Internal)	
Social Scientist	
navaneeta.rath@gmail.com	
11. Dr. Alakananda Parida (Internal)	
r musopher / Ethicist	
alakanandaparida@gmail.com	
12. Sri Tarananda Pattanavak (Internal)	
regar wavisor	
tnpattanayak@gmail.com	
13. Prof. Pravati Kumari Mahapatra	
Member Secretary / Basic Sciences	
mpkzooluu@gmail.com	
Best Wishes	

Prof, Pravati Kumari Mohapatra

Member Secretary

To	Date:	15/07/2021
Name & Address of the PI:		

\*\*\*\*\*\*\*

Sub:	
Ref:	

review:	
IEC Reference No:	
Project Title:	
Version No. & Date:	
Principal Investigator	

Thank you for submitting your application which was considered at the Institutional Ethics Committee meeting on at Utkal University and the below mentioned documents have been reviewed and discussed.

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\*The approval letter is valid for one year. The amendments to the proposal, DRC/ reports protocol deviation and violation reports need to be submitted to IEC for review and approval should be sought before implementation. The progress completion report should be submitted to IHEC for review before expiry of this approval failing which the approval stands withdrawn.

Dr.Sanghamitra Pati Chairperson

## REVIEW MEETING OF

# THE INSTITUTIONAL ETHICS COMMITEE (IEC), UTKAL UNIVERSITY

Date: 15.07.2021, Time: 3:30pm Venue: Online mode (Google Meet)

## AGENDA

1. 20

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15:30am - 15:35am	: Welcome address by Prof. Pravati Kr. Mahapatra, Member Secretary, ICE-UU Utkal University
15:35am - 15:40am	: Address by Dr. Sanghamitra Pati, Chairperson, IEC-UU & Director, ICMR-RMRC, Bhubaneswar
15:40am - 15:45am	: Briefing the members about applications by Dr. P.K.Patra Convener, IEC-UU
15:45am - 16:45pm	: Presentation & Discussion on applications (Total- 6 nos.)
15:45pm' 16:55pm	: Views by members of IEC, UU & Future actions
15:55pm - 17:00pm	: Vote of thanks by Dr. Sanatan Majhi, Co-Convener, IEC-UU

## IEC, UU: Review Meeting, 15th July, 2021

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SI, No.	Name & address of the Applicant	Title of the proposal	Documents submitted	Remarks, if any
1	Mr. Dhananjay Kumar Tanty	Indentification, validation of potential candidate genes and design of New Chemical Entities for Diabetes Mellitus using computational chemistry techniques	1.Research Proposal 2. Application to IEC 3. PhD Regn letter	
2	Mr. Sampad Mohapatra	Self-Efficacy among Substance abusers: The Role of Motivational Enhancement Therapy	1.Research Proposal 2. Application to IEC 3. Informed consent template (English & Odia)	
3	Ms. Priyanka Patnaik	Glass Ceiling, Psychological Capital And Job Satisfaction: A Study Among Women In IT Sector	1.Research Proposal 2. Application to IEC 3. Informed consent template (English)	
4	Dr. Prasanna Kumar Patra (PI)- DHR Proposal submitted	An Exploratory Study on Socio- Economic, Environmental and Behavioral Correlates of Covid-19 Pandemic among the Particularly Vulnerable Tribal Groups (PVTGs) of Odisha	1.Research Proposal 2. Application to IEC 3. Informed consent template (English)	Provisional Ethics Committee' approval certificate (consideration issued)
5	Dr. P.K.Patra (Coordinator) & Prof. Mitali Chinara (Co- coordinator)	Socio-Economic, Demographic and Nutritional Health Study among the Particularly Vulnerable Tribal Groups (PVTGs) of Odisha	1.Research Proposal 2. Application to IEC 3. Informed consent template (English & Odia)	
6	Dr. Priyanka Khurana	An Anthropological Study of Nutritional Status among the Children of Bondo Tribe of Odisha	1.Research Proposal 2. Application to IEC 3. Informed consent template (English & Odia) 4. Summary & Synopsis	

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## REVIEW MEETING OF

## THE INSTITUTIONAL ETHICS COMMITEE (IEC), UTKAL UNIVERSITY

#### Date: 15.03.2022, Time: 3:00pm Venue: Online mode (Google Meet)

#### AGENDA

03:00pm - 03:05pm	: Welcome address by Prof. Pravati Kr. Mahapatra, Member Secretary, ICE-UU Utkal University
03:05pm - 03:10pm	: Address by Dr. Sanghamitra Pati, Chairperson, IEC-UU & Director, ICMR-RMRC, Bhubaneswar
03:10pm - 03:15pm	: Briefing the members about applications by Dr. P.K.Patra Convener, IEC-UU
03:15pm-04:40pm	: Presentation & Discussion on applications (Total- 8 nos.)
04:40pm-04:55pm	: Views by members of IEC, UU & Future actions
04:55pm-05:00pm	: Vote of thanks by Dr. Sanatan Majhi, Co-Convener, IEC-UU



#### INSTITUTIONAL ETHICS COMMITTEE UTKAL UNIVERSITY, VANI VIHAR, BHUBANESWAR-751 004, ODISHA

Proceedings of the review meeting of Institutional Ethics Committee (IEC) of UtkalUniversity held on 15.03.2022 at 3.00 pm through on-line mode (Google Meet).

#### Members Present:

- 1. Dr. SanghamitraPati (Chairperson)
- 2. Dr. Sanjeeb Kumar Sahoo, Member
- 3. Dr. Truptirekha Swain, Member
- 4. Prof. Sukanta Kumar Nanda, Member
- 5. Dr. Ramesh Mohanty, Member
- 6. Dr.Sarit Kumar Rout (Advisor from another IERB, External Member)
- 7. Prof. JagneshwarDandapat, Member (Internal)
- 8. Prof. NavaneetaRath, Member (Internal)
- 9. Prof. PravatiKumariMahapatra (Member Secretary)
- 10. Dr. Prasanna Kumar Patra (Convener)
- 11. Dr. SanatanMjahi, (Co-Convener)

#### Resolutions:

- The Member Secretary welcomed the Chairperson and other members of the ICE, UU to the review meeting. The Convener briefed the members about all eight applications received by the IEC, UU for deliberation in the meeting.
- All eight applicants (details given below) along with their respective supervisors / PIs/ mentors were
  invited to make presentations of their research proposals. After each presentation, members interacted
  with applicants on various ethical and technical issues relating to the research proposals and specific
  suggestions / decisions were made on each application, as presented below.

SL Ne	Name of the Applicant (E-mail & Mobile)	Department/ Centre/Institute	Course	Title of the Study	Supervisor/ PI	Document submitted (with date)	Decision / Remarks
1	Manisha Mistra manahamishra.auy@a mail.com Mob: 9439199201	P.G.Department of Psychology, Utkal University	PhD Scholar	Bole of Problematic Internet Use on Cognitive Functions and Psychological Wellbeing among Students	Dr.JashobastaM ahapatra <u>jashobasta.orsa</u> a <u>Bupail.com</u> Moli: 9437256903 / 9938587143	Synopsis, Infonredcosent form (English &Cdia)	Approved however, the IEC suggested the candidate to submit the proposal with revised sampling method, to be circulated among IEC members
2	Nadia Azadi nadiaazadim@gmail.co E Mob:	P.G. Department of Psychology, Utkal University	PLD scholar	Efficacy of Prace Education in the Management of Anger among Adolescents: An Intervention Study	Dr. PrangyaPara mita Priyadarshini Das pranaya podasre search@email.c ott	Synopsis, Informredcosent form (English &Odia)	Approved, however, sampling size needs justification
3	De Sabhannita Panda sabhasmRaR1@gmail.c om Mole: 7587350382	P G Departmentof Psychology, BJB College, BBSR	Assisant Professor	Perspective Taking among Juwenile Delinquents of Odisha	Pi (Self)	Sysopsis, Informeedcovern form (English &Odia)	Approved, however, the Committee suggested that since the research involves the juveniledelinquents who are a vulnerable section of the society, the applicant is advised to seek additional clearance / approval from State Level Ethica Committee.

4	SwagatikaSamaataray kamantarayion2010@g mail.com Mob:	P.G.Department of Psychology, Utikal University	PhD Scholar	Reading and Mathematical Ability among Children: The Role of Smillectual Abilities, Poverty and Home Literacy Environment	Dr. PringyaPara mita Priyadarshini Das <u>Bransya, podasre</u> saarch@grans.c	Synopsis, Informedcosent form (English &Odia)	Approved
ł.	PriyankaBabera	Centre for Women's Studies,	PhD Scholar	Phenomenological	em Dr.Manaswini		
	<u>Privankalipi20@amail.c</u> 9 <u>m</u> Mob. 9776074291	Utkal University, BBSR	sciolar	Analysis of Lived Experiences of Lower Limb Prosthetic Users from a Gorder Perspective	Desh E-mail: manaswinidash	Synopsis, Informedcosent firm (Erglish &Odia)	Approved
	Dr.PriyankaKharana (CeE in STMC)	Coll in STMC, UtkalUniv, BBSR	Assignt	Nutritional Health and	Dr.P.K.Patra		
	privankakhurana09/8% mail.com	and a second processing of	Professor (PA)	sur Livelihood a community based study among the PVTGs of Odishe	(Coordinator, CoE)	Synopsis, Informedcosent form (English &Odia)	Approved
	Dr.PriyankaKliurana (CoE in STMC)	CoE in STMC, Uskal University,	Assistant	Status of Maternal and	akaatra@vediff mai.com		
	ativankakhurana05@g mall.com	BBSR	Professor (FA)	Child Health among the PVTGs of Odisha: A Community-based Study	Dr.P.K.Patra (Coordinator, CoE)	Synopsis, Informedcosent form (English &Odia)	Approved
1	Dr. Sagar K. Mishra (CoE in ST56C)	CoE in STheC, Utkal University,	Asseant	Ethnomedicinal study of	DR.DatradBradiff freit.com Dr.P.K.Patra		
	skmotraudos@amail.c om	BBSR .	Professor (FA)	plants traditionally used by PVTGs of Odisha and Phytopharmacological livaluation of some of the promising plant species	(Coordinator, CoE)	Syropsis, Infortredcosent form (English &Odia)	Approved, however, the Committee approved the first component of the project (i.e. Ethnomedicinal study of plants traditionally used by PVTGs of Odisha), and used by PVTGs of Odisha), and the necessary applicant may take necessary approval for the second compenent of the project from competent authority .Committee as it may include laboratory work

 The Chairperson authorized the Member Secretary to issue the certificate / letter of decision of the IEC, Utkal University to individual applicants.

The meeting ended with the vote of thanks by the Co-Convener.

(SanghamitraPati) Chairperson

(Sanjeeb Kumar Sahoo) Member

(Truptirekha Swain) Member

(Sukanta Kumar Nanda) Member

(Ramesh Prasad Mohanty) Member

(Sarit Kumar Rout) Member

(NavancetaRath) Member (Internal)

15.3:202

(Prasanna Kumar Patra) Convener (JagneshwarDandapat) Member (Internal)

5.3.2022 (Sanatan Majhi) Co-Convener

(PravatiKumariMahapatra) Member Secretary

	7	6	j.a.	4	6	(1)		No.
Dr. Sagar K. Mishrn (CoE in STMC))	Dr. Priyanka Khurana (CoE in STMC) priyankakhurana09@gma il.com	Dr. Priyanka Khurana (CoE in STMC) priyankakhurana09/@gma il.com	Priyanka Behera E-mail: griyankaEpi2072gmuil.co m Mob: 9776074291	Swagatika Samuntaray samuntarayioe2010@am ail.com Mob:	Dr. Subhasmita Panda Mob: 7587350382 E-mail: subhasmita81@emnil.co	Nadia Azadi nadiaazadina@gmail.com Mob:	Manisha Mishra munishamishra.psy@uma il.com Mob: 9439199201	n. (E-mail & Mobile)
CoE in STMC, Utkal Univ, BBSR	CoE in STMC, Utical Univ, BBSR	CoE in STMC, Utkał Univ, BBSR	Womens Studies, Utkal Uaiv, BBSR	PG Dept of Psychology, Utkal University	Dept of Psychology, BJB College, BBSR	PG Dept of Psychology, Utkal University	PG Dept of Psychology, Utkal University	Department/ Centre/Institute
Assisant Professor (FA)	Assisant Professor (FA)	Assisant Professor (FA)	PhD scholar	PhD scholar	Assisant Professor	PhD scholar	PhD scholar	Course
Ethnomedicinal study of plants traditionally used by PVTGs of Odisha and Phytopharmacological Evaluation of some of	Status of Maternal and Child Health among the PVTGs of Odisha: A Community-based Study	Nutritional Health and Liveitboot: a community based study among the PVTCis of Odisha	Phenomenological Analysis of Lived Experiences of Lower Limb Prosthetic Users from a Gender Perspective	Reading and Mathematical Ability among Children: The Role of Intellectual Abilities, Poverty and Home Literacy Environment	Perspective Taking among Juvenile Delinquents of Odishu	Efficacy of Pence Education in the Management of Anger among Adolescents: An Intervention Study	Role of Problematic Internet Use on Cognitive Functions and Psychological Wellbeing among Students	Title of the Study
Dr. P.K.Parra (Coordinator, CoE) pkpatra@rediffmail.com	Dr. P.S. Patra (Cooronnator, CoE) pkpatra@res5ffmail.com	Dr. F.A. Fatra (Consumer, ColE) physical@rediffmail.com	Dr. Manaswini Dash E-mail: manaswinidashi@ymail.com	Dr. Prangya Parumita Priyadarshini Das pranuya,npdasresearch@um ail.com	> Really &	Dr.Frangya Parumita Priyadarshini Das prangya ppdasresearch@gm all.com	Dr.Jashobanta Mahapatra jashobanta arissa@gmail.co m Mab: 9437256903 / 9938587143	Supervisor/ PI
Synopsis, Informed cosent form (Eng & Odia)	Synopse, Informed cosent form (Eng & Odia)	form (Eng & Odia)	Synopsis, Inforared cosent form (Eng & Odia)	Synopsis, Infonired cosent form (Eng & Odia)	Synopsis, Informed cosent form (Eng & Odia)	Synopsis, Informed cosent form (Eng & Odia)	Synopsis, Informred cosent form (Eng & Odia)	Document submitted (with date)
sit but	1	1	1	Cond	From Affiliating College (recommuded by the OSHEC)	Con Screen	The property	Decision / Remarks

List of Applications for IEC Review Meeting, Utkal University, Bhubaneswar to be held on 15.03.2022 at 3:00pm (through Online, Google Meet)

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FAX: (0674) 2567055/2567850 <u>Tel:(0674)</u> 2567387(0) UTKAL UNIVERSITY VANI VIHAR BHUBANE5WAR-751004

No R-31/2021

Date 25.06.2021

## Notification

In pursuance of the approval of the Vice Chancellor dated 25.6.2021, panel for the Institutional Ethics Committee of the Utkal University is constituted as mentioned below.

## 1. Chairperson (External)

Dr. Sanghamitra Pati, Director, ICMR-RMRC, Chandrasekharpur, Bhubaneswar-751004. Phone: 0674-2301322/2301332, Mob: 9437093306, Email: drsanghamitra12@gmail.com.

## 2. Basic Sciences / Researchers (External)

i. Dr. Sanjeeb Kumar Sahoo, Scientist - F Institute of Life Sciences, Nalco Square, Bhubaneswar-751023, Phone: 674 2304341, Mobile: 9438505320, Email: sanjeebsahoo2005@gmail.com

ii. Dr. Manoranjan Ranjit, Scientist-F, Regional Medical Research Centre (ICMR), Bhubaneswar, PIN-751023. Mobile: 9437488192, Email- ranjit62@gmail.com

# 3. Scientist from Medical Practice/ Clinicians (External)

 Dr. Trupti Rekha Swain, Associate Professor, Pharmacology, SCB Medical College and Hospital, Cuttack, PIN-753001, Mobile: 9438126333. Email id: drtruptiswain@gmail.com

ii. Dr. Guru Prasad Chhotray (MD, Pathology), Former Deputy Director, RMRC (ICMR), Bhubaneswar, PIN-751023, Mobile: 9437060589, Email: gpchhotray@yahoo.co.in

## 4. Legal Advisor (External)

Prof. Sukanta Kumar Nanda, Professor and Head, P.G Dept of law, Madhusudan Law University, Cuttack-753003, Mobile 437377377, email: nandask97@gmail.com

ii. Mr.Prabhu Prasan Behera, Advocate, Odisha High court , Prabhu Niwas, Nuasahi , Naya Bazar, Cuttack. Mobile: 9438006487, Email: prabhuprasanna89@gmail.com

## 5. Social Scientist / Social Activist (External)

Dr. Ramesh Mohanty, Research Officer, Nabakrushna Choudhury Centre for Development Studies, Bhubaneswar, Odisha-751013, Mobile: 9861162856, Email: ramesh.neds @gov.in

## 6. Philosopher / ethicist / theologian (External)

Mob: 7377074334, Email: pdas@ravenshawuniversity.ac.in



No

FAX: (0674) 2567055/2567850 <u>Tel:(0674)</u> 2567387(0) UTKAL UNIVERSITY VANI VIHAR BHUBANESWAR-751004

Date\_

## Lay persons/ Common citizens

Dr Pravas Acharya: Organ donation and tissue bank in Cuttack, Odisha; Mob: 09437020348, Email:dr.pravasacharya@gmail.com

## 8. Member Secretary (Utkal University)

Prof. Pravati Kumari Mahapatra, Dept of Zoology, Utkal University. Mobile: 9437281982. Email: mahapatra.pk.zool@utkaluniversity.ac.in / mpkzoolua@gmail.com

## Invited / Internal Members ( for discussion and guidance purpose )

## 1. Basic Sciences / Researchers (Internal) invited corresponding

Prof. Jagneswar Dandapat. Dept of Biotechnology, Utkal University, Mobile: 437466087, Email: j.dandpat.nou/@gmail.com.

## 2. Social Scientist /Philosopher Social / Activist (Internal)

Prof. Navneeta Rath, Department of Sociology, Utkal University, Mobile: 9437211588, Email: navaneeta.rath@gmail.com

## 3. Philosopher / ethicist / theologian (Internal)

Dr. Alakananda Parida, Department of Philosophy, Utkal University, Mobile: 9439785463, Email: alakanandaparida@gmail.com

#### 4. Legal Advisor (Internal)

Sri Tarananda Pattanayak, Advocate, Orissa High Court, 2.1axmi Villa, Pilgrim Road, College Square, Cuttack-753003, Mobile: 9861126941, Email-tripattanayak@gmail.com

## 5. Advisor from another IERB (IIPH/RMRC/AIIMS/ any other)

Dr. Sarit Kumar Rout, Additional Professor, Indian Institute of Public Health, Bhubaneswar, Mobile: 9937162455, Email: sarit.kumar@phfi.org

Applicats { 2) 3) psychologi



FAX: (0674) 2567855/2567850 <u>Tel:10674</u>) 2567387(0) UTKAL UNIVERSITY VANI VIHAR BHUBANESWAR-751004

No.

Date .....

#### 6. Convener and Co-Convener

 Dr Prasnna Kumar Patra, Dept. of Anthropology, Utkal University, Mob: 8763356554, Email: pkpatra@rediffmail.com (Convener)
 Dr. Sanatan Majhi, Dept. of Biotechnology, Utkal University, Mob: 9938093250, Email: sanatanm@gmail.com (Co-Convener)

2 topay Registrar

Dated

## dt 25.06-2.021.

Memo No R/ 32 / 2021

Copy forwarded to

- 1. All members of the committee
- 2. Chairman, PG Council, Utkal University
- 3. All Heads of PG Departments
- 4. Director R&D
- 5. Comptroller of Examinations
- 6. Comptroller of Finance
- 7. Chief Librarian , Parija Library
- 8. Secretary to Vice Chancellor, for kind information of the Vice Chancellor
- 9. Director, CDC for information and intimation to affiliated colleges.

a leprory Registrar

## Institutional Ethics Committee (Human) UTKAL UNIVERSITY

Vani Vihar, Bhubaneswar - 751004

Members	Participation
1 .Dr. Sanghamitra Pati	
Chairperson, IEC-UU	
drsanghamitra12@gmail.com	
2.Dr. Sanjeeb Kumar Sahoa	
Dasic Sciences / Researcher	
sanjeebsahoo2005@gmail.com	
3.Dr. Truptirekha Swain	
Medical Practice / Clinician	
drtruptiswain@gmail.com	
4. Prof. Sukanta Kumar Nanda	
Legal Advisor	
nandask97@gmail.com	
5. Dr. Ramesh Mohanty	
Social Scientist / Social Activist	
Ramesh.ncds/@gmail.com	
6.Dr. Patita Paban Das	_
Philosopher / Ethicist	
pdas@ravenshawuniversity.ac.in	
7.Dr. Pravas Acharya	
Lay person/ Common ncitizen	
pravsacharya@gmail.com	
8. Dr. Sarit Kumar Rout	
Advisor from another IERB	
sarit.kumar@phfi.org	
9.Prof. J. Dandapat (Internal)	
Basic Sciences / Researcher	
jdandapat.nou@gmail.com	
10. Prof. Navaneeta Rath (Internal) Social Scientist	
navaneeta.rath@gmail.com	
11. Dr. Alakananda Parida (Internal)	
Philosopher / Ethicist	
alakanandaparida@gmail.com	
12. Sri Tarananda Pattanayak (Internal) Legal Advisor	
tnpattanayak@gmail.com	
13. Prof. Pravati Kamari Va	
13. Prof.Pravati Kumari Mahapatra Member Secretary / Basic Sciences	
mpkzooluu@gmail.com	
Best Wishes	

Prof, Pravati Kumari Mohapatra Member Secretary

То	Date: 15/07/2021
Name & Address of the PI:	

Dear	
Sub:	
Ref:	

Type of review:	
IEC Reference No:	
Project Title:	
Version No. & Date:	
Principal Investigator	

Thank you for submitting your application which was considered at the Institutional Ethics Committee meeting on at Utkal University and the below mentioned documents have been reviewed and discussed. а.

- b.
- c.
- d.
- e.

The decision of the IEC : Approved / ......\*

\*The approval letter is valid for one year. The amendments to the proposal, DRC/ reports protocol deviation and violation reports need to be submitted to IEC for review and approval should be sought before implementation. The progress completion report should be submitted to IHEC for review before expiry of this approval failing which the approval stands withdrawn.

Dr.Sanghamitra Pati Chairperson

Ministry of Environment, Forest and Climate Change Government of India

Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA) 5th Floor, Vayu Block, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi

# CERTIFICATE

of Zoology, Utkal University, Bhubaneswar, Orissa with CPCSEA has been renewed for Research for Education purpose on Small Animals bearing registration number This is to certify that the registration of Animal House Facility of Post Graduate Dept. 192/GO/Re/S/2000/CPCSEA.

The registration is valid for five years from 31st May, 2018 to 30th May, 2023.

Jeromé Minz

Deputy Secretary (AW) & Member Secretary (CPCSEA)



FAX: (0674) 2567055/2567850 Tel:(0674) 2567387(0) UTKAL UNIVERSITY VANI VIHAR BHUBANE5WAR-751004

No R-31/2021

## Date 25.06.2021.

#### Notification

In pursuance of the approval of the Vice Chancellor dated 25.6.2021, panel for the Institutional Ethics Committee of the Utkal University is constituted as mentioned below.

#### 1. Chairperson (External)

Dr. Sanghamitra Pati, Director, ICMR-RMRC, Chandrasekharpur, Bhubaneswar-751004. Phone: 0674-2301322/2301332, Mob: 9437093306. Email: drsanghamitra12/@gmail.com.

## 2. Basic Sciences / Researchers (External)

i. Dr. Sanjeeb Kumar Sahoo, Scientist - F Institute of Life Sciences, Nalco Square, Bhubaneswar-751023, Phone: 674 2304341, Mobile: 9438505320, Email: sanjeebsahoo2005@gmail.com

ii. Dr. Manoranjan Ranjit, Scientist-F, Regional Medical Research Centre (ICMR), Bhubaneswar, PIN-751023. Mobile: 9437488192, Email- ranjit62/digmail.com

## 3. Scientist from Medical Practice/ Clinicians (External)

 Dr. Trupti Rekhn Swain, Associate Professor, Pharmacology, SCB Medical College and Hospital, Cuttack, PIN-753001, Mobile: 9438126333. Email id: drtruptiswain@gmail.com

ii. Dr. Guru Prasad Chhotray (MD, Pathology), Former Deputy Director, RMRC (ICMR), Bhubaneswar, PIN-751023, Mobile: 9437060589, Email: gpchhotray@yahoo.co.in

## 4. Legal Advisor (External)

Prof. Sukanta Kumar Nanda, Professor and Head, P.G Dept of law, Madhusudan Law University, Cuttack-753003, Mobile \$437377377, email: nandask97@gmail.com

ii. Mr. Prabhu Prasan Behera, Advocate, Odisha High court , Prabhu Niwas, Nuasahi , Naya Bazar, Cuttack. Mobile: 9438006487, Email: prabhuprasanna89@gmail.com

## 5. Sozial Scientist / Social Activist (External)

Or. Ramesh Mohanty, Research Officer, Nabakrushna Choudhury Centre for Development Studies, Bhubaneswar, Odisha-751013, Mobile: 9861162856, Email: ramesh.neds @gov.in

## 6. Philosopher / ethicist / theologian (External)

Or Patita Paban Das, Asst Professor, Dept. of Philosophy, Ravenshaw University, Mob: 7377074334, Email: pdas@ravenshawuniversity.ac.in



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FAX: (0674) 2567055/2567850 <u>Tel.(0674)</u> 2567387(O) UTKAL UNIVERSITY VANI VIHAR BHUBANESWAR-751004

Date.

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## 5. Advisor from another IERB (HPH/RMRC/AIIMS/ any other)

Dr. Sarit Kumar Rout, Additional Professor, Indian Institute of Public Health, Bhubaneswar, Mobile: 9937162455, Email: sarit.kumar@phfi.org

Applicary 3) Psychologi



No.

FAX: (0674) 2567055/2567850 Tel:(0674) 2567387(0) UTRAL UNIVERSITY VANI VIHAB BHUBANESWAR 751004

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#### 6. Convener and Co-Convener

i. Dr Prasnna Kumar Patra, Dept. of Anthropology, Utkal University, Mob: 8763356554, Email: pkpatra@rediffmail.com (Convener) ii: Dr. Sanatan Majhi, Dept. of Biotechnology, Litkal University, Mob: 9938093250, Email: sanatanm@gmail.com (Co-Convener)

stepay Registrar

Dated

## H-25-06-2021.

## Memo No R/ 32 / 2021

#### Copy forwarded to

- All members of the committee Ι.
- 2. Chairman, PG Council, Utkal University
- 3. All Heads of PG Departments
- 4. Director R&D
- 5. Comptroller of Examinations
- 6. Comptroller of Finance
- 7. Chief Librarian , Parija Library
- 8. Secretary to Vice Chancellor, for kind information of the Vice Chancellor 9. Director, CDC for information and intimation to affiliated colleges.

5 lyroy Registrar

# Institutional Ethics Committee (Human)

UTKAL UNIVERSITY

Vani Vihar, Bhubaneswar - 751004

Members	Participation
1 .Dr. Sanghamitra Pati	
Chairperson, IEC-UU	
drsanghamitra 12@gmail.com	
2.Dr. Sanjeeb Kumar Sahoo	
Basic Sciences / Researcher	
sanjeebsahoo2005@gmail.com	
3.Dr. Truptirekha Swain	
Medical Practice / Clinician	
drtruptiswain@gmail.com	
4. Prof. Sukanta Kumar Nanda	-
Legal Advisor	
nandask97@gmail.com	
5. Dr. Ramesh Mohanty	
Social Scientist / Social Activist	
Kamesh_ncds@gmail.com	
6.Dr. Patita Paban Das	-
Philosopher / Ethicist	
pdas@ravenshawuniversity.ac.in	
/.Dr. Pravas Acharva	
Lay person/ Common ncitizen	
praysacharya@gmail.com	
8. Dr. Sarit Kumar Rout	
Advisor from another IERB	
sarit.kumar@phfi.org	
9.Prof. J. Dandapat (Internal)	
Basic Sciences / Researcher	
jdandapat.nou@gmail.com	
10. Prof. Navanceta Rath (Internal)	
Social Scientist	
navaneeta.rath@gmail.com	
11. Dr. Alakananda Parida (Internal)	
r musopher / Ethicist	
alakanandaparida@gmail.com	
12. Sri Tarananda Pattanavak (Internal)	
regar wavisor	
tnpattanayak@gmail.com	
13. Prof. Pravati Kumari Mahapatra	
Member Secretary / Basic Sciences	
mpkzooluu@gmail.com	
Best Wishes	

Prof, Pravati Kumari Mohapatra

Member Secretary

To	Date:	15/07/2021
Name & Address of the PI:		

\*\*\*\*\*\*\*

Sub:	
Ref:	

review:	
IEC Reference No:	
Project Title:	
Version No. & Date:	
Principal Investigator	

Thank you for submitting your application which was considered at the Institutional Ethics Committee meeting on at Utkal University and the below mentioned documents have been reviewed and discussed.

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\*The approval letter is valid for one year. The amendments to the proposal, DRC/ reports protocol deviation and violation reports need to be submitted to IEC for review and approval should be sought before implementation. The progress completion report should be submitted to IHEC for review before expiry of this approval failing which the approval stands withdrawn.

Dr.Sanghamitra Pati Chairperson

## REVIEW MEETING OF

## THE INSTITUTIONAL ETHICS COMMITEE (IEC), UTKAL UNIVERSITY

#### Date: 15.03.2022, Time: 3:00pm Venue: Online mode (Google Meet)

#### AGENDA

03:00pm - 03:05pm	: Welcome address by Prof. Pravati Kr. Mahapatra, Member Secretary, ICE-UU Utkal University
03:05pm - 03:10pm	: Address by Dr. Sanghamitra Pati, Chairperson, IEC-UU & Director, ICMR-RMRC, Bhubaneswar
03:10pm - 03:15pm	: Briefing the members about applications by Dr. P.K.Patra Convener, IEC-UU
03:15pm-04:40pm	: Presentation & Discussion on applications (Total- 8 nos.)
04:40pm-04:55pm	: Views by members of IEC, UU & Future actions
04:55pm-05:00pm	: Vote of thanks by Dr. Sanatan Majhi, Co-Convener, IEC-UU



#### INSTITUTIONAL ETHICS COMMITTEE UTKAL UNIVERSITY, VANI VIHAR, BHUBANESWAR-751 004, ODISHA

Proceedings of the review meeting of Institutional Ethics Committee (IEC) of UtkalUniversity held on 15.03.2022 at 3.00 pm through on-line mode (Google Meet).

#### Members Present:

- 1. Dr. SanghamitraPati (Chairperson)
- 2. Dr. Sanjeeb Kumar Sahoo, Member
- 3. Dr. Truptirekha Swain, Member
- 4. Prof. Sukanta Kumar Nanda, Member
- 5. Dr. Ramesh Mohanty, Member
- 6. Dr.Sarit Kumar Rout (Advisor from another IERB, External Member)
- 7. Prof. JagneshwarDandapat, Member (Internal)
- 8. Prof. NavaneetaRath, Member (Internal)
- 9. Prof. PravatiKumariMahapatra (Member Secretary)
- 10. Dr. Prasanna Kumar Patra (Convener)
- 11. Dr. SanatanMjahi, (Co-Convener)

#### Resolutions:

- The Member Secretary welcomed the Chairperson and other members of the ICE, UU to the review meeting. The Convener briefed the members about all eight applications received by the IEC, UU for deliberation in the meeting.
- All eight applicants (details given below) along with their respective supervisors / PIs/ mentors were
  invited to make presentations of their research proposals. After each presentation, members interacted
  with applicants on various ethical and technical issues relating to the research proposals and specific
  suggestions / decisions were made on each application, as presented below.

SL Ne	Name of the Applicant (E-mail & Mobile)	Department/ Centre/Institute	Course	Title of the Study	Supervisor/ PI	Document submitted (with date)	Decision / Remarks
1	Manisha Mistra manahamishra.auy@a mail.com Mob: 9439199201	P.G.Department of Psychology, Utkal University	PhD Scholar	Bole of Problematic Internet Use on Cognitive Functions and Psychological Wellbeing among Students	Dr.JashobastaM ahapatra <u>jashobasta.orsa</u> a <u>Bupail.com</u> Moli: 9437256903 / 9938587143	Synopsis, Infonredcosent form (English &Cdia)	Approved however, the IEC suggested the candidate to submit the proposal with revised sampling method, to be circulated among IEC members
2	Nadia Azadi nadiaazadim@gmail.co E Mob:	P.G. Department of Psychology, Utkal University	PLD scholar	Efficacy of Prace Education in the Management of Anger among Adolescents: An Intervention Study	Dr. PrangyaPara mita Priyadarshini Das pranaya podasre search@email.c ott	Synopsis, Informredcosent form (English &Odia)	Approved, however, sampling size needs justification
3	De Sabhannita Panda sabhasmRaR1@gmail.c om Mole: 7587350382	P G Departmentof Psychology, BJB College, BBSR	Assisant Professor	Perspective Taking among Juwenile Delinquents of Odisha	Pi (Self)	Sysopsis, Informeedcovern form (English &Odia)	Approved, however, the Committee suggested that since the research involves the juveniledelinquents who are a vulnerable section of the society, the applicant is advised to seek additional clearance / approval from State Level Ethica Committee.

4	SwagatikaSamaataray kamantarayion2010@g mail.com Mob:	P.G.Department of Psychology, Utikal University	PhD Scholar	Reading and Mathematical Ability among Children: The Role of Smillectual Abilities, Poverty and Home Literacy Environment	Dr. PringyaPara mita Priyadarshini Das <u>Bransya, podasre</u> saarch@grans.c	Synopsis, Informedcosent form (English &Odia)	Approved
ł.	PriyankaBabera	Centre for Women's Studies,	PhD Scholar	Phenomenological	em Dr.Manaswini		
	<u>Privankalipi20@amail.c</u> 9 <u>m</u> Mob. 9776074291	Utkal University, BBSR	sciolar	Analysis of Lived Experiences of Lower Limb Prosthetic Users from a Gorder Perspective	Desh E-mail: manaswinidash	Synopsis, Informedcosent firm (Erglish &Odia)	Approved
	Dr.PriyankaKharana (CeE in STMC)	Coll in STMC, UtkalUniv, BBSR	Assignt	Nutritional Health and	Dr.P.K.Patra		
	privankakhurana09/@g mail.com	and a second processing of	Professor (PA)	Livelihood: a community based study among the PVTGs of Odishe	(Coordinator, CoE)	Synopsis, Informedcousui form (English &Odia)	Approved
	Dr.PriyankaKliurana (CoE in STMC)	CoE in STMC, Uskal University,	Assistant	Status of Maternal and	akaatra@vediff mai.com		
	ativankakhurana05@g mall.com	BBSR	Professor (FA)	Child Health among the PVTGs of Odisha: A Community-based Study	Dr.P.K.Patra (Coordinator, CoE)	Synopsis, Informedcosent form (English &Odia)	Approved
1	Dr. Sagar K. Mishra (CoE in ST56C)	CoE in STheC, Utkal University,	Asseant	Ethnomedicinal study of	DR.DatradBradiff freit.com Dr.P.K.Patra		
	skmotraudos@amail.c om	BBSR .	Professor (FA)	plants traditionally used by PVTGs of Odisha and Phytopharmacological livaluation of some of the promising plant species	(Coordinator, CoE)	Syropsis, Infortredcosent form (English &Odia)	Approved, however, the Committee approved the first component of the project (i.e. Ethnomedicinal study of plants traditionally used by PVTGs of Odisha), and used by PVTGs of Odisha), and the necessary applicant may take necessary approval for the second compenent of the project from competent authority .Committee as it may include laboratory work

 The Chairperson authorized the Member Secretary to issue the certificate / letter of decision of the IEC, Utkal University to individual applicants.

The meeting ended with the vote of thanks by the Co-Convener.

(SanghamitraPati) Chairperson

(Sanjeeb Kumar Sahoo) Member

(Truptirekha Swain) Member

(Sukanta Kumar Nanda) Member

(Ramesh Prasad Mohanty) Member

(Sarit Kumar Rout) Member

(NavancetaRath) Member (Internal)

15.3:202

(Prasanna Kumar Patra) Convener (JagneshwarDandapat) Member (Internal)

5.3.2022 (Sanatan Majhi) Co-Convener

(PravatiKumariMahapatra) Member Secretary

	7	6	j.a.	4	6	(1)		No.
Dr. Sagar K. Mishrn (CoE in STMC))	Dr. Priyanka Khurana (CoE in STMC) priyankakhurana09@gma il.com	Dr. Priyanka Khurana (CoE in STMC) priyankakhurana09/@gma il.com	Priyanka Behera E-mail: griyankaEpi2072gmuil.co m Mob: 9776074291	Swagatika Samuntaray samuntarayioe2010@am ail.com Mob:	Dr. Subhasmita Panda Mob: 7587350382 E-mail: subhasmita81@emnil.co	Nadia Azadi nadiaazadina@gmail.com Mob:	Manisha Mishra munishamishra.psy@uma il.com Mob: 9439199201	n. (E-mail & Mobile)
CoE in STMC, Utkal Univ, BBSR	CoE in STMC, Utical Univ, BBSR	CoE in STMC, Utkał Univ, BBSR	Womens Studies, Utkal Uaiv, BBSR	PG Dept of Psychology, Utkal University	Dept of Psychology, BJB College, BBSR	PG Dept of Psychology, Utkal University	PG Dept of Psychology, Utkal University	Department/ Centre/Institute
Assisant Professor (FA)	Assisant Professor (FA)	Assisant Professor (FA)	PhD scholar	PhD scholar	Assisant Professor	PhD scholar	PhD scholar	Course
Ethnomedicinal study of plants traditionally used by PVTGs of Odisha and Phytopharmacological Evaluation of some of	Status of Maternal and Child Health among the PVTGs of Odisha: A Community-based Study	Nutritional Health and Liveitboot: a community based study among the PVTCis of Odisha	Phenomenological Analysis of Lived Experiences of Lower Limb Prosthetic Users from a Gender Perspective	Reading and Mathematical Ability among Children: The Role of Intellectual Abilities, Poverty and Home Literacy Environment	Perspective Taking among Juvenile Delinquents of Odishu	Efficacy of Pence Education in the Management of Anger among Adolescents: An Intervention Study	Role of Problematic Internet Use on Cognitive Functions and Psychological Wellbeing among Students	Title of the Study
Dr. P.K.Parra (Coordinator, CoE) pkpatra@rediffmail.com	Dr. P.S. Patra (Cooronnator, CoE) pkpatra@res5ffmail.com	Dr. F.A. Fatra (Consumer, ColE) physical@rediffmail.com	Dr. Manaswini Dash E-mail: manaswinidashi@ymail.com	Dr. Prangya Parumita Priyadarshini Das pranuya,npdasresearch@um ail.com	> Really &	Dr.Frangya Parumita Priyadarshini Das prangya ppdasresearch@gm all.com	Dr.Jashobanta Mahapatra jashobanta arissa@gmail.co m Mab: 9437256903 / 9938587143	Supervisor/ PI
Synopsis, Informed cosent form (Eng & Odia)	Synopse, Informed cosent form (Eng & Odia)	form (Eng & Odia)	Synopsis, Inforared cosent form (Eng & Odia)	Synopsis, Infonired cosent form (Eng & Odia)	Synopsis, Informed cosent form (Eng & Odia)	Synopsis, Informed cosent form (Eng & Odia)	Synopsis, Informred cosent form (Eng & Odia)	Document submitted (with date)
sit but	1	1	1	Cond	From Affiliating College (recommuded by the OSHEC)	Con Screen	The property	Decision / Remarks

List of Applications for IEC Review Meeting, Utkal University, Bhubaneswar to be held on 15.03.2022 at 3:00pm (through Online, Google Meet)

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## Intellectual Property Rights Cell (IPR Cell) Utkal University

#### About the IPR

Creativity and innovation are the new drivers of the world economy. Intellectual property refers to creations of the mind. Intellectual property Rights (IPR) plays a dynamic role in enhancing the socio-economic wealth of the country. These rights are outlined in Article 27 of the Universal Declaration of Human Rights, which provides for the right to benefit from the protection of moral and material interests resulting from authorship of scientific, literary or artistic productions. The importance of intellectual property (1883) and the Berne Convention for the Protection of Industrial Property (1886). Both treaties are administered by the World Intellectual Property Organization (WIPO).

#### Why promote and protect intellectual property?

There are several compelling reasons.

- 1. The progress and well-being of humanity rest on its capacity to create and invent new works in the areas of technology and culture.
- 2. The legal protection of new creations encourages the commitment of additional resources for further innovation.
- 3. The promotion and protection of intellectual property spurs economic growth, creates new jobs and industries, and enhances the quality and enjoyment of life. The intellectual property system helps strike a balance between the interests of innovators and the public interest, providing an environment in which creativity and invention can flourish, for the benefit of all.

#### Where India does stands?

The number of patents being filed in India has went up to 58, 502 in 2020-21 from 45, 444 in 2016-17 and 39, 400 in 2010-11. The share of patents granted also increased to 28, 391 in 2020-2021 from 9, 847 in 2016-17 and 7, 509 in 2010-11. Consequently, India climbed 35 ranks since 2015 on the Global Innovation Index to place 46th in 2021.

Despite this growing trend in grant of patents, India is still lagging behind China (530, 000), the United States (350, 000), Japan (179, 000) and South Korea (135, 000) in 2020 by a huge margin. Hence, it is of utmost importance to promote IP related activities from all possible corners.

#### Forms of protection

- 1. **Patents**: Patent is an exclusive right granted by a country to the owner of an innovation to make, use, manufacture and market the invention, provided the innovation satisfies certain criteria like having novelty, inventive step and industrial application (please refer FAQs about Patents).
- 2. Copyrights: Copyright is a right granted to the owner for creating an original literary or dramatic or musical or artistic work. Cinematographic films including sound track and video films and recordings on discs, tapes, etc. are also covered under copyrights. Computer programs and software are covered under literary works and are protected under copyrights in India.
- 3. **Trademarks**: Trademark is a distinctive sign, which identifies certain goods or services as those produced or provided by a specific person or enterprise. Trademarks may be one or combination of words, letters, and numerals and may also consist of drawings, symbols, two / three dimensional signs or colours, used as distinguishing features.
- 4. **Industrial design**: Industrial Design means the features of shape, configuration, pattern, ornament or composition of lines or colours applied to any article by any industrial or manual process or means and which are judged solely by the perception of the eye.
- 5. **Geographical indications**: Geographical Indications (GI) means an indication which identifies certain agricultural or natural or manufactured goods as originating or manufactured in the territory of a country, or a region or locality in that territory, where a given quality, reputation or other characteristics of such goods is essentially attributable to its geographical origin.
- 6. Layout design of integrated circuits: Layout Design of Integrated Circuit includes a layout of transistors and other circuitry elements and includes lead wires connecting such elements and expressed in any manner in a semiconductor integrated circuit (IC), designed to perform an electronic circuitry function.
- 7. **Trade secrets**: Trade Secret, also referred as undisclosed information, includes formula, pattern, compilation, programme, device, method, technique or process. It is perhaps the most important form of protection for industries and R&D institutions.
- 8. **Plant variety protection**: Plant Variety Protection and Farmer's Rights (PVPFR) is a system for protection of plant varieties, the rights of farmers and plant breeders and to encourage the development of new varieties of plants. Criteria for protection of a new plant variety are distinctness, uniformity, stability, novelty and appropriate denomination (generic designation

#### IPR Cell, Utkal University

Intellectual property Rights have become significant issue of discussion in last 10-15 year with the emergence of WTO agreement on intellectual property rights. Research and Innovation in

our country emerge both from industry as well as academic institutions. In today's era where intellectual property Rights are globally enforceable, we need to develop a conducive environment where we can impart knowledge of patents, Copyrights, Geographical Indications and other IPRs to our young generation so they can equip to create innovations and can protect their intellectual Property Rights including their innovation and creativity.

After the enactment of the National IPR Policy of 2016, the Science and Technology Department, Government of Odisha through Odisha State Council on Science & Technology Department has established a Patent Information Centre (PIC) to harness the IP potential of the state. The PIC, vide Lr. No. 27564800502017/20/1329/ST, Bhubaneswar Dated 26.02.2018, requested all the state universities to open an IPR Cell to provide a platform to share and discuss the latest development and applications of IPR with practical exposure and to facilitate the local innovators including faculty members, students and research scholars. Accordingly, the University has opened an IPR Cell in May, 2018 with the following objectives:

- 1. To organize awareness programme for students/ faculties/researchers for the economic, social and cultural benefits of IPRs among all sections of the society.
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- 8. To keep a record of all the activities conducted by the IPR Cell along with the patent information of the institute.
- 9. To arrange financial assistance for filing patents.

The IPR Cell is trying to generate IPR consciousness through organization of workshops and awareness programmes for students, researchers and faculties of the university. The Cell is trying to amalgamate an IPR culture and to think of innovations which can lead to development of potential IPs. Interdisciplinary research and university-institution-industry collaboration is another focus of the cell.

*Mission*: To create awareness on the significance of IPR amongst the researchers and academia from various sectors, IPR Cell of Utkal University provides a platform through various workshops and interactive sessions among faculties and researchers.

## **IPR cell members**

See the file (I think it is approved in the file; we can write reconstituted with the following members, Get a back dated letter from Registrar)

- 1. The Chairman, P G Council, Utkal University
- 2. Director, R & D, Utkal University
- 3. Director, IQAC, Utkal University
- 4. Prof. N. Das, Department of Chemistry, Utkal University
- 5. Dr. Mrutyunjay Panda, Department of Computer Science, Utkal University
- 6. Head, Department of Psychology, Utkal University
- 7. Dr S. S. Debasish, Department of Business Administration, Utkal University
- 8. Dr Gunanidhi Sahoo, Faculty-in-Charge, IPR Cell, Utkal University

## **Activities/Events**

## IQAC cell organized one on patent (Get the data from Pravati, someone gave talk on filling the patent, I was also present in the meeting)

 Organized a two days IPR sensitization camp for faculty members and research students during 17-18 August 2020 with Mr. S. Basant, PanAsian IP Services, New Delhi as the resource person.

#### Give any photographs here (below the activity)

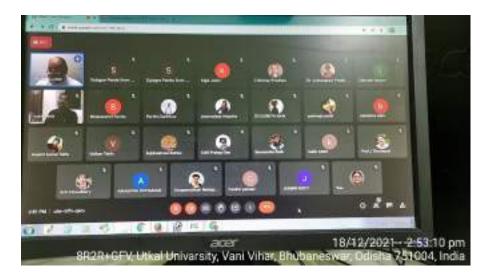
 Organized a one day workshop on "IPR and Patents" on "IPR and Patents" on 20<sup>th</sup> December 2021 in PG Council Hall of the University with two resource persons (Dr S. K. Rout from Science & Technology Department, Govt. of Odisha and Mr. K. C. Nayak, Institute of Life Sciences, Bhubaneswar) and around 100 participants including teachers, PDFs and research students. The workshop was intended to cover various aspects of IPR like Patents, Copyrights, Trademarks, etc. attended the programme.







3. Online webinar organized with Mr Sanjaya Bhattacharya, Patent officer, Kolkata asd the resource person.



#### 4. **Product transfer**

**Prof. Jagneswar Dandapat** and his team from Department of Biotechnology of the University have developed the **Anti-Transferrin Antibody, which has been** 

commercialized by Abgenex India Pvt. Ltd, India (<u>https://abgenex.com/polyclonal-antibody-to-transferrin-antheraea-mylitta</u>).







#### **Development of Anti-Transferrin Antibody**

By Department of Biotechnology, Utkal University, Bhubaneswar



#### Advantages and Applications of The Product:

This antibody is an indigenously developed product and it will be cheaper compared to other prevailing products. It has sensitivity and reproducibility which will detect transferrin as biomarker in blood or tissue related to iron dependent physiological dysfunctions.

TECHNOLOGY DEVELOPMENT & TRANSLATIONAL RESEARCH

## **Patents filed**

SI	Application	Title	Date of	Applicants
No	No		filing	
1	202132- 007234	Sensor based intelligent device to monitor physical and mental health of patients based on their breathing patterns, odour and respiratory measurements	21.02.2021	Sanjaya Kumar Sarangi (UU), Dr M. Panda (UU), Dr S. Hemalatha, Dr S. Mishra, Dr B. K. Uswadia, Dr H. S. Saini, Dr M. R. Chowdhury, Dr F. O. Patel, Dr K. Arumugam, Dr M. Pandit, Dr Srividya R., Dr S. Balamurugan
2	2021210- 04527	Artificial intelligence- based smart toilet for elders and physically challenged people	02.02.2021	D. K. Dewangan, Dr N. Awasthy, R. K. Maurya, Dr M. K. Sharma, Dr S. shamsi, <b>Sanjaya Kumar Sarangi (UU),</b> <b>Dr M. Panda (UU),</b> Dr Neel kamal, Dr P. K. Tripathy, Dr N. Sharma, Dr Alok Agrawal, Dr S. Balamurugan
3	202121210- 06119	Sensor-based intelligent robotic device for elder people to detect their falling and mechanism to ensure their safety	12.02.2021	A. Chowdhury, Rishabh, Taruna, Dr S. Shasmi, <b>Sanjaya Kumar Sarangi (UU),</b> Dr S. Mishra, Dr E. Ganesan, Dr Atul Shiva, Dr M. R. Chowdhury, Dr V. Muthu-lakshmi, P. Singh, Dr S. Balamurugan
4	2021410- 15648	Artificial intelligence- based system for face detection and identification of masked faces during covid pandemics	01.04.2021	Dr A. Mishra, <b>Sanjaya Kumar Sarangi</b> <b>(UU),</b> Dr T. Kumar D., K. Kanimojhi, Dr S. Saravana Kumar, Dr S. Dutta, S. Ansar, Dr S. Nayak, S. Farhat, S. F. S. Farhat, Dr S. Balamurugan
5	Indian Patent application 2021310- 31982	Process for developing seaweed extract and composition useful against UV-	15.07.2021	<b>Dr Jyotsnarani Pradhan (UU),</b> Prof. S P Adhikary, Prof. Luna Samanta & Dr S R Jena

6	Australia	Process for	22.07.2021	Dr Jyotsnarani Pradhan (UU), Prof. S
	Innovation	developing seaweed		P Adhikary, Prof. Luna Samanta & Dr
	Patent	extract and		S R Jena
	application	composition useful		
	20211-	against UV-radiation,		
	04442	oxidative damage		
		and skin cancer		
7				

#### **Patents granted**

SI	Application	Title	Country	Applicants	Term
No	No				
1	202110-	System for issue	IP	Patro Pramoda, Pati Dakshya Prasad,	Eight
	0314	of alert of security	Australia	Sarangi Sanjaya Kumar (UU), Dash	years
		breach using		Akshaya Kumar, Chowdhury Manas	from 19
		machine learning		Ranjan, Verma Satya Bhusan, S.	January
		and fuzzy logic		Hanumantha Rao, Rout Trilochan,	2021
				Mishra Umakanta and Sahu Aditya	
				Kumar	

## **Product developed**

Transferrin, a multitask secretory glycoprotein, is a highly conserved protein involved which is involved in a wide range of physiological functions, starting from delicate iron homeostasis, growth, differentiation, to an array of cytoprotective activities including apoptosis. It has high affinity binding sites for iron and thereby maintains a safe level of free iron in body tissues.

For the first time, **Prof. Jagneswar Dandapat** and his team from Department of Biotechnology of the University have identified an abundantly expressed protein in the tasar silkworm *Antheraea mylitta* as Transferrin having antioxidant function and successfully developed a polyclonal antibody (Anti-Transferrin Antibody) against this protein. The cross reactivity of this antibody with other organisms suggests its conserved nature.

Anti-Transferrin antibody developed by the Department of Biotechnology, Utkal University would be of great use for the detection of transferrin in the tissues of wide range of organisms and to study the iron dependent physiological dysfunctions.

#### **Important Web Links**

IPR India	http://www.ipindia.nic.in/	
IP services India	http://ipindiaservices.gov.in/	
Patent Facilitating Centre	http://www.pfc.org.in/index.html	
Patent search		
WIPO (World Intellectual Property Organization) Patentscope	https://patentscope.wipo.int/search/en/ structuredSearch.jsf	
USPTO (United States Patent and Trademark Office)	https://www.uspto.gov/patents-application- process/search-patents	
IP India	https://ipindiaonline.gov.in/tmrpublicsearch/	
InPass (Indian Patent Advanced Search System)	http://ipindiaservices.gov.in/publicsearch/	
Google Patents	https://patents.google.com/	
Espacenet (European Patent Office- Patent Search)	https://worldwide.espacenet.com/	

## Contact

Dr Gunanidhi Sahoo Faculty-in-charge, IPR Cell, Utkal University Mobile: 9438328039 Email: <u>sahoogunanidhi.zool@utkaluniversity.ac.in</u>

## Intellectual Property Rights Cell (IPR Cell) Utkal University

#### About the IPR

Creativity and innovation are the new drivers of the world economy. Intellectual property refers to creations of the mind. Intellectual property Rights (IPR) plays a dynamic role in enhancing the socio-economic wealth of the country. These rights are outlined in Article 27 of the Universal Declaration of Human Rights, which provides for the right to benefit from the protection of moral and material interests resulting from authorship of scientific, literary or artistic productions. The importance of intellectual property was first recognized in the Paris Convention for the Protection of Industrial Property (1883) and the Berne Convention for the Protection of Literary and Artistic Works (1886). Both treaties are administered by the World Intellectual Property Organization (WIPO).

#### Why promote and protect intellectual property?

There are several compelling reasons.

- 1. The progress and well-being of humanity rest on its capacity to create and invent new works in the areas of technology and culture.
- 2. The legal protection of new creations encourages the commitment of additional resources for further innovation.
- 3. The promotion and protection of intellectual property spurs economic growth, creates new jobs and industries, and enhances the quality and enjoyment of life. The intellectual property system helps strike a balance between the interests of innovators and the public interest, providing an environment in which creativity and invention can flourish, for the benefit of all.

#### Where India does stands?

The number of patents being filed in India has went up to 58, 502 in 2020-21 from 45, 444 in 2016-17 and 39, 400 in 2010-11. The share of patents granted also increased to 28, 391 in 2020-2021 from 9, 847 in 2016-17 and 7, 509 in 2010-11. Consequently, India climbed 35 ranks since 2015 on the Global Innovation Index to place 46th in 2021.

Despite this growing trend in grant of patents, India is still lagging behind China (530, 000), the United States (350, 000), Japan (179, 000) and South Korea (135, 000) in 2020 by a huge margin. Hence, it is of utmost importance to promote IP related activities from all possible corners.

#### **Forms of protection**

1. **Patents**: Patent is an exclusive right granted by a country to the owner of an innovation to make, use, manufacture and market the invention, provided the

innovation satisfies certain criteria - like having novelty, inventive step and industrial application.

- 2. Copyrights: Copyright is a right granted to the owner for creating an original literary or dramatic or musical or artistic work. Cinematographic films including sound track and video films and recordings on discs, tapes, etc. are also covered under copyrights. Computer programs and software are covered under literary works and are protected under copyrights in India.
- 3. **Trademarks**: Trademark is a distinctive sign, which identifies certain goods or services as those produced or provided by a specific person or enterprise. Trademarks may be one or combination of words, letters, and numerals and may also consist of drawings, symbols, two / three dimensional signs or colours, used as distinguishing features.
- 4. **Industrial design**: Industrial Design means the features of shape, configuration, pattern, ornament or composition of lines or colours applied to any article by any industrial or manual process or means and which are judged solely by the perception of the eye.
- 5. **Geographical indications**: Geographical Indications (GI) means an indication which identifies certain agricultural or natural or manufactured goods as originating or manufactured in the territory of a country, or a region or locality in that territory, where a given quality, reputation or other characteristics of such goods is essentially attributable to its geographical origin.
- 6. Layout design of integrated circuits: Layout Design of Integrated Circuit includes a layout of transistors and other circuitry elements and includes lead wires connecting such elements and expressed in any manner in a semiconductor integrated circuit (IC), designed to perform an electronic circuitry function.
- 7. **Trade secrets**: Trade Secret, also referred as undisclosed information, includes formula, pattern, compilation, programme, device, method, technique or process. It is perhaps the most important form of protection for industries and R&D institutions.
- 8. **Plant variety protection**: Plant Variety Protection and Farmer's Rights (PVPFR) is a system for protection of plant varieties, the rights of farmers and plant breeders and to encourage the development of new varieties of plants. Criteria for protection of a new plant variety are distinctness, uniformity, stability, novelty and appropriate denomination (generic designation

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- 3. Director, R & D, Utkal University
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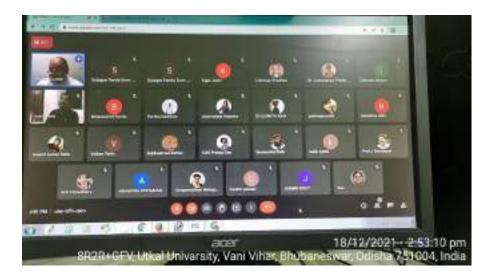
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#### 3. Product transfer

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By Department of Biotechnology, Utkal University, Bhubaneswar



### Advantages and Applications of The Product:

This antibody is an indigenously developed product and it will be cheaper compared to other prevailing products. It has sensitivity and reproducibility which will detect transferrin as biomarker in blood or tissue related to iron dependent physiological dysfunctions.

TECHNOLOGY DEVELOPMENT & TRANSLATIONAL RESEARCH

## **Patents filed**

SI	Application	Title	Date of	Applicants
No	No		filing	
1	202132-	Sensor based	21.02.2021	Sanjaya Kumar Sarangi (UU), Dr M.
	007234	intelligent device to		Panda (UU), Dr S. Hemalatha, Dr S.
		monitor physical and		Mishra, Dr B. K. Uswadia, Dr H. S.
		mental health of		Saini, Dr M. R. Chowdhury, Dr F. O.
		patients based on		Patel, Dr K. Arumugam, Dr M. Pandit,
		their breathing		Dr Srividya R., Dr S. Balamurugan
		patterns, odour and		
		respiratory		
		measurements		
2	2021210-	Artificial intelligence-	02.02.2021	D. K. Dewangan, Dr N. Awasthy, R. K.
	04527	based smart toilet for		Maurya, Dr M. K. Sharma, Dr S.
		elders and physically		shamsi, <b>Sanjaya Kumar Sarangi (UU),</b>
		challenged people		Dr M. Panda (UU), Dr Neel kamal, Dr
				P. K. Tripathy, Dr N. Sharma, Dr Alok
				Agrawal, Dr S. Balamurugan
3	202121210-	Sensor-based	12.02.2021	A. Chowdhury, Rishabh, Taruna, Dr S.
	06119	intelligent robotic		Shasmi, <b>Sanjaya Kumar Sarangi (UU),</b>
		device for elder		Dr S. Mishra, Dr E. Ganesan, Dr Atul
		people to detect		Shiva, Dr M. R. Chowdhury, Dr V.
		their falling and		Muthu-lakshmi, P. Singh, Dr S.
		mechanism to ensure		Balamurugan
		their safety		
4	2021410-	Artificial intelligence-	01.04.2021	Dr A. Mishra, Sanjaya Kumar Sarangi
	15648	based system for		<b>(UU),</b> Dr T. Kumar D., K. Kanimojhi,
		face detection and		Dr S. Saravana Kumar, Dr S. Dutta, S.
		identification of		Ansar, Dr S. Nayak, S. Farhat, S. F. S.
		masked faces during		Farhat, Dr S. Balamurugan
		covid pandemics		
5	Indian	Process for	15.07.2021	Dr Jyotsnarani Pradhan (UU), Prof. S
	Patent	developing seaweed		P Adhikary, Prof. Luna Samanta & Dr
	application	extract and		S R Jena
	2021310-	composition useful		
	31982	against UV-		

6	Australia	Process for	22.07.2021	Dr Jyotsnarani Pradhan (UU), Prof. S
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## **Important Web Links**

R India	http://www.ipindia.nic.in/
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IP services India	http://ipindiaservices.gov.in/
Patent Facilitating Centre	http://www.pfc.org.in/index.html
Patent search	
WIPO (World Intellectual Property Organization) Patentscope	https://patentscope.wipo.int/search/en/structuredS earch.jsf
USPTO (United States Patent and Trademark Office)	https://www.uspto.gov/patents-application- process/search-patents
IP India	https://ipindiaonline.gov.in/tmrpublicsearch/
InPass (Indian Patent Advanced Search System)	http://ipindiaservices.gov.in/publicsearch/
Google Patents	https://patents.google.com/
Espacenet (European Patent Office- Patent Search)	https://worldwide.espacenet.com/

## Contact

Dr Gunanidhi Sahoo Faculty-in-charge, IPR Cell, Utkal University Mobile: 9438328039 Email: <u>sahoogunanidhi.zool@utkaluniversity.ac.in</u>

## Vice-Chancellor

Formation of a new IQAC committee of the Utkal University may kindly be approved for the session 2018-19 as several members of the previous committee have either superannuated/ no more holding their position/ or transferred. The proposed list of members for the committee is stated below.

- 1. Chairperson : Head of the Institution Prof. Soumendra Mohan Patnaik, Vice-Chancellor, Utkal University; : Chairperson 2. Administrative Officers : Chairman, P.G. Council, Utkal University; : Member Registrar, Utkal University; : Member Director, CDC, Utkal University; : Member Comptroller of Finance, Utkal University : Member Controller of Examinations, Utkal University; : Member 3. Teachers : Prof. S. K. Pradhan, Dept. Computer Science : Member Prof. (Mrs.) S. Mahapatra, Dept. of Physics; : Member Prof. (Mrs.) N. Rath, Dept. of Sociology; : Member Prof.(Mrs.) P. Jena, Dept. of Lib. & Inf. Sc.; : Member Prof. S. Acharya, Dept. of AIHC&A; : Member Prof. J Dandapat, Dept. of Biotechnology : Member Prof. B.B. Mishra, Dept. of Bus. Admn. : Member Prof. N.N Das, Dept. of Chemistry : Member 4. One Member from the Management : Prof. K. M. Sethy, Syndicate Member : Member 5. One/Two Nominees from Local Society, Students & Alumni : Prof. A.K. Parida, Director, ILS, Bhubaneswar : Member Prof. K.K. Basa, Former Professor, Utkal University : Member 6. One/Two Nominees from Employers/Industrialists/Stakeholders : Dr Gitanjali Batmanabane, Director, IIMS, Bhubaneswar : Member Dr Sanghamitra Pati, Director, RMRC, Bhubaneswar : Member 7. One of the senior teachers as the Co-ordinator / Director of the IQAC :
  - Prof. (Mrs) P.K. Mahapatra, Dept. of Zoology; Director, IQAC :

Puelaple 6.7.2018

Approved Malnoix (.7.2018

A meeting of the internal quality assurance cell (1040) is to be convened to take stock of various issues of the university. As vice chancellos is the chairman of the committee, it would be appreciated if it is fixed on 27.8.2018 at 3PM. Other members are to be informed accordingly.

Appoved

BIRGETOR, IBAC

1

Proceedings of the Meeting of the Internal Quality Assurance Cell (IQAC) Committee held on 03.01.2020 at 3 P.M. in the Chamber of the Vice Chancellor, Utkal University.

### Members present

Prof. Soumendra Mohan Patnaik, Vice Chancellor in Chair

Prof. Sabita Acharya, Chairperson, P.G.Council

Mr Dayanidhi Nayak, Registrar

Prof. Nigamananda Das

Prof. Sanjay Acharya

Prof. Bidhu Bhusan Mishra

Prof. Jagneshewar Dandapat

Prof. Kabir Mohan Sethy

Prof. Navaneeta Rath

Prof. Pushpanjali Jena

Prof. Pravati Kumari Mahapatra, Director, IQAC

### Business transacted

1. Minutes of the last meeting was confirmed.

- Prof. P.K. Mahapatra, Director, IQAC welcomed the members and presented the action taken report and activities of the University
- Implementation of management information system (MIS) was discussed. The Registrar, Utkal University was requested to go ahead with the process of expression of Interest from various vendors on the basis of the information provided by the Director (R & D) and Director IQAC in consultation with the Coordinator, RUSA.
- Administrative audit will be held by the end of January 2020. Director R&D is requested to provide a format for the audit.
- 5. It was decided to conduct Academic Audit of all departments during 2<sup>nd</sup> week of February, 2020. The Director IQAC will inform all Heads of the Departments regarding the audit and provide the required format to all faculty members by 6.01.2020 to be submitted to the Director IQAC by 31<sup>st</sup> January, 2020.
- Peer team report on Institutional Assessment and Accreditation of Utkal University (17-19, November, 2016) was discussed.
- 7. Based on the peer team report it was decided to review the performance of 17 (Seventeen) Self Financing Courses running in the university in terms of operationalization, management and decision making of the courses. Feed back to be obtained from students, faculty members and the course co-ordinators. Chairperson, P.G. Council, is requested to convene the meeting in January, 2020.
- Registrar is requested to take necessary steps towards introduction of battery operated vehicles within the campus.

Page - 1 - of 2

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- Prof. P.K. Mahapatra, Director, IQAC welcomed the members and presented the action taken report and activities of the University
- Implementation of management information system (MIS) was discussed. The Registrar, Utkal University was requested to go ahead with the process of expression of Interest from various vendors on the basis of the information provided by the Director (R & D) and Director IQAC in consultation with the Coordinator, RUSA.
- Administrative audit will be held by the end of January 2020. Director R&D is requested to provide a format for the audit.
- It was decided to conduct Academic Audit of all departments during 2<sup>sd</sup> week of February, 2020. The Director IQAC will inform all Heads of the Departments regarding the audit and provide the required format to all faculty members by 6.01.2020 to be submitted to the Director IQAC by 31<sup>st</sup> January, 2020.
- Peer team report on Institutional Assessment and Accreditation of Utkal University (17-19, November, 2016) was discussed.
- Based on the peer team report it was decided to review the performance of 17 (Seventeen) Self Financing Courses running in the university in terms of operationalization, management and decision making of the courses. Feed back to be obtained from students, faculty members and the course co-ordinators. Chairperson, P.G. Council, is requested to convene the meeting in January, 2020.
- Registrar is requested to take necessary steps towards introduction of battery operated vehicles within the campus.

Page - 1 - of 2

- 9. Training programmes on soft skills, ethics and personality development to be started immediately under RUSA programme. Coordinator RUSA to be intimated accordingly.
- 10. Prof B. B. Mishra, Dept. MBA is requested to provide guidelines towards linkage with
- 11. Prof. J. Dandapat, Dept. Biotechnology is requested to coordinate matter related to Transfer of Technology from university to industry.
- 12. Regarding the possibilities of resource generation through consultancy, the Committee recommended that the University should have a clear cut policy on consultancy. The recommendations of the committee will be ratified by the Syndicate which will be sent to the Hon'ble Chancellor for approval.
- 13. Regarding appointment of Director of Physical Education, Prof. K.M. Sethy was requested to probe into the matter and provide previous records and practices to the Registrar for immediate action.
- 14. Regarding poor maintenance of physical infrastructure, Registrar was requested to send a letter to Govt, of Odisha for financial support emphasizing NAAC team report on
- 15. Two Credit course on Research and Publication Ethics (RPE) approved by the University Grants Commission (D.O. No.F.1-2/2018 (Journal /CARE) December, 2019, was . discussed. Chairperson, P.G. Council and Prof. R&D were requested to coordinate and develop strategy towards implementation of a common PhD pre-registered course.
- 16. Uploading AQAR 2018-19 in the NAAC Portal was approved by the committee. 17. The Vice Chancellor informed the committee that the revised Acts and Statutes will be in effect by the Government shortly. The members deliberated that as Utkal University has been identified as Category I University - the University should have more autonomy than other state universities.
- 18. It was decided to discuss Peer Team Report on institutional challenges and
- recommendations for quality enhancement of the institution in the next IQAC meeting. 19. The meeting ended with vote of thanks proposed by Prof. N. Rath.

(Prof. S.M. Patnaik)

Vice-Chancellor

(Prof. P.K.Mahapatra) Director, IQAC 3rd January, 2020

Page - 2 - of 2

## Proceedings of the Meeting of the Internal Quality Assurance Cell (IQAC) Committee held on 31.1.2020 at 3pm in the Chamber of Vice-Chancellor, Utkal University

## Members present

Prof. Soumendra Mohan Patnaik, Vice Chancellor in Chair

Prof. Sabita Acharya, Chairperson, P.G.Council

Mr Surendra Kumar Sahoo, Comptroller of Finance Prof. Nigamananda Das

Prof. Bidhu Bhusan Mishra

Prof. Jagneshewar Dandapat

Prof. Kabir Mohan Sethy

Prof. Sateesh Kumar Pradhan

Prof. Pushpanjali Jena

Prof. Pravati Kumari Mahapatra, Director, IQAC

### Business transacted

- 1. Minutes of the last meeting was confirmed.
- 2. Prof. P.K. Mahapatra, Director, IQAC welcomed the members and presented the action taken report and activities of the University
- 3. It was discussed to review the qualification and eligibility of faculty members of all self financing and PPP mode courses. Chairperson PG Council was requested to invite all course Coordinators and initiate the review process. Further, merging of some self financing courses having common courses of study was discussed. It was proposed to merge some courses consulting corresponding course coordinators and controller of examinations and subsequent approval of the academic
- 4. It was proposed that the Registrar should take immediate steps and coordinate the process of conducting interview for the post of Chief Librarian of Parija Library which was advertised.
- 5. The proposal for appointment of the PEO of MS Law College, as in-charge Director Physical Education, Utkal University till appointment of a regular director was accepted and necessary steps to be taken by the Registrar was suggested.
- 6. For maintenance of old buildings including departments, hostels and staff quarters, a committee was proposed to be constituted headed by the Development Officer. The committee should suggest the ways and coordinate the repair process.
- 7. In order to strengthen the soft skill development of students, Prof. R& D was requested to proceed towards purchase of computers as per the requisite submitted by different departments along with software consulting the Coordinator RUSA and the Registrar.
- 8. The proposal for obtaining online consent from examiners and evaluation of PhD thesis was welcome by all members. The Controller Examinations, to coordinate the whole process was
- It was discussed to make all centres of excellence functional in the new academic building and interdisciplinary research conducted by all departments was proposed to be evaluated during academic audit. It was further discussed to nominate socially, physically and financially challenged post graduate students from all regular departments for award of financial assistance
- 10. Consultancy to be taken up as project mode was suggested in order to encourage faculty members to accept consultancy as well as smooth operation.
- 11. It was decided to discuss on strategy for implementation of recommendations of the Peer Team Report on Institutional Assessment and Accreditation of Utkal University (17-19 November, 2016) by National Assessment and Accreditation Council (NAAC) in the next IQAC meeting.
- 12. The meeting ended with vote of thanks proposed by Prof. NN Das.

(Prof. S.M. Patnaik) Vice-Chancellor 31" January, 2020

Mellat

(Prof. P.K.Mahapetra) Director, IOAC 31<sup>st</sup> January, 2020

PROCEEDINGS OF THE MEETING OF INTERNAL QUALITY ASSURANCE CELL (IQAC), UTKAL UNIVERSITY

Held on Friday 12th June 2020| Time-11.00am to 1.30pm | Platform: Google Meet

## Members present

Prof. Soumendra Mohan Patnaik, Vice Chancellor in Chair Prof. Gitanjali Batmanabane, Director AlIMS, Bhubaneswar Dr Sanghamitra Pati, Director RMRC, Bhubaneswar Dr Ajay Kumar Parida, Director, ILS. Bhubaneswar Prof. Kishor Kumar Basa, Former Professor of Anthropology, Utkal University Shri Sarat Kumar Majhi, Controller of Examinations, Utkal University Prof. Basant Kumar Mallick Chairman P.G. Council, Utkal Uiversity, Prof. Sateesh Kumar Pradhan, Dept. Computer Science Prof. Swapna Mahapatra, Dept. of Physics, Utkal University Prof. (Mrs.) Navaneeta Rath, Dept. of Sociology, Utkal University Prof.(Mrs.) Pushpanjali Jena, Dept. of Lib. & Inf. Sc., Utkal University Prof. Sanjaya Acharya, Dept. of AIHC&A, Utkal University Prof. Jagneshewar Dandapat, Dept. of Biotechnology, Utkal University Prof. Bidhu Bhusan Mishra, Dept. of Bus. Admn., Utkal University Prof. Nigamananda Das, Director R&D, Coordinator World Bank and Director CDC Prof. Prabodh Kumar Hota, Coordinator RUSA, Utkal University

Prof. Pravati Kumari Mahapatra, Director, IQAC

### Business transacted

- 1. Minutes of the last meeting was confirmed.
- Prof. P.K. Mahapatra, Director, IQAC welcomed the members and presented the action taken report and activities of the University.
  - Present committee was constituted on 20<sup>th</sup> August 2018 and the first meeting of the committee was held on 27<sup>th</sup> of the same month. Several important aspects relating to improvement of the University status was discussed in that first meeting.
  - ii. Vice Chancellor Prof. SM Patnaik, proposed for making a space in the name of Mahatma Gandhi as 75years of Utkal University was coinciding with celebration of 150 years of Mahatma Gandhi's Birth. Inauguration of "Ahimsa Sthal" by Hon'ble Chancellor of Odisha Prof Ganeshi Lal on 2<sup>nd</sup> October, 2020 witnessed one of the mega action taken events.
  - iii. Prof. Gitanjali Batmanabane proposed for developing a common strategy for assessment related to practical examinations under CBCS courses. At present, the University has implemented a common syllabus for undergraduate students. Prof. Batmanabane proposed for an exhibition as part of platinum jubilee celebration of the University during 23<sup>rd</sup> to 27<sup>th</sup> November, 2019. The celebration was a grand success with exhibits from all teaching departments.
  - iv. The proposal for beautification of the campus has been taken up in a grand scale with landscaping of important areas.
  - v. New guidelines for admission into PhD course has been implemented as discussed in previous IQAC meetings. Director IQAC requested all members to develop strategy to complete implementation of the NAAC peer team recommendation for quality enhancement of the University.
- 3. Prof. Soumendra Mohan Patnaik, Vice Chancellor delivered the inaugural address. He informed the members regarding the special achievement of the Utkal University as it was placed within 100 best universities of the country based on the NIRF 2020 ranking conducted by the Ministry of Human Recourse Development, Government of India. Prof. Patnaik placed the AQAR 2019-20 for re-approval of the committee for uploading at the NAAC portal.
- Prof. Gitanjali Batmanabane, Director AIIMS, emphasized on the difficulties faced by faculty and students during the trying period of COVID-19 pandemic. She focused on monitoring quality of teaching, student's response and conducting examinations on line.

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5. Prof Ajay Parida, Director. ILS suggested the university to be more active in social media and to develop strategy for due branding of the university events. He was optimistic about overcoming the COVID-19 challenges. However, Dr Parida raised his concern relating to resource crunch, sustenance of status of research and other activities of the University post-covid reopening.

- Dr Sanghamitra Pati, Director, RMRC, proposed for a sustainable plan for facing the pandemic situation and develop indicators for quality control of the online teaching.
- Mr Sarat Kumar Majhi, Controller of Examinations expressed the pandemic as a challenge for conducting the University Examinations. He emphasized on complete automation of examination process as well as payment of fees towards admission and examination of students.
- 8. Prof KK Basa, described the situation as new normal and proposed for developing guidelines for the nature of field work during the trying period of COVID-19. He further emphasized on immediate appointment of faculty members and encouragement of existing faculty members of the University to excel. Prof. Basa further proposed for online classes for post graduate students. However, he commented on the importance of real class and no virtual teaching can act as the substitute.
- Prof. Satish Pradhan proposed to keep students academically engaged through assignments, video lectures by faculty and develop strategy for conducting online examinations.
- 10. Prof. Swapna Mahapatra proposed for sharing power point slides with students as an ideal tool for teaching. She expressed concern over networking facility available to students residing in remote areas and proposed to develop suitable alternative methods to reach such students.
- Prof. Navaneeta Rath's emphasis was on empowering women through various activities such as vigilance awareness programme, sharing vital gender issues, mega gender audit, and introduction of short term courses on gender issues.
- Prof. Puspanjali Jena's concern was immediate appointment of chief librarian for smooth functioning of the historic Parija Library.
- Prof. Basant Kumar Mallick, Chairperson PG Council stressed up on online teaching during the pandemic.
- 14. Prof. Sanjaya Acharya focused upon the importance of record keeping and strengthening the Media Cell of the University. He also proposed for the distribution of the soft copy of the souvenir prepared during the Platinum Jubilee celebration to all the faculty members.
- Prof. Jagneshewar Dandapat emphasized upon the possibility of transfer of technology from University to industry. He proposed for hostel facility for research scholars throughout the year necessary for uninterrupted research activity.
- 16. Prof. Bidhu Bhusan Mishra highlighted upon raising funds in the post-covid world. He proposed for establishment of a consultancy cell with suitable guidelines. He also proposed for mobilizing alumni for funds rising and establishment of a data centre.
- Prof. Nigamananda Das, raised his concern over faculty members to be involved in more number of research Projects. Every department should come up with quality research publications. Prof. Das proposed for automation of office during the pandemic.
- 18. Prof. Prabodh Kumar Hota, Coordinator RUSA, discussed regarding establishment of Utkal Entrepreneurship and Carrier Hub under RUSA. He proposed for introduction of happiness programmes for faculty members, soft skill development, artificial intelligence and creative activity for students through the Center.
- 19. Other matters related to establishment of a day care centre for faculty members and staff of the University, achievement of rural outreach programme, appointment of Deans with secretarial staff, conducting programmes for wellbeing of students, staff and faculty members was discussed by the members.
- 20. The meeting ended with vote of thanks by Prof. Navanceta Rath.

(Prof. S.M. Patnaik) Vice-Chancellor 12<sup>th</sup> June, 2020

pu.a.

(Prof. P.K.Mahapatra) Director, IQAC 12<sup>th</sup> June, 2020

Page - 2 - of 2

REGISTRAR



Composition of IQAC Committee Name

FAX: (0674) 2567055 /2567850 <u>Tel:(0674)</u> 2567387(O) UTKAL UNIVERSITY VANI VIHAR BHUBANESWAR-751004

No 10AGAR-DA /2002

Date 23 - 03 - 2022\_\_\_\_

## Notification

In pursuance of the approval of the Vice Chancellor dated 23.3.2022, the Internal Quality Assurance Cell (IQAC) in conformity with the NAAC guidelines has been reconstituted for Utkal University as follows.

	si	
	10	
1	Chairperson	Prof. Sabita Acharya (Vice Chancellor)
2	Eight members from amongst the	
	Teachers of the University	2. Prof. Bhaswati Patnaik, Dept. of Psychology
	÷	3. Dr Mrutyunjaya Panda, Dept. of Computer Science
		4. Dr Madhuchhanda Mohanty, Dept. of PMIR
		5. Dr Rudranarayan Mohapatra, Dept. of Odia
		6. Dr Ajit Kumar Sahoo, Dept. of History
		7. Dr Seema Mallik, Dept. of Political Science
		8. Dr Jyotsnarani Pradhan, Dept.of Biotechnology
3	One member from the	1. Prof. Bidhu Bhusan Mishra, Dept of MBA
	Management	이상가가 가지 않는 것을 받았는 것 같아.
		1. Chairman PG Council
1	(Members)	2. Registrar
	2	3. Comptroller of Finance
		4. Controller of Examinations
		5. Director Research and Development
		6. Coordinator World Bank
		7. Director College Development Council
		8. Director Students Welfare
		9. Director Human Resource Development Council
		10. Coordinator Rashtriya Uchchatar Shiksha Abhiyan
		11. Warden, Hostels
5	Nominee each from the Local	1. Prof. Ranjan Kumar Bal, Former Chairman PG Council
2	Society/Trust, Students and	and Director IQAC, Utkal University
	Alumni	2. Director ILS, Bhubaneswar
	Alamin	3. Miss Monalisa Patra, Dept. of Chemistry (PG Student)
	Nominee each from the	1. Dr B.K. Satpathy, Former Executive Director, NALCO
6		2. Director AIIMS, Bhubaneswar
	Employer/Industrialists/Stakehold	3. Prof. Susmit Prasad Pani, Executive Members of Odisha State Higher
	ers	Education Council (OSHEC).
	One senior teacher as the	Prof. Pravati Kumari Mahapatra , Dept. of Zoology
7	Culle Service manufactor and the	
	Coordination / Databased of the	Law
	IQAC	REGISTRAR
	0.5	Dated 23-03-2022
	Memo No R/JGAC/R- 020/2022	Dated 23 03 2022
Convi	o the Secretary to Vice-Chancell	or for kind information of the Vice-Chancellor
2000,		
		REGISTRAR





FAX: (0674) 2567055 /2567850 <u>Tel:(0674)</u> 2567387(0) UTKAL UNIVERSITY VANI VIHAR BHUBANESWAR-751004

No. 18AC/05-R-65

Date 25.11.2021

Notification

In pursuance of the approval of the Vice Chancellor dated 17.11.2021, the Internal Quality Assurance Cell (IQAC) in conformity with the NAAC guidelines has been reconstituted for Utkal University as follows.

SI	Composition of IQAC Committee	Name
no		
1	Chairperson	Prof. Sabita Acharya (Vice Chancellor)
2	Eight members from amongst the	<ol> <li>Prof. Navaneeta Rath, Dept. of Sociology</li> </ol>
	Teachers of the University	<ol><li>Prof. Bhaswati Patnaik, Dept. of Psychology</li></ol>
	17	<ol><li>Dr Mrutyunjaya Panda, Dept. of Computer Science</li></ol>
		4. Dr Madhuchhanda Mohanty, Dept. of PMIR
		5. Dr Rudranarayan Mohapatra, Dept. of Odia
		<ol><li>Dr Ajit Kumar Sahoo, Dept. of History</li></ol>
		<ol><li>Dr Seema Mallik, Dept. of Political Science</li></ol>
		<ol> <li>Dr Jyotsnarani Pradhan, Dept.of Biotechnology</li> </ol>
3	One member from the	<ol> <li>Prof. Bidhu Bhusan Mishra, Dept of MBA</li> </ol>
	Management	
4	Administrative Officer	1. Chairman PG Council
	(Members)	2. Registrar
		3. Comptroller of Finance
		4. Controller of Examinations
		5. Director Research and Development
		6. Coordinator World Bank
		7. Director College Development Council
		8. Director Students Welfare
		9. Director Human Resource Development Council
		10. Coordinator Rashtriya Uchchatar Shiksha Abhiyan
		11. Warden, Hostels
5	Nominee each from the Local	1. Prof. Ranjan Kumar Bal, Former Chairman PG Council
	Society/Trust, Students and	and Director IQAC, Utkal University
	Alumni	2. Dr Ajay Kumar Parida, Director ILS, Bhubaneswar
	55.30 D028C-020	3. Miss Monalisa Patra, Dept. of Chemistry (PG Student)
6	Nominee each from the	1. Dr B.K. Satpathy, Former Executive Director, NALCO
	Employer/Industrialists/Stakehold	2. Dr Gitanjali Batmanabane, Director AIIMS, Bhubaneswar
	ers	<ol> <li>Prof. Susmit Prasad Pani, Members of Odisha State Higher Education Council (OSHEC).</li> </ol>
7	One senior teacher as the	Prof. Pravati Kumari Mahapatra , Dept. of Zoology
	Coordinator / Director of the	
	IQAC	the
		IN MANY
		REGISTRAR

Memo No R/1@ AC-05- R-66

Dated 25.11.2021.

REGI

Copy to the Secretary to Vice-Chancellor for kind information of the Vice-Chancellor

## Utkal University Vanivihar, Bhubaneswar

No. of IQAC meetings held during the year:

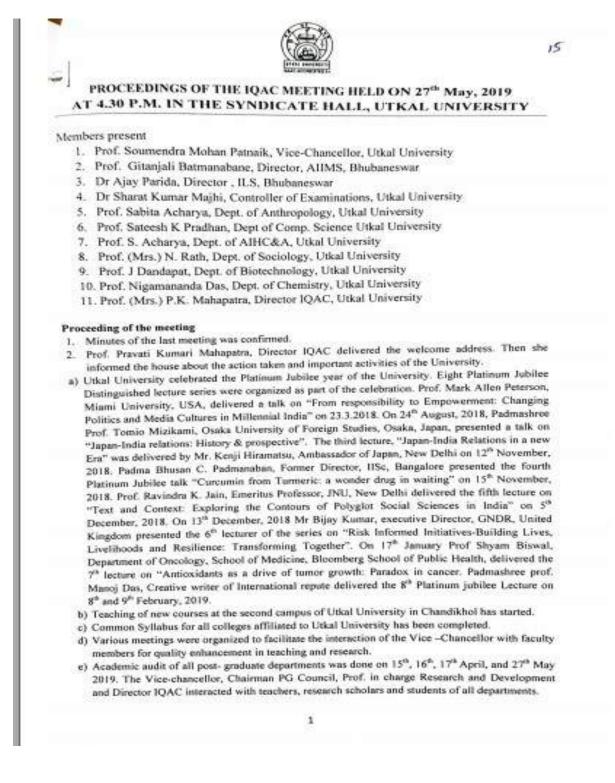
1<sup>st</sup> Meeting on dated 27 May 2019

The details of MoM is on Annexure: A

2<sup>nd</sup> Meeting on dated: 27 Aug 2018

The details of MoM is on Annexure: B

### Annexure –A



- ) "Premamayee Hall" in Parija Library is in the process of renovation for creating a healthy reading space.
- g) The process for appointment of faculty members has been initiated.
- h) "Research Connect" a Conference with Elsevier, the international publishing house, was held on 4<sup>th</sup> September, 2018.
- International Centre of the University has started functioning under the Coordinatorship of Prof. Sabita Acharya, Chairperson PG Council.
- As part of beautification of campus, the heritage tree site neat Department of Chemistry has been beautified with sponsorship from State Bank of India functioning in the University Campus.
- k) Modalities regarding updating the University website was developed.
- 1) University Foundation day was celebrated on 27th November, 2018.
- m) On 25<sup>th</sup> March, a ceremony for the award of PhD degrees, gold medals and other awards for the session 2016-17 was held in the MKCG, Auditorium. On 29<sup>th</sup> March, 2019 the 49<sup>th</sup> annual Convocation of Utkal University was held for the session 2017-18. His Excellency Prof. Ganeshi Lal, Hon'ble Governor of Odisha and Chancellor of Utkal University, presided over the meeting. Hon'ble Chief Justice of Odisha High Court, Shri Kalpesh Satyendra Jhavery graced the occasion as Chief Guest. Dr G. Batmanabane, Director IIMS, Bhubaneswar was guest of honour.

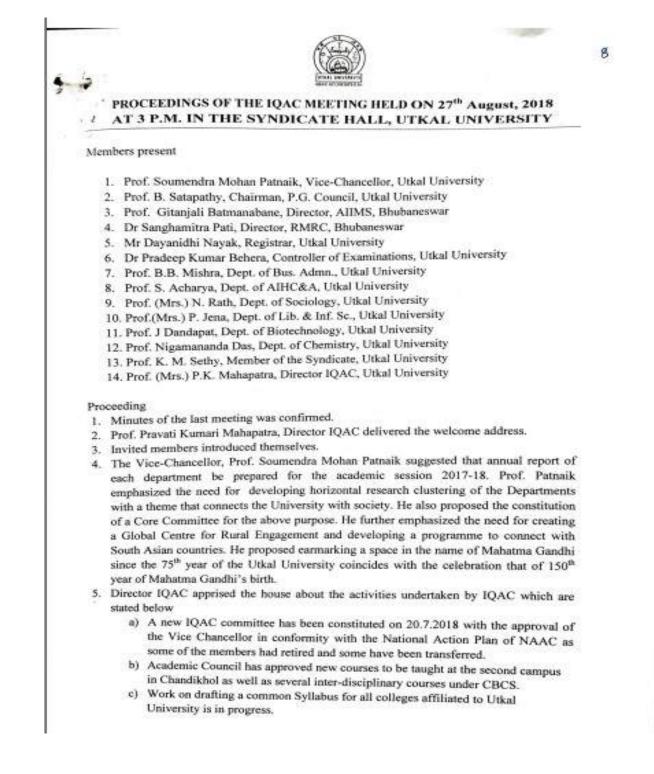
Following matters were discussed by the members

- Reconstruction of campus life (Infrastructure, Academics, Social) following devastating effects of the Cyclone FANI.
- For rain water harvesting in the campus, Chairman of the Indian Institute of Water Management to be contacted for possible plan of action.
- Regarding disposal of waste (Hazardous and nonhazardous), Dr J dandapat, has been requested to coordinate the matter and contact Odisha Pollution Control Board for possible modalities.
- Maintenance and sanitation of Departments: Registrar Utkal University to take required steps.
- Website updating (Hostels, Departments, Office, NSS): Prof. In charge University web site to coordinate with NIC for updating University website.
- 8. Establishment of Yoga Centre
- 9. Guidelines for PhD submission and evaluation
- 10. The meeting ended with a vote of thanks to the chair by Prof. N. Rath.

Vice-Chancellor

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#### Annexure --B



- d) Institutional Ethics Committee following ICMR guidelines has been constituted. The first meeting of the committee was held on 17.4.2018, where seven proposals were accepted;
  - c) A modified draft on anti-Plagiarism has been prepared.
  - f) Various meetings were organized to facilitate the interaction of the Vice Chancellor with faculty members for quality enhancement in teaching and research.
  - g) Academic audit of all post- graduate departments was conducted on 22<sup>ed</sup> and 23<sup>rd</sup> March, 2018. The Vice-chancellor and Director IQAC interacted with teachers, research scholars and students of the departments.
  - h) IQAC conducted a meeting with ICT committee on 19.7.2018 for improvement of the University Website.
  - i) "Premamayee Hall" in Parija Library to be renovated for creating a healthy reading space.
  - j) Plan for Celebration of 75 years of the Utkal University; the process has been initiated with the constitution of a core committee. Proposals for the celebration have been developed by the committee members. Two meetings with the students, the alumni, the staff and the teachers have been organized.
  - k) The process for appointment of faculty members has been initiated.
  - "Research Connect" a Conference with Elsevier, the international publishing house, is planned to be held on 4<sup>th</sup> September, 2018.
  - m) Activities for internationalization of the University has been initiated
- 6. Prof. Gitanjali Batmanabane, Director, AIIMS, Bhubaneswar discussed developing a strategy for assessment related to practical examinations for the proposed common CBSC course. She proposed to develop an anti-plagiarism policy very carefully and emphasized that the software should cater to the needs of the University as well as students. She suggested that a canteen be set up and junk food be banned. She said that centres for peace and meditation as well as a health club should be established. She stressed the importance of conducting multiple activities such as Heritage walks, exhibitions as part of the celebration of the Platinum Jubilee
- Dr Sanghamitra Pati, Director RMRC, Bhubaneswar laid emphasis on creating awareness among faculty members and research students regarding predatory journals. She further suggested that departments should identify such journals. She also said that workshops related to Academic honesty and integrity should be inducted.
- Prof. Nigamananda Das, suggested that Government support should be sought to institute a patent cell in the University campus. He further added that an exhibition for school children for 2 days in collaboration with AHMS, RMRC, IMMT and ILS as part of celebration of the Jubilee should be organized.
- 9. Members discussed the need for the beautification of the campus. Prof. BB Mishra, Dept. of Business Administration, Utkal University was requested to seek the help of public sector units for the purpose. Dr Nigamananda Das, Dept. of Chemistry was requested to coordinate the activities.

 Modalities regarding updating the University website were discussed by members. Prof. B
 Satapathy, Chairman PG Council was requested to take up the matter with Prof. S Acharya, Dept. of Dept. of AIHC&A, Utkal University.

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- All members agreed to take necessary steps to make the University library a vibrant learning place.
- The Director IQAC was authorized to prepare the Annual Quality Assurance Report (AQAR) for the session 2017-18 and communicate to NAAC with approval from the University authority.
- The proposal for the immediate appointment of office Assistant and Data Entry Operator to
  ensure smooth operation of IQAC Office was accepted. The Director was advised to inform
  the Registrar to do the needful.
- The meeting ended with a vote of thanks to the chair by Mr Dayanidhi Nayak, Registrar, Utkal University

Vice-Chancell

Aleha Director, IQAC 27.8.2018

6



### PROCEEDINGS OF THE MEETING OF INTERNAL QUALITY ASSURANCE CELL (IQAC) UTKAL UNIVERSITY

A meeting of IQAC, Utkal University was held on 16<sup>th</sup> December, 2021 at 3.30pm in the Syndicate hall of the new administrative building, Utkal University. The following members were present in the meeting.

- 1. Prof. Sabita Acharya, Vice-Chancellor, Utkal University in Chair
- Prof. Asoka Kumar Das, Vice Chairperson, Odisha State Higher Education Council OHEC, Odisha (Special Invitee)
- 3. Prof. Basanta Kumar Mallik, Chairman, P. G. Council, Utkal University
- 4. Prof. Ajay Kumar Parida, Director, ILS, Bhubaneswar
- 5. Dr B.K. Satpathy, Former Exécutive Director, NALCO
- 6. Prof. Ranjan Kumar Bal, Former Chairman PG Council& Director IQAC, Utkal University
- 7. Prof. Susmit Prasad Pani, Executive Members of Odisha State Higher Education Council (OSHEC)
- 8. Mr Surendra Kumar Sahoo, Comptroller of Finance, Utkal University
- 9. Mr Sarat Kumar Maihi, Controller of Examinations, Utkal University
- 10. Prof. Jagneswar Dandapat, Director R &D, Utkal University
- 11. Prof. Nigamananda Das, Coordinator WB and Director CDC, Utkal University
- 12. Dr S. K. Badamali, Director Students Welfare, Utkal University
- 13. Prof. Bidhu Bhusan Mishra, Director Human Resource Development Council, Utkal University
- 14. Prof. Prabodh Kumar Hota, Coordinator RUSA. Utkal University
- 15. Prof. Navaneeta Rath, Dept. of Sociology, Utkal University
- 16. Prof. Bhaswati Patnaik, Dept. of Psychology, Utkal University
- 17. Dr Mrutyunjaya Panda, Dept. of Computer Science, Utkal University
- 18. Dr Madhuchhanda Mohanty, Dept. of PMIR, Utkal University
- 19. Dr Rudranarayan Mohapatra, Dept. of Odia, Utkal University
- 20. Dr Ajit Kumar Sahoo, Dept. of History, Utkal University
- 21. Dr Seema Mallik, Dept. of Political Science, Utkal University
- 22. Dr Jyotsnarani Pradhan, Dept.of Biotechnology, Utkal University
- 23. Miss Monalisa Patra, Student, Utkal University
- 24. Prof. Pravati Kumari Mahapatra, Director, IQAC and Convener

### **Business transacted**

- 1. Proceedings of the last meeting held on 12th May, 2021 was confirmed.
- Prof. Pravati Kumari Mahapatra. Director, IQAC welcomed the members present in the meeting. Prof. Mahapatra informed the house about the important events organized by Utkal University and presented the action taken report of the previous IQAC committee meeting.

### **Recent Activities**

- Odisha Research Conclave-2021 was organized on 13<sup>th</sup> and 14<sup>th</sup>November, 2021 by Utkal University in association with Odisha State Higher Education Council.
- ii. A workshop on preparedness for NAAC accreditation was organized on 22<sup>nd</sup> November, 2021 with Prof. Amiya Kumar Rath, Advisor NAAC as the Chief speaker. Prof. Ranjan Kumar Bal, Former Chairman PG Council & Director IQAC, Utkal University and Prof. Susmit Prasad Pani, Executive Members of OSHEC were also present in the workshop.
- iii. Review meetings with all Heads of Departments was conducted on 7<sup>n</sup> and 9<sup>th</sup>December, 2021 to discuss the progress on NAAC preparedness.

### Action taken report

- i. Online feedback system of students: Adapted by all Departments
- E-resource development and upload in the website: E-contents have been added to the existing and all uploaded on the University website.
- iii. Plantation both sides of internal roads and beautification of rest of the campus including Departments: Registrar has taken initiatives and are in progress.
- iv. Seminars conducted for benefit of faculty and students by IQAC: Safety during Covid-19 pandemic (21<sup>st</sup> May, 2021) Cyber safety (2<sup>nd</sup> July, 2021)
- Consultancy projects taken up by the Department of MBA in collaboration with the MBA Agribusiness.
- vi. Provision for funding to support publications including article processing charges in indexed international journals by faculty members: Proposal has been approved with a provision for publication processing charges from RUSA grant.

### 3. Suggestions by Members

- Prof. Asoka Kumar Das, Vice Chairperson, OHEC, Odisha suggested for inclusion of more members in the existing working committee of Utkal University for the third round of NAAC accreditation. He also proposed for a meeting with the working committee members for discussion on preparation of SSR.
- Prof. Ajay Kumar Parida, Director, ILS, Bhubaneswar emphasized upon establishing more research collaboration through MoU with various research/academic institutions.
- Dr B. K. Satpathy, Former Exécutive Director, NALCO focused upon conducting regular Business School Conventions in the University for better exposure of students.
- Prof. Susmit Prasad Pani, Executive Members, OSHEC suggested continuation of uploading of recent questions in the question Bank and details of value-added courses conducted by different Departments on the University website. He also suggested for auto-linking contents of Human Recourse Development Council of Utkal University with University website.
- Prof. Jagneswar Dandapat, Director R &D emphasized upon mode of updating on the website to be dynamic and regulated by Heads of the Departments and administrative Heads as and when required.
- Mr Sarat Kumar Majhi, Controller of Examinations informed the house regarding further improvement in examination automation. He was requested to take necessary steps towards uploading different types of forms in the University website for easy access of students.
- Mr Surendra Kumar Sahoo, Comptroller of Finance informed the house regarding development related to financial transactions by the University through NEFT / RTGS. He also informed regarding uploading of the recent financial audit report, utilization certificates and flow of funds on the University website.

- Prof. Ranjan Kumar Bal, Former Chairman PG Council & Director IQAC, Utkal University advised for distribution of workload and assigning responsibility to faculty members for the upcoming NAAC visit.
- Prof. N. Das, Director CDC, Utkal University emphasized upon organization of interactive workshop on Revised NAAC Assessment & Accreditation Framework with different affiliated colleges under Utkal University for preparation and submission SSR.
- Prof. P. K. Mahapatra, Director IQAC placed the Annual Quality Assurance Report (AQAR 2020-21) to be uploaded in the NAAC portal before the committee. The committee members approved the AQAR and suggested the same to be placed before the Syndicate for ratification.

SI no	Future plan of action	Duty assignment
A	Uploading data for NIRF 2022 India Ranking	Director IQAC to coordinate with the team members of NIRF and upload the data
B	Application for the third cycle of NAAC accreditation, preparation and uploading of Institutional Information for Quality Assessment(IIQA)	
с	Preparation of Self Study Report (SSR) to be uploaded in NAAC portal	Criteria wise SSR preparation to be coordinated by the Conveners of the Working Committee NAAC i. Curricular Aspects: Prof. N. Rath ii. Teaching Learning and Evaluation: Prof. P.K. Mahapatra iii. Research, Innovation and Extension: Prof. J. Dandapat iv. Infrastructure and Learning Resources: Prof. K.M. Sethy v. Student Support and Progression: Prof. K.B. Panda vi. Governance, Leadership and Management: Prof. B.B. Mishra vii. Institutional Values and Best Practices; Prof. N. Das
D	Report on Energy, Water, Gender and Green Audits	To be submitted by concerned conveners i. Green Audit: Dr Chimnaya Pradhan, Dept. of Botany ii. Gender Audit: Prof. Jayanti Dora, School of Women Studies iii. Energy Audit: Dr Prafulla Kumar Panda, Dept. of Physics iv. Water Audit: Dr Jayadev Dinda, Dept. of Chemistry
E	Academic Audit of all departments Including self-financing courses and centers	To be coordinated by Director IQAC in consultation with Academic committee members.
F	Administrative audit and steps for implementation of e-office in the University	To be coordinated/executed by the Registrar, Utkal University

## 4. Future plan of action and duty assignment

Prof. Sabita Acharya, Vice Chancellor delivered her concluding remarks and the meeting was ended with vote of thanks by Prof. Navaneeta Rath.

(Prof. P.K. Mahapatra) Director, IQAC 16<sup>th</sup> December, 2021

(Prof. S. Acharya) Vice-Chancellor 16<sup>th</sup> December, 2021

## 4.2.2. Institution has subscription for e-Library resources

Library has regular subscription for the following:

- 1. e journals
- 2. e-books
- 3. e-ShodhSindhu
- 4. Shodhganga
- 5. Databases

Options:

- A. Any 4 or all of the above
- B. Any 3 of the above
- C. Any 1 of the above
- D. None of the above

File Description

• Upload any additional information

• Details of subscriptions like e-journals, e-books, e-ShodhSindhu, Shodhganga Membership etc. (Data Template)

PAN # AAMFK5216C

TAN # BLRK13150E

GST Rog # 29AAMFK5216C1ZE

KI/OUC/007/2022-23

Ta

19-03-2022

The Chief Librarian

Parija Library, Utkal University

**KITE India** 

Vani Vihar

Dear Sir

Greetings!

Please find below the details as desired by you. Proquest database which was subscribed to by all state universities through the initiative of Department of Higher Education, Govt of Odisha used to offer following content from 2016-2020

### Α.

EBooks-	About 1,99,158
Scholarly Journals-	About 12,260
Trade Journals-	About 3,080
Reports-	About 2,590
Newspapers-	About 2,272
Magazines-	About 1,352

Dissertations and Theses- About 51, 47,073

Academic Videos- About 68,292

в

The amount received in rupees (inclusive of taxes) for the above database for all state universities is mentioned below year wise.

2016	2017	2018	2019	2020
1,30,95,136.00	1,50,59.407.99	1,68,57,012.00	1,81,83,386.00	1,80,38,690.00

103, Dream Meadows, Kundalahalli, Bangalore-560037, India Page | 1 Phone : +919845288550 / +918049594154

PAN # AAMFK5216C

TAN # BLRK13150E

GST Reg # 29AAMFK5216C1ZE

### <u>C.</u>

23 KITE India

Digitization of theses was a complimentary free offer from Proquest to the universities. As per the MOU 500 print theses of each participating university are supposed to be digitized during the subscription period which is 01/01/2016 to 31/12/2020 as per the purchase order. Proquest has already digitized more than 10,000 theses.

The no of theses digitized for Utkal University is 5263 in nos, which is 10 times more than the quota.

### D.

Proquest helped Utkal University staff upload about 4600 theses on SHODHGANGA site.

**Best Regards** 

Sanjib Panigrahi

### E Resources under 4.2.2 criteria (In 2020 21)

Department	E Library Resources	Subscription	Brief Description	Documentation (If Any)	Any Other Relevant document
			University has subscribed all these e-books Access		
A & A Economics			licence in perpetual, DRM-free mode for the		
A & A Economics			purpose of Research, Teaching and student		
	1093	Yes	Education study continue-mode.		
			University has subscribed all these e-books Access		
AIHCA			licence in perpetual, DRM-free mode for the		
AIIICA			purpose of Research, Teaching and student		
	1327	Yes	Education study continue-mode.		
			University has subscribed all these e-books Access		
Anthropology			licence in perpetual, DRM-free mode for the		
Anthropology			purpose of Research, Teaching and student		
	444	Yes	Education study continue-mode.		
			University has subscribed all these e-books Access		
			licence in perpetual, DRM-free mode for the		
Biotechnology			purpose of Research, Teaching and student		
	211	Yes	Education study continue-mode.		
			University has subscribed all these e-books Access		
			licence in perpetual, DRM-free mode for the		
Botany			purpose of Research, Teaching and student		
	436	Yes	Education study continue-mode.		
			University has subscribed all these e-books Access		
Business			licence in perpetual, DRM-free mode for the		
Administration			purpose of Research, Teaching and student		
	1083	Yes	Education study continue-mode.		
	1000	105	University has subscribed all these e-books Access		
			licence in perpetual, DRM-free mode for the		
Chemistry			purpose of Research, Teaching and student		
		Yes	Education study continue-mode.		
		103	University has subscribed all these e-books Access		
			licence in perpetual, DRM-free mode for the		
Commerce			purpose of Research, Teaching and student		
	388	Yes	Education study continue-mode.		
	500	165	University has subscribed all these e-books Access		
Commutou So P			licence in perpetual, DRM-free mode for the		
Computer Sc. & Application			purpose of Research, Teaching and student		
Application		Vac			
		Yes	Education study continue-mode.		
			University has subscribed all these e-books Access		
English			licence in perpetual, DRM-free mode for the		
-	700	No	purpose of Research, Teaching and student		
	709	Yes	Education study continue-mode.		
			University has subscribed all these e-books Access		
Geography			licence in perpetual, DRM-free mode for the		
	402		purpose of Research, Teaching and student		
	483	Yes	Education study continue-mode.		
			University has subscribed all these e-books Access		
Geology			licence in perpetual, DRM-free mode for the		
8/			purpose of Research, Teaching and student		
	300	Yes	Education study continue-mode.		
			University has subscribed all these e-books Access		
History			licence in perpetual, DRM-free mode for the		
			purpose of Research, Teaching and student		
	786	Yes	Education study continue-mode.		
			University has subscribed all these e-books Access		
Lib. & Inf. Science			licence in perpetual, DRM-free mode for the		
			purpose of Research, Teaching and student		
	128	Yes	Education study continue-mode.		
			University has subscribed all these e-books Access		
LL.M			licence in perpetual, DRM-free mode for the		
			purpose of Research, Teaching and student		
		Yes	Education study continue-mode.		

1		1		
			University has subscribed all these e-books Access	
Mathematics			licence in perpetual, DRM-free mode for the	
			purpose of Research, Teaching and student	
	705	Yes	Education study continue-mode.	
			University has subscribed all these e-books Access	
ODIA			licence in perpetual, DRM-free mode for the	
ODIT			purpose of Research, Teaching and student	
		Yes	Education study continue-mode.	
			University has subscribed all these e-books Access	
Philosophy			licence in perpetual, DRM-free mode for the	
r mosopny			purpose of Research, Teaching and student	
	823	Yes	Education study continue-mode.	
			University has subscribed all these e-books Access	
Dhystop			licence in perpetual, DRM-free mode for the	
Physics			purpose of Research, Teaching and student	
	325	Yes	Education study continue-mode.	
			University has subscribed all these e-books Access	
DIMD			licence in perpetual, DRM-free mode for the	
PMIR			purpose of Research, Teaching and student	
	269	Yes	Education study continue-mode.	
			University has subscribed all these e-books Access	
<b>D H</b> (1 <b>C C C</b>			licence in perpetual, DRM-free mode for the	
Political Science			purpose of Research, Teaching and student	
	744	Yes	Education study continue-mode.	
			University has subscribed all these e-books Access	
			licence in perpetual, DRM-free mode for the	
Psychology			purpose of Research, Teaching and student	
	1149	Yes	Education study continue-mode.	
			University has subscribed all these e-books Access	
			licence in perpetual, DRM-free mode for the	
Public Administration			purpose of Research, Teaching and student	
	326	Yes	Education study continue-mode.	
	520	103	University has subscribed all these e-books Access	
Sanskrit			licence in perpetual, DRM-free mode for the purpose of Research,Teaching and student	
		Voc		
		Yes	Education study continue-mode.	
			University has subscribed all these e-books Access	
Sociology			licence in perpetual, DRM-free mode for the	
	1014	Vee	purpose of Research, Teaching and student	
	1614	Yes	Education study continue-mode.	
			University has subscribed all these e-books Access	
Statistics			licence in perpetual, DRM-free mode for the	
	705		purpose of Research, Teaching and student	
	705	Yes	Education study continue-mode.	
			University has subscribed all these e-books Access	
Zoology			licence in perpetual, DRM-free mode for the	
			purpose of Research, Teaching and student	
	197	Yes	Education study continue-mode.	
			University has subscribed all these e-books Access	
			licence in perpetual, DRM-free mode for the	
			purpose of Research, Teaching and student	
Education	333	Yes	Education study continue-mode.	
			University has subscribed all these e-books Access	
			licence in perpetual, DRM-free mode for the	
			purpose of Research, Teaching and student	
Enviornment Science	137	Yes	Education study continue-mode.	
			University has subscribed all these e-books Access	
			licence in perpetual, DRM-free mode for the	
			purpose of Research, Teaching and student	
Tourism &Hosp. Mgmt	58	Yes	Education study continue-mode.	
			University has subscribed all these e-books Access	
			licence in perpetual, DRM-free mode for the	
			purpose of Research, Teaching and student	
Social Science	882	Yes	Education study continue-mode.	 
Total	1 /	103		 
10101	14		]	

# 4.2.3: Average annual expenditure for purchase of books/ e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

4.2.3.1: Annual expenditure for purchase of books and journals year- wise during the last five years (INR in lakhs)

Year	2015-16	2016-17	2017-18	2018-19	2019-20
INR in lakhs	Rs. 26, 99,944/	- Rs.28,37110/-	Rs.1,50, 000/-	NIL	Rs. 162,429/-

Data to be provided for the last five years: (As per Data Template)

Expenditure on the purchase of books: 58, 49,483/-

Year of expenditure: 5 Years

Formula:

### 1/( 5)×∑\_(i=1)^5∭[Expd]]\_i

Where: [[Exide]]\_i= Expenditure in rupees on purchase of books and journals in the year

File Description (Upload) Any additional information

Audited statement of accounts

Details of annual expenditure purchase of books and journals during the last five years (Data Template as of 4.2.2)

Name	Book id	ISBN	Title	No. of views
UTKAL UNIVERSITY	2537	9788132118008	Credit Risk Management for Indian Banks	1
UTKAL UNIVERSITY	2583	9788132117193	The Little Book of Big Customer Satisfaction Measurement	1
UTKAL UNIVERSITY	2590	9788132118206	Valuing Health Systems	1
UTKAL UNIVERSITY	2596	9788132118213	Real Estate Finance in India	1
UTKAL UNIVERSITY	2707	9788132119869	Learning Disabilities in India	1
UTKAL UNIVERSITY	2716	9788132119937	Twentieth Century Imperialism	1
UTKAL UNIVERSITY	2739	9788132119029	Mutiny at the Margins: New Perspectives on the Indian Uprising of 1857	1
UTKAL	2769	9788132119357	Riots and After in Mumbai	1

UNIVERSITY				
UTKAL	2784	9789351500070	Corporate Finance	2
UNIVERSITY				
UTKAL	2792	9789351503637	Innovations in Family Planning	1
UNIVERSITY				
UTKAL	2824	9789351504085	State of the Adivasis in Odisha 2014	1
UNIVERSITY				
UTKAL	2827	9789351504115	Understanding India	2
UNIVERSITY				
UTKAL	2847	9789351504481	Fieldwork in South Asia	1
UNIVERSITY				
UTKAL	2853	9789351504528	The Acrobatics of Change	1
UNIVERSITY				
UTKAL	2855	9789351504535	An Indian Political Life	1
UNIVERSITY				
UTKAL	2896	9789351505075	Intercultural Communication	6
UNIVERSITY				-
UTKAL	2903	9789351505167	Artefacts of History	1
UNIVERSITY				-
UTKAL	2917	9789351505365	Caring for the Elderly	1
UNIVERSITY	2517	5785551505505		-
UTKAL	2935	9789351509516	Political Economy of Poverty Eradication in India and Essays	1
UNIVERSITY	2955	3193221203210	on Fiscal Reform	T
	2047	0700251505716		1
	2947	9789351505716	Hinduism in India	1
UNIVERSITY	0050	0700054500760		
UTKAL	2959	9789351509769	India on the Western Screen	1
UNIVERSITY				
UTKAL	2991	9789352800278	Globalization	1
UNIVERSITY				
UTKAL	3046	9789352800681	The Tao of Loyalty	1
UNIVERSITY				
UTKAL	3081	9789352801022	Inclusion and Exclusion in Local Governance	1
UNIVERSITY				
UTKAL	3103	9789352801183	Data Analysis in Business Research	1
UNIVERSITY				
UTKAL	3124	9789352802326	Organizing and Managing in the Era of Globalization	1
UNIVERSITY				-
UTKAL	3129	9789352802357	Socio-Political and Economic Challenges in South Asia	1
UNIVERSITY				-
UTKAL	3143	9789352802487	Land Reforms in India	2
UNIVERSITY	5143	5705552002407		2
UTKAL	21/1	9789352801428	Stratogic Issues and Challenges in Health Management	1
	3145	3103332001428	Strategic Issues and Challenges in Health Management	1
UNIVERSITY	2452	0700252002540		~
UTKAL	3152	9789352802548	E-Finance	2
UNIVERSITY				
UTKAL	3153	9789352801558	Greening the Supply Chain	1
UNIVERSITY				
UTKAL	3186	9789352801800	Unlocking E-Government Potential	1
UNIVERSITY				

UTKAL	3281	9789352803378	Imagi-Nations and Borderless Television	1
UNIVERSITY				
UTKAL UNIVERSITY	3304	9788132118886	Locating Cultural Change	1
UTKAL	3335	9789352804993	Black Coffee in a Coconut Shell	1
UNIVERSITY		5705552004555		-
UTKAL	3356	9789386042118	Advances in Cognitive Science, Volume 2	1
UNIVERSITY		5705500042110		-
UTKAL	3378	9789351506294	Military Psychology	1
UNIVERSITY	5578	9789331300294	ivilital y Esychology	-
UTKAL	3410	9789352806997	A History of Hinduism	1
UNIVERSITY	5410	9789332800997	A history of hinduishi	-
UTKAL	3439	9789352807635	Mentoring 2.0	1
	3439	9/8935280/035	Mentoring 2.0	L
UNIVERSITY	2447	0700254500002	Final Concelidation, Budget Definite and the Manua	-
	3447	9789351509882	Fiscal Consolidation, Budget Deficits and the Macro	1
UNIVERSITY	2450	07000000000	Economy	
UTKAL	3459	9789386042712	Challenging the Injustice of Poverty	1
UNIVERSITY		070000000000		-
UTKAL	3489	9789386042873	Indias Economy and Growth	1
UNIVERSITY				
UTKAL	3524	9789353281991	Rethinking Pluralism, Secularism and Tolerance	1
UNIVERSITY				
UTKAL	3533	9789386062697	Women and Politics of Peace	1
UNIVERSITY				
UTKAL	3551	9789386446091	The Writer, the Reader and the State	1
UNIVERSITY				
UTKAL	3552	9789353282639	Why I Am Not a Hindu	2
UNIVERSITY				
UTKAL	3575	9789386446473	Global Change, Ecosystems, Sustainability	1
UNIVERSITY				
UTKAL	3602	9789385985683	China and India	1
UNIVERSITY				
UTKAL	3610	9789385985799	Engendering Performance	1
UNIVERSITY				_
UTKAL	3654	9789351500056	Management of Organizational Change	1
UNIVERSITY				
UTKAL	3760	9788132103202	Sri Lankan Society in an Era of Globalization	1
UNIVERSITY	3700	3100125102505	SH Lahkan Society III an Ela OFGIODAllZation	_ <b>1</b>
	2704	0700122101022	Dowond Consumer Marketing	4
	3784	9788132101833	Beyond Consumer Marketing	1
UNIVERSITY	2704	0700122402007	Droinstermine Deinvertert	4
	3791	9788132102007	Brainstorming Reinvented	1
UNIVERSITY	0.000	0700054500005		-
UTKAL	3800	9789351503897	Aaker on Branding	1
UNIVERSITY				
UTKAL	3832	9788132103981	Industrial Relations	1
UNIVERSITY				
UTKAL	3861	9788132101321	The Politics of Water Resource Development in India	1
UNIVERSITY				
UTKAL	3870	9788132103943	Nation, Civil Society and Social Movements	1

			TOTAL VIEWS =	113
UNIVERSITY	6	575555555555555555555555555555555555555	the museum of broken rea cups	<b>)</b>
UTKAL	2431	9789353883393	The Museum of Broken Tea Cups	3
UNIVERSITY	2427	910933320000	Autude is Everything	<b>∠</b>
UTKAL	2427	9789353288006	Attitude is Everything	2
UTKAL UNIVERSITY	2237 9	9789353885571	Art and Science of Management in the Digital Era	1
	8	0700252005571	Art and Science of Management in the Digital Era	1
UTKAL UNIVERSITY	2237 o	9789353884635	Reading Difficulties and Dyslexia	4
UNIVERSITY	8	0700050004605		-
UTKAL	2217	9789353884284	Tribal Development in India	1
UNIVERSITY	5			
UTKAL	2217	9789353883614	Global Commons	2
UNIVERSITY	1			
UTKAL	2208	9789353884086	Political Economy of Caste in India	1
UNIVERSITY	6			
UTKAL	2192	9789353882419	Organic Farming	5
UNIVERSITY	6			
UTKAL	2138	9789353882495	FinTech Future	2
UNIVERSITY	1			_
UTKAL	2135	9789353882389	Social Entrepreneurship in India	1
UNIVERSITY		J/0JJJJ20J0ZI		L T
UTKAL	4405	9789353285821	Why People Give	1
UTKAL UNIVERSITY	4399	9789353286064	Telly-Guillotined	1
	1200	0780252286064	Tally Guillatingd	1
	4398	9789353286408	Seeing Digital	1
UNIVERSITY	4200	0700050006400	Capital Disital	
UTKAL	4391	9789353283797	Women in School Leadership	2
UNIVERSITY		0700050005		-
UTKAL	4384	9789353284626	Inkblot Personality Test	1
UNIVERSITY				
UTKAL	4383	9789353285401	India's Pursuit of Energy Security	2
UNIVERSITY				
UTKAL	4137	9788132118497	Services Marketing and Management	9
UNIVERSITY				
UTKAL	4097	9789386602206	Natural Hazards Management in Asia	1
UNIVERSITY				
UTKAL	3995	9789352801190	Institutions, Consultants and Transformation	1
UNIVERSITY			·	
UTKAL	3992	9789351508625	From Start-Up to Global Success	1
UNIVERSITY				
UTKAL	3916	9788132102892	Peasants in India's Non-Violent Revolution	1
UNIVERSITY				_
UTKAL	3890	9788178299969	Total Management by Ratios	1
UNIVERSITY		2,002,0207,00		
UTKAL	3875	9788178299785	Political Violence and the Police in India	1
UNIVERSITY	20/1	9788132103930	Peasants Movements in Post-Colonial India	1
UTKAL	3871	9788132103936	Peasants' Movements in Post-Colonial India	1

6	Comp. Sc.	RBPPL 63410/2016-17	Rs.9,483/-
	Comp. se.	Dt30.01.2017	
	Arch.	RBPPL 63409/2016-17 Dt-30.01.2017	Rs.16,953/-
101	1	RBPPL/63411/2016-17	Rs.77,744/-
1 1 2 2	Lib. Sc.	Dt30.01.2017	
		Total =	Rs.1,21,923/-
12. Padmalaya	Commerce	PD/16-17/0551/ Dt27.01.2017	Rs. 18,901/-
	MBA	PD/16-17/0554/ DL-27.01.2017	Rs. 35,328/-
	Comp. Sc.	PD/16-17/0555/ Dt27.01.2017	Rs.18,489/-
	MBA	PD/16-17/0553/ Dt27.01.2017	Rs.4,095/-
	Philosophy	PD/16-17/0558/ Dt27.01.2017	Rs.1,968/-
	/Lib. Sc.	PD/16-17/0557/ Dt27.01.2017	Rs.9,181/-
	Pol. Sc.	PD/16-17/0559/ Dt27.01.2017	Rs. 8,676/-
	Math	PD/16-17/0552/ Dt27.01.2017	Rs. 4,491/-
	Physics	PD/16-17/0556/ Dt27.01.2017	Rs. 2,792/-
	Reference Book	PD/16-17/0560/ Dt27.01.2017	R.s. 93,089/-
		Total =	Rs.1,97,010/

And a

Chief ibrarian (1/C), Partial Librarian (1/C), UTKAL UNIVERSIT

13	A The Law House	Law	77 1 1 1 1 1 1			0
16			TLH41/1	6	Rs.1,00,0	
1			т	'otal =	Rs. 1,00,0	Do 000/-
1	4 The New Book Corner	K Zoology	D505		Rs.6,708/-	
		Geography	12.01.2017 D510	7	Rs.17,464/	Do
		Geography ,	- 14.01.2017 D351	7	Rs.19,468/	
-			05.01.2017 Tota		Rs.43,640/-	Nº.
5.	- Sonam Prakashan	Reference Book	197	B	s.66,404/-	
		Psychology	18.01.2017 15 15.01.2017		8.53,408/-	Do
		English	15.01.2017 10 15.01.2017	R	s.1,00,000/	1-
	1	Anthropology	11 15.01.2017	R	s.1,00,000/	WI.
					\$.3,19,812/	
6.	Friends Publishers	Odia	221;			
			11.01.2017	-	1,00,000/-	
-			Total	= Rs.	1,00,000/-	
2	Orient Black Swan	Psychology	2864DTD; 17.01.2017	Rs.t	6,400/-	-
		Math	2866DTD; 17.01.2017	Rs.6	56,908/-	-
		Geography	. 2867DTD; 17.01.2017	Rs.1	,602/-	-
		Sociology	2868 DTD; 17.01.2017	Rs.9	5,221/-	
		444 11 11 11 11 11 11 11 11 11 11 11 11		Rs.1.	70,131/-	2
8. N	Neoti Book Agency Pvt. Ltd.	Statistics	000448; Dt06.02.2017	-	7,566/-	
		Sociology	000453; Dt06.02.2017	Rs. 5,	300/-	Book Exhibitie
		Chemistry	000444; Dt06.02.2017	Rs. 8,	905/-	
		Biotech	000442; Dt06.02.2017	Rs. 48	,529/- * -	Ma
			Total =	Rs.1,10		

	F					
1	4-1		Comp. Sc.	RBPPL-63410/2016-17 Dt30.01.2017	Rs.9,483/-	
11		Arch.		Rs.16,953/-		
1		Lib. Sc.	RBPPL/63411/2016-17 Dt30.01.2017	Rs.77,744/-		
			1	Total=	Rs.1,21,923/-	
	12.	Padmalaya	Commerce	PD/16-17/0551/ Dt27.01.2017	Rs. 18,901/-	
			MBA	PD/16-17/0554/ Dt27.01.2017	Rs. 35,328/-	
			Comp. Sc.	PD/16-17/0555/ Dt27.01.2017	Rs.18,489/-	
		MBA	PD/16-17/0553/ Dt27.01.2017	Rs.4,095/-		
		Philosophy	PD/16-17/0558/ Dt27.01.2017	Rs.1,968/-		
			/Lib, Sc.	PD/16-17/0557/ Dt27.01.2017	Rs.9,181/-	
			Pol. Sc.	PD/16-17/0559/ Dt27.01.2017	Rs. 8,676/-	
			Math	PD/16-17/0552/ Dt27.01.2017	Rs. 4,491/-	
			Physics	PD/16-17/0556/ Dt27.01.2017	Rs. 2,792/-	
			Reference Book	PD/16-17/0560/ Dt27.01.2017	Rs. 93,089/-	
				Total =	Rs.1,97,010/-	1

Grand Total = Rs.28,37,110/-

Chief Light (1/C). Chief Lightian (1/C). Partial Library UTKAL UPUTT

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sino	Particulars	cial year 2016-17 Amount/Rs	Amount/Rs		Payments Account
		_	173923.00		173923.00
1	office Expenses Books Binding office exp(office stationery) office exp(office stationery) office Expenses(Binding of Books)	10870.00 98336.00 54301.00 10416.00			236366.00
	2 <u>Contingencies</u> Contingency(audit fees) contingency(Cleaning & maint. Charges) Contingency(Meeting exp) Equipment(Umbrella) Proquest Orientation Programme Contingency(others)	31730.00 45276.00 34000.00 9000.0 9000.0 94873.0	D 0 0 0	D	
	Contingencies(wall Clock)	20987.0	256170.0	00	256170.00
	3 Equipment Equipment(Repair & maint Comp) Equipment(Display Board) Equipment(Electrical) Equipment(Notice Board Equipment(repair & maint aqua guard) Equipment(Succession Board) Equipment(Venile Board)	68173.0 64000.0 8817 ( 6435 ( 15965.) 8290.1 84490.			
	4 Furniture(Repair & Maint(Furnitures)	514973	00 514973.	.00 4582 (	0 510391 0 12000.0
18	5 Preservation of Records	12000	.00 12000	.00	12000.00
	6 Books & Journals Periodicals Reference Books	52312 <u>4977</u>	3.2.274	.00	57289.0
			161981	00	161981.0
	7 Other payment Books exhibition EMD Refund Naac Team Exp	16290 92000 53691	0.00		-
	Swipe transfer	165500	0.00 165500		1655000.0
	Total	306770	2.00 306770	2.00 4582	.00 3063120.0



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28.12.19	17.00		\$7.00	2000.00	2017.00	2017.00
28.12.16	17,00		17.00	2000.00	2017.00	2017.00
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	1210 E. Aturclator.	MDR & Amociates	Contingency(Audit Jees) Contingency(Audit Jees)	2873.09	
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umin'	Second Production	Completion 7.47	EMO Actured	\$0000.00	
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	a willing a	Ingris Obergris	Contingency(Others)	632.50	
	Bark Chargets	Issign Transfer	Swipe transfer	2000.00	
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	Swiat In Prokabilitary	Outerd Advert	Contingency(Others)	6453.00	
15 TOP 34	Girdged Advance Services	Output Advent	Contingency Others	0943.500	
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	Mingrenna Tanéi	REDESTIMATION OF PARAMETERS			BARRY ST
	Peterson 2012	Contraction of the last of the	Contingency(Others)	1000.00	
8.423.38	Prodects Same	Travelling skp	Books & Journals	9004.00	
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18.40.53		Timelingesp	Contingency(Otkars)	110,00	
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Suir		News Paper & Periodicals	Books & Inumats	18345 001	
		Manute & mart	Equipment/Repair & maint compl	600.00	
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	Durgs semerarios	I mulproport Record & Maren Con	Equipment(Repair & Ataint Compi	308.00	
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and the second sec	Meding Expenses	Equipment/Repair & maint.come: contingency/Monting.com	1005.00	- mind
A A	Bark charges	CONDINENCY (Mittersing cours)		
19-	Dwipe transfer	Sumple transfer	57.56	
100	Begar & Mars(Aquation)	Equipment/repur & maint agus guordi	4365.00	
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an Tarda	Hepair & Ment	Nack Team Lep	22000.000	
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11.191938	Water Team Exp	Nack Team Exp	5003.00	
arris Janal	Labour Charges	Nack Team Exp	6003.65	
ama Tetal	Nack Team Expendes	Nack Team Exp	6000.00	
ereiz Zpółki	Candle	Costingency(Others)	206.00	
- cop becart	Regair & martiCompl	Contingency(Others)	700.00	
alar belleta	EASD Refund: Waste Material	Equipment/Repair & maint.compli EK65 Refund	1000.00	
HAR SWEER	Auto Fare Charges	Confingency[Others]	1003.00	
in the second se		Contingency(Others)	2000.00	
Denies paper agentry	Thip & Periodicals	Books & Journals	2538.00 4552.00	
anwa paper aderery	Np & Periodicals	Books & Journals	8552.00	
To Prays	Repair & Maintifumitures)	Repair & Purchase of Furnitures(Furniture)	165662.00	
	Meeting experiens	Contingency(Meeting exp)	700.00	
e Praes	Office Stationery	Giffion exp(Office stationery)	9480.00	
IN FLAVE	Table Doth	Gantingsmcy(Otherit)	7800.00	
+ Pr//ve	Well Clock	Equipment(wall Clock)	9530.00	
+ Press	Office stationery	Office exp(Office Stationery)	1000.00	
ut Sahoo	Auto Fare Charges	Controgency(others) Books Binding	\$790.00	
ing the second	Printing & Stationery Display Line	[Contingency(Others)	2771.00	
Kumar Ratra	Tata (ky HGD tics	Contingency(Others)	2200.00	
califi	Frinting & Binding(data ontry)	Office Expenses/Dinding of Books	\$208.00	
140m	Frietling & Binding(data entry)	Unice Experites(Binding of Bottk1)	5266.00	
in Fraun	Table Coth & Table Gizzi	Repair & Purchase of Funktures(Funkture)	7635.00	
A Fitzan	Binding of Plioto	contingency(otheral	7200.00	
0.81218	books binding	books Binding	5080.00	
i Frank	Venille Board	Equipment/Venile Board)	9630.00	
anta Tarrat	Repair & trisin( Almonth)	Repair & Purchase of Furnitures(Furniture) Repair & Purchase of Furnitures(Furniture)	4956.00	
Prime	Goor mat Coll	Repair & Purchase of Furnitures(Furniture) Equipment(Repair & maint.comp)	7509.00	
Fitzya	Hard disk, Pen zinve	Equipment/Neper & maint.compo Office Expenses	3104.00	
Previ	Hard disk, Pendrive	[Equipment[Repair & maint.comp]	7464.00	
s Fraus	Colour of Rag	Repair & Purchase of Furnitures(Furniture)	990.00	
e Prava	No & Periodicals	Books & Southais	1270.00	
* Prave	Colour of sandlings of Francis	Repair & Purchase of Furnitures(Furniture)	3,71000.00	
Ford	Display Boenti	Equipment(Display Roard)	6400.00	
Tures.	Display Boand	Equipment(Display floard)	6400.00	
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Trava	Display Board	Equipment[Display Board]	6400.00	
FEENE	Oisplay Bustd	Equipment(Display Board)	5400.00	
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Fritze	Display Board	Equipment(Display Buand)	6400.00	
FTANK	Office Stationery	Office Expenses	9638,00	
Pravit	Office Stationery	Office Expenses	9679.00	
Entel	Table Glass	Repair & Purchase of Furnitures(Furniture)	8780.00	
DORAN	table Glass	Aspair & Purchase of Furnitures(Furniture)	7380.00	
UTRVB	Printing & Stationery	office Experises	5515.00	
TAVS.	Mocedanicut	office Expenses	4385.00	
ofeena .	office Expenses	utlice Expenses	1990.00	
2245		Mack Team Exp	7875.00	
1210	Venile Board	Equipment/Venile Biland)	\$950.00	
1000	Verile Board.	Equipment/Venile Bhard)	9990.00	
of division	Venile Board	Equiproent(Repair & maint.comp)	\$00.00	
7217	Venile Board	Equipment(Vende Buard)	00.0699	
4	Auditor Refeasiment	Contingency (others)	2000-00	
4	Office Stamp	office exp(office stationery)	1150.00	The second second
er:3016	Station - man	and the second s	The second	1408543.50
1	Statue Insuguration	Contingency(others)	1950.00	
1918	Venile Boani	Equipment(Venile Board)	9990.00	
CRAW	Vervie Board	Equipment(Venile Board)	9990.00	
1918	Venile Board	Equipment/Venile Board)	\$620.00	1
1819	Venile Board	Equipment(Venile Board)	15300,00	
PER P	Plastic Mat	Contingency(others)	5072.00	
14m	Plastic Mat	Contingency(others)	5072.00	
	Plastic Mat	office exploffice stationery)	3540.00	
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	in the Supplers/Others	Furbosit Swipe Transfer	Head of Account	Aresunt/Es. N 1540000.000	onth wise
1	1011 2010	and the second state of th	and the set		10400000
1	Sound Enterprises	Repair & maint(comp)	Equipment(Nepaly & maint.comp)	350.00	
10	The literation	Labour Charges	contingency[Cleaning & insint. Changes]	\$880.00	
1 3	- Tr	Surpe transfer	Swice Transfer	25000.00	
1 3	Durge Interprises	Reper & Malat. (Comp)	Equipment(Repair & Maint Comp)	350.00	
I.H		Labour Charges Uffice stationery	Contingency Cleaning & maint: Charges)	170.00	
111 10		Auto Tare charges	Office exp(office Stationery) Office exp(office Stationery)	\$00.00	_
76.25.10	and the second se	purchase committee meeting	contingency(Meeting exp)	3500.00	
胡南西		Np & Periochcals	Books & Journals	4119.00	
110.16		Advertisement	Contingency(others)	0006.001	
20.09.16	53 BOOK Supplier	Hefund of EMD	EMD Refund	10000.00	
	May,2016			100 million (1997)	60083
10.05 18		Advertisement	contingency(Others)	1000.00	
21.00.18		Traveling exp	(contingency(Others)	700.00	
23.00:10		Meeting Exproses	curtingency(Meeting exp)	1000.000	
7E 00.10	M.D.Makidin	Travelling Lig	Continguincy(Others)	500.00	
29.00.10	Pradeop Swales	Meeting Experioes	contingancy(Meeting exp)		4100
ALCONT OF	June,2015 Amit kumpr Diswal	Records R. A. Maler Property	Equipment(Repair & Maint comp)	1600.00	and the second
01.07.16		Repair & Maint(comp) Labour Charges	Centingency(Cleaning & maint, Charges)	4704.00	
19.07 14	SDR & Associates	SOR & Associates	Contingenest/Audit Fails}	2290.00	
27.07.16		labour Charges	Contingancy(Creaning & onaint, Charges)	4704.00	
23.07.16		Guest Entertainment	Centingeocy (others)	1000.00	
27.07.16	Esireka Forbes	Annual Maint Charges	Equipment/Repair & Maint Agua Goardy	11100.00	
22.07 16	Euroka Forbes	Office Stationary	Office explorace stationery	99995.00	
27.07.16	Faireka Forbes	Evinting & Stationery	Office exploration stationery	9739.00	
27.07.16		Mitcellaneous	Office exploffice stationery)	5541.00	5508
- ACCREDIT	auty,2016	Hard State of the second second	To how and had a link	500.00	- a scott
13.00.18	M.D.Maiadein	Urobrella	Equipment(Underella) Contingenty(Cleaning & maint, Charges)	3528.00	
11.00.11	Indira Panda	Labour charges	Contingency(Dearing or main: Chargety	5000.00	
27 00 16	Fradeep Swain	Meeting Expendet	Books & Journals	4288.00	
31.00.36	LC News Paper Agency	No & Periodicals	Office explorfice stationery)	1000.00	
19.08.16	Pradeep Swath	Printing Exp Np & Periodicals	Books & Journala	4342.00	
17.08.16		Np & Periodicals	Books & Journals	3851.00	
22.08.16	S.C. News paper agency Indica panda	Labour Charges	Contingency(Cleaning & maint Charges)	4704-00	
75.06.16	P. Samek	Labour Charges	Contingency(Clearing & maint. Charges)	2352.00	1
25:08.16	Chief Librarian	Audit Exp	Contingenty(others)	2000.00	
19 08 16	Chief Levanan	Meeting Expenses	contingency(Meeting exp)	700.00	
11 DR 16	Chief Librarian	Meeting Expenses	Contingency(Meeting exp)	\$000.00	
2. 18	August,2016	CONTRACTOR OF THE OWNER	Construction of the second	and the second s	-3726
01.0116	Pradeep Swam	Meeting Expenses	Contingency(Meeting exp)	4000.00	<u></u>
01 04 16	Chief Ubrarian	Proquest Grientation Programm	Proquest Orientation Programme	9000.00	1
01.09.15	Bhanja Prava	Printing & Stationers	Office exploffice stationery)	9620.00	T
08.09.19	ninarija Prava	Printing & Stationery	Office exp(office stationery)	4600.00	
38.09.16	indra Panda	Labour Charges	Contingency(Cleaning & maint. Overges)	2352.00	
	Indra Panda	Labour Charges	contingency(Cleaning & maint, Charges)	2352.00	
20.09.16	Durga Enterprises	Repair & Maint(Comp)	Equipment(Repair & Maint.comp)	350.00	
28.09.15	Durge Enterprises Rhorga Prava	Installation of computer:	Equipment(Electrical)	8317.00	
201.052.16	saniaumdra Das	Remaneration	Contingenty(others)	1000.00	
21.65 16	sch & Associaties	Audit Esp	Contingency(audit lees)	11500.00	
and the	September,2016	State State State State	And and a state of the state of		1320
05.10.14	Pradeep Swain	Auto Fare Charges	Contingency(others)	402.00	
09.311.26	pradicep swain	Miscelaneous	contingency(others)	1005.00	
06.10.36	P. Garnali	Labour Charges	contingency Cleaning & maint, Charges)	3528.00	
06 10 36	Md Maiadat	Fuel Charges	contingency others)	500.00	
07.30.16	Impression Software Solutions	Repair & Maint(Comp)	Equipment(Repair & maint comp)	4750.00	
08 10 16	Elianja Prava	Printing & Stationery	Office exp(office stationery)	4472.00	1
03.10.16	Ehanja Prava	Printing & Stationery	Office exp(office stationery)	5450.00	1
17.10.26	Indira Fanda	Labour charges	Contingency(Dearing & maint. Charges)	2352.00	
20.10.16	Chief Librarian	Menting Expenses	Contingency(Meeting exp)	2000.00	
28.10.10	Chief Librarian	Meeting Expenses	Contingency(Meeting exp)	2000.00	
	Pradriesz Snanin	Auto Fare Charges	Contingency(others)	500.00	
19.10.16	Durga Enlergelses	Frinting & Stationery	office explotice stationery	3000.00	
75.10.18	P.E.Swein P.E.Swein	Repair & Maint(Comp)	Equipment[Begair & maint comp]	200.00	
11.10.16		DTP Charges	cifice captoffice stationery)	1003.00	
31.10.10	Scioners Pustak metal October, 2016	Periodicals/Licrary Books	Keferance Books	4977.05	
02.11.16	Prossanna Romar Nanda	EMD Refund(waste miterial)	END list and	- Caral	386
	P.K.Sweite	Manting Exponents	EMD Refund contingency/Meeting expl	1000.00	
	Nd Marodin	Repair & maint elicycle)	Contingency(steers)	5000.00	
	Durga Enterprises	Repair & MantiCompi	Equipment(Repair & maint.comp)	2000.00	
101116			The second	350.00	
01116 11116		Senar & Mant Compt	Equipment Repair & maint comp	350.00	

Ned I Ken

	12	-		Dara	Inte				1	901
1	66.0	or .					6766.00	157000.00	163766-00]	264
1	129.04	0			_		329,00	3000.00	3129.00	3129
100	431.00	10					431.00	10000.00	10431.00	10431.
Past	388.00						388.00	9000.00	9388.00	.9388.
1000	1 431.00						431.00	10000.00	10431.00	10431
1.25 .	-	1		40.00			40.00	10000000	0.00	40.
6 6		-		100.00			100.001		0.00	100
1				6.00			6,00		0.00	
51 17		-		0.00	343.00		348.00		0.00	348
101.17	226,00	5			JANEDU		226.00	5000.00	5226.001	5226
18:01.17	226.00						226.00	5000.00	5226.00	5226
10.01.15	272.00						272.00	6000.00	6272.00	6272
21.01 16	183.00						183.00	4(100.00	4183.00	4383
21 01.16	365.0K						365.00	\$000.00	8355.00	6365
21.01.10	184.00						184.00	4000.00	4184.00	4184
25.01.17	416.00						416.00	9000.000	9416.00	9416
31.01 17	92.00						92.00	2000.00	2092.00	20/92
51/01/17	378.00						378.00	8000.00	8378.00	8378
						_	378.00	.0000.00	8378.00	8378
31,01,17	378.00				1258.00		1258.00	-00455746	0.00	1258
and the second se					1258.00		504.00	9000.00	9504.00	9504
04.02.17	504						112.00	2000.00	2112.00	2112
04.02.17	117		CAUNT NO.				10000.00	10000 100	0.00	10000
09.07.17			10000.00				579.00	10000.00	10579.00	10579
13.02,17	579	-					579.00	10000.00	10579,00	10575
13.02.17	579						521.00	9000.00	9521.00	.9521
13.02.17	523	-	1				10030.00	3000.00	0.00	10000
13/02.17			10000.00				10000.00	-	0.00	10000
11.02.17	_		10000.00				10000.00		0.00	10000
13.02.17		1	10000.00				10000.00		0.00	10000
13.02.17	1		10000.00		-				0.00	10000
11.02.17			10000.00		-		10000.00		0.00	10000
14.02.17			10000.00	1			10030.00		0.00	10000
13.02.17			10000.00	() (			10000.00			1000
16.02.17	-				144.00.		144.00		0.00	
11.03 17					1150.00		1150.00	-	0.00	115
15.03.17					1255.00		1255.00		0.00	125
15.03.17	1						0.00		0.00	
8.03.17	A append			4582.00			4582.00	-	0.00	458
1.03.17	13,00	1000		Contraction of the	-		13.00	2000.00	2013.00	201
1 03 17	63.00			1000			63.00	10000.00	10063.00	1006
1.03.17	6.00			10000			6:00	1000.00	1006.00	100
1.63.17	1				1195.00	_	1195.00		0.00	119
Total	41120.04	541890100	83000.00 28728 00	4820,00	16132.00	30000.00	787690.04	1194000.00	1235120.04	198169

1	15500	-	
1	a	Somer +	F
130	andto	The second	1
10	(fenid)	MP	

Particulars		Amt/Rs
Bank Interest		12484
Interest(Flexible A/c)		28636
Emd Received		83000
Sale of Waste Paper		28728
Fees & fines		16132
Skilled Based workshop Trg programme		30000
Collection from students		583890
Others		238
Refund against furniture A/C		4582
Total		787690
Adjusted against Furniture A/C	4582.00	4582
Total Received		783108

		UTKAL UNIN BHDBAN arija Ubrary Des	VERS VESV OD() VB(0)	piment Fund Account		
H	Amount(Rs)	ments Account	Tor	the Year ended 31st March,2017 Payments	Areaunt(Ra)	Amount(Rs)
Contract Services		1.071.105.95	214	Office Repenses Printing & Stationery and Binding of Books Contingencies	173923.00	#10289
**************************************		583,890.00 16,132.00		Equipment, Repair & Maint . Display Board Destrical Works Notice Doard Repair & Marrit (Accanguard) Repair & Marrit (Accanguard)	54009.00 8817.00 6435.00 15965.00	256170
Interest Received Interest on SE Account Interest on Heat	12,484.04	41,120.04		Repair & Maint(comp) Succession Board Venile Board	64173.00 8293.00 84400.00	
Others: Skill Based Workshop Trg. programme	30,000.00	1#1,965.00		Furniture: Regult & Furchase of Furniture		3.50391.0
END Reprint Sale of Waste Paper	83,006.00 28,738.00			Preservation of Records		33/000.0
Tilmerilananan	238.05			Rocks & Journals NP & Periodicals Reference Rocks	52312.00 4977.00	57289.1
				Other Payments Naec Teahs Exp Books Exhibition EMD Refund	53691.00 16290.00 32000.00	161583.0
				Closing Balances Cash at Barik SBI A/C No.10164210644 Cash at Dark SBI A/C No.35682280614 Uncluding MOD Balance)	453,998.00	453,098.0

For SDR & Associates Chartered Accountants

FRN-326527E Sh EAA (CAS.R Saboo) Partner Mamh, No-056068

Date: ML12.2017 Place Dishapeswar



Y.	Inteent	Collection from the itudents (An PG Teaching Dept.)	EMD Received	Sale of Scrap	Others/R efund against Furiture & Fixtures	al year 2016- Fees & Fines	Shilled trased workshop	Total	Fransauler From Temp.Fd A/C	Votal transfer	100-
(7.00.16 (06.00.16	12484.00	-			72.00	-		72.00		0.00	72.0
115.04.18	10.04	-	-		-			12484.00		37484.00	12494.0
TE 184 10		_	1 1					0.00		0.04	0.0
10.04.16	-			-		10000	1	6.00		0.00	0.01
1781.24		-	-			1611.00	10000.00	1633.00	-	0.00	1633.0
274536			1			2615.00		2825.00		0.00	30000.0
10-06-11						930 00		0.00		0.00	10.01
12.07.16			-			770-00		770.00		0.00	770 02
26.02.16	12:00	_				a surrenter		\$2.00	1000.00	1012.00	1012 (2
20.07.16			-			1000.00		1000.00		0.00	1000 00
06.115.36	153.00			-				153.00		0.00	000 11553 00
11.00.36	15.00	_						15.00	1000.00	1015-00	1015-00
11/08/26	44.00				-			44.00		3044.00	3044.00
12.05.36	1					220.00		220.00	3000,00	0.00	5075 00
0.03.36	64.00	_						\$4.00	4000.00	4054.00	4064.00
19.08.36	178.00			-		-		107.00	E000.00	6107.00	6107.00
9.00.36	160.00			/				160,00	9000.00	9160.00	9160.00
31,30 0	32.00				-			72.00	4000.00	4072.00	4072.00
7.08.16	33.001			-			_	93,00	1000.00	1018.00	1018.60
2.08.16	56.00				_			\$6.00	3000.00E	3056-00	3056.66
5.00.16 5.00.16	34.00	_						94.00	2000.00	2038.00	5094.00
0.08.10	38.00							38.00	2000.00	2038.00	2038.00
9.06.16	10.00	_				Contrast.		19.66	\$000.00	1019.00	1019-00
0.09.16	100.03	-		_		1619.00		1619.00 60.00	3000.00	0.00	1613.00
1.09.36	80.00			1				80.00	4000,00		4080.00
7.09.16	187.00					-		387.00	. 9000.00	0187.00	9157.00
9.42% 20	220.00				_			88.00 220.00	4003.00	4088.00	4085.00
7.89.36					1	19.00		19,00		0.00	19.60
7.09.36	43.00	-		_				45.00	2003.00	2645.00	2045.00
109 16.		_		_		1105.00		67.00	3000.00	3067.00	3057.00
10.96	275.00							275.00	11000.00	11275.00	11275.00
10.16	25.00		_					25.00	1000.00		1025.00
10.16	127.00				_			127.00	4000.00	4101.00	4101.00
10.18	54.00	_						54.00	2000.00	2654.00	2054.00
10.14	57.00			-				57.00 88.00	2000.00		2057.00
1036	\$77.00					-		177.00	6000.00	3088.00	3088.00 6197.00
10.16	796.00							236.00	8000.00	0236.00	#236-02
10.26	167.00		1000.00	_				147.00	5000.00	5147.00	3147.00
10.36			1000.00		-			1000.00		0.00	1000.00
10.16			1000.00					1000.00		0.00	1000.00
23 36	156.00				-	145.00		145.00	Victoria	0.00	145.00
13.16	158.00							156.00	5000.00	5156.00	\$156.00 \$158.00
11.16	63	No. Contractor						63.00	2000.00	2063.00	2093.00
11.16		77898,60		_				277890.00		0.00	277890.00
33.36	20	05209.00			-			70830.00		0.00	70800.00
11.16		100x001				-		108100.00	-	0.00	105200.00
and a state	12	00.000						21900.00	1	0.00	\$190% H
	(almas	Lungest									

-		Bar	k Reconciliation as on 31.03.201	7		
Balance a	s per Cash I	Book as per audit				453098.00
Cheques &	issued not p	resented for payment				
Date	Cheque	Particulars	Head of account	Amount/Rs	Date of Clg	
14 05.12	111836	Kesaba Chandra Nath		160.00		
28.03.17	781044	Umakanta Kar	Contingency	300.00	05.04.17	
28.03.17	781045	MD. Maludin	Contingency	320.00	05.04.17	
28.03.17	781046	Umakanta	Contingency	130.00	11.04.17	
28 03.17	781047	S.C News Paper	news paper & periodicals	8348.00	13.04.17	
28.03.17	781049	Judhistir Nayak	Contingency	600.00	03.05.17	
28.03.17	190051	Kedarswar Mishra	Contingency	8816.00	27.04.17	
28.03.17	190052	Durga Enterprises	Contingency	700.00	31.05.17	
iotal .				19374.00		19374.00
alance as	per bank p	ass book as on 31.03.201	7			472472.00

	Details of Reconciliation	
Sino	Particulars .	Amount/Rs
	1 Swipe Amount transfer to (SB A/C)	1655000.00
	2 Swipe Amount transfer from (SB A/C)	1194000.00
	MOD Balance as on 31.03.2017	461000.00
	Balance in SB A/C	11472.00
	Total	472472.00
1	3 Less Cheques not presented for payment	19374.00
	Balance as on 31.03.2017 including MoD Balance	453098.00



# LFA AUDIT REPORT

#### List of Records verified.

1. Development cash book

2 Budget cash book

3 Book purchase cash book

a Loss of book alo cash book

5 DCR

6.Pald vouchers

7.Stock registers

8 Accession registers

9.Bank pass book

10 Money receipts

11, Other connected records and registers and Res.

#### Staff Position of Parija Library:

Slina	Name of the Post	Sanctioned strength	Existing strength	Remarks
1	2	3	4	5
1	Chief Ibtarian	1	-	1 I/C Chief librarian
2	Asst. librarian	4	3	
1	Technical Asst.	8	2	
(	ut. Technical Asst.	9	9	
5	Pandit Asst	1	1	
i	Library Attendent	18	1	
7.	Binder	2		
5	Section Officer	1.	1	
0	Sr.Aest	7	-	
in in	Jr.Asst	1	1	
11	Jr. Typist	2	2	
15	Peon	4	4	
12	Watchman	4	2	
14 15	Group-D	1	-	
5	Sweeper	4	4	

til

#### Physical Verification:

Particulars	Date	Physical Balance	Book Balance	Difference	Page no.
In case of \$ 410 to sector.	10.5.20			Itany	
Joused MR books	30.5.18	14 nos (41001-\$1100)	14 nos (41001-41100)	Nii	
Trysical ventication of	Charles Auto				27-28

Duta = 23 6.18

Page no. =24-25

Stamp of Rs. 3/- =3/-X998= 2994/-

Stamp of Ra. 2/- = 2/-X 1052=2104/-

Stamp of Re. 1/- = 1/-X 48= 48

				20
Total = 5146/- Physical balance of Rs. 5146/- agreed	with the book belance	a _		
Physical balance of each could not b	a done due le non	maintenance of 'updated o	ash book .	
1.Development Fund A/C				
Financial Position		( c . B m Bl;	3-16)	
O.B. as on 1.4.16 (as per last A.R.)	= 1078109.96			
Receipts	= 783108.04			
Total	= 1861218.00			
Expenditure	= 1408126.00			
C.B. as on 31.3.17 (As per Audit)	≈ 453098.00			
C.B. as on 31.3.17 (as per Cash Book)	453096.00	( OB ason 01.	04.150	
Difference	= 148			
Bank Reconciliation:				
C.B. as on 31.3.17				
Cash Book	= 453098.0	30		
Details of Cheques Issued but not. encashed by 31.3.2017;			Amt (Rs.)	
Ch.no./Dt. 111856/14/5.12			160	
781044/26.3.17			300	
781045/28.3.17 781046/28.3.17			130	
781047/28.3.17 781049/28.3.17			8348 600	
190051/26.3 17			8816	
190052/28.3.17 Total			(19374)	
(Mart)			S	
Ealance as per Bank Pass book				
CONTRACTOR AND A	=472472.00			
as on 31.3.17				
as on 31.3.17 SBI A/C no. 35692280614				
the second se				
SBI A/C no. 35692280814 Details of Reconciliation:	= 1655000.00			
SBI A/C no. 35692280814 Details of Reconciliation: 1.Swip Amount transfer to SB A/c				
SBI A/C no. 35692280814 Details of Reconciliation: 1.5wip Amount transfer to SB A/c 2.Deduct(-)Swip amount	= 1655000.00			
SBI A/C no. 35692280814 Details of Reconciliation: 1.Swip Amount transfer to SB A/c				
SBI A/C no. 35692280814 Details of Reconciliation: 1.5wip Amount transfer to SB A/c 2.Deduct(-)Swip amount	= 1655000.00			

			242
Anteresting of Land Flore and			
k (+)Add Clearest balance			
	=11472.00		
in SB A/C			
5.Total	= 472472.00		
5.t-Kess Cheques not cleared by 31.3.17	= 19374.00		
r Balance as on 31.3.17 including MOD balan	ice = 453098.00		
Hend wise Receipts:			
Pinada of A/ca		Amount(Rs.)	
Received from PG council towards developme	Int fund	583890.00	
Fees and Fines		16132.00	
Interest on SB a/c		12454.04	
Interest on RexLa/c		28636.00	
Skill based workshop training programme		30000.00	
EMD received Sele of waste paper		83000,00	
sale or waste paper Nisc. receipts		28728.00	
Total		783108.04	
MiceExpanses		410289.00	
oupment Repair & Maintenance			
umiture repair & purchase		256170.00	
reservation of records		510391.00	
looks and Journals		12000.00	
Nher payments		161981.00	
otal		1408120.00	
Less of Book A/c			
nancial Postion			
B, as on 1.4.16 (as per Bank pass book			
s cash book was not produced to fast audit )	=258854.75		
coepts	= 14270.00		
stal	= 273124.75		
xpenditure	= nil		
B. as on 31.3.17 (As per Audit)	= 273124.75		
B. as on 31.3.17 (As per Audst) B in bank as on 31.3.17	= 273124.75 = 273124.75		

MOD balance = 2,20,000.00 +Cleared balance 53,124,75)

Difference = Nil

#### Head wise Receipts

1.Collection of Fees = 1336.00

2.Bank interest = 12934.00

LFA 20-08-20	EPORT		2-11
Party against for Land Party Alerth			
Total = 14270.00			
Hand wise Expenditure			
NF			
3.Book Purchase Cash Book			
Envirtual Position.			
D.E. as on 1.4.16 (as per last A.R.)	= 592210.68		
Rectipla	= 175004.35		
Tatal	= 787215.03		
Expenditure	= 727449.00		
C.B. as on 31 3.17 (As per Audit)	= 39766.03		
C.B. as on 31.3.17 (as per Cash Book	<li>a) = 39766.03</li>		
Difference	- NI		
C. B. In bank as on 31.3.17	= 39822.03		
SBI A/C no. 80162010014632			
C.B. in cash book as on 31.3 17	= 39766 03		
	= 56.00		
Difference			
Ch. No.559431 /24,11 16 of Rs.56.00			
Ch. No.559431 (24,11,16 of Rs.56.00 Head wise Receipts;		Arres willing 1	
Ch. No.559431 (24,11,16 of Rs.56,00 Head wise Receipts; Heads of Alca Bank interest		Amount(Rs.) 35343.35	
Ch. No.559431 (24,11,16 of Rs.56,00 Head wise Receipts; Heads of Alca Bank interest			
Ch. No.559431 (24,11,16 of Rs.56,00 Head wise Receipts; Heads of Alca Bank interest Cancelled cheque Total		35343.35	
Ch. No.559431 (24,11,16 of Rs.56,00 Head wise Receipts; Heads of Alca Bank interest Cancelled cheque Total	not encashed by 31.3.17.	35343.35 139661.00	
Ch. No.559431 (24,11, 16 of Rs.56,00 Head wise Receipts; Heads of Alca Bank interest Cancelled cheque Total Head wise Expenditure: Heads of AlCs	not encashed by 31.3.17.	35343.35 139661.00	
Ch. No.559431 (24,11,16 of Rs.56,00 Head wise Receipts: Heads of A/ca Bank interest Cancelled cheque Total Head wise Expenditure: Heads of A/Cs	not encashed by 31.3.17.	35343.35 139661.00	
Ch. No.559431 (24,11,16 of Rs.56,00 Head wise Receipts; Heads of Alca Bank interest Cancelled cheque Total Head wise Expenditure: Heads of A/Cs Purchase of books	not encashed by 31.3.17.	35343.35 139661.00	
Ch. No.559431 (24, 11, 16 of Rs.56,00 Head wise Receipts; Heads of Alca Bank interest Cancelled cheque Total Head wise Expenditure: Heads of AlCs Purchase of books Returned to COF Bank charges	Amount(Rs.) 806799.00 120610.00 46.00	35343.35 139661.00	
Ch. No.559431 (24,11,16 of Rs.56,00 Head wise Receipts: Needs of A/ca Bank interest Cancelled cheque Total Head wise Expenditure: Heads of A/Cs Purchase of books Returned to COF Bank charges Total	Amount(Rs.) 506799.00	35343.35 139661.00	
Ch. No.559431 (24,11, 16 of Rs.56.00 Head wise Receipts; Heads of Alca Bank interest Cancelled cheque Total Head wise Expenditure Heads of AlCs Purchase of books Returned to COF Bank charges Total 4 Budget fund Alc	Amount(Rs.) 806799.00 120610.00 46.00	35343.35 139661.00	
Ch. No.559431 (24, 11, 16 of Rs.56,00 Head wise Receipts; Heads of Alca Bank interest Cancelled cheque Total Head wise Expenditure Heads of AlCs Purchase of bocks Returned to COF Bank charges Total 4. Budget fund Alc	Amount(Rs.) 806799.00 120610.00 46.00	35343.35 139661.00	
Ch. No.559431 (24, 11, 16 of Rs.56,00 Head wise Receipts; Heads of Alca Bank interest Cancelled cheque Total Head wise Expenditure: Heads of AlCs Purchase of books Purchase of books Returned to COF Bank charges Total 4. Budget fund Alc	Amount(Rs.) 806799.00 120610.00 40.00 727449.00	35343.35 139661.00	
Ch. No.559431 (24, 11, 16 of Rs.56,00 Head wise Receipts; Heads of Alca Bank interest Cancelled cheque Total Heads of AlCs Purchase of books Purchase of books Returned to COF Bank charges Total 4. Budget fund Alc Enancial Position O.B. as on 1, 4, 16 (as per last A.R.) Receipts	anot encashed by 31.3.17.	35343.35 139661.00	
Ch. No.559431 (24,11, 16 of Rs.56,00 Head wise Receipts; Heads of Alca Bank interest Cancelled cheque Total Head wise Expenditure: Heads of AlCs Purchase of books Returned to COF Bank charges Total 4 Budget fund Alc Enencial Position O.B. as on 1.4, 16 (as per last A.R.) Receipts Total	not encashed by 31.3.17. Amount(Rs.) 606799.00 120610.00 46.00 727449.00 = 3483931.19 = 7207460.00	35343.35 139661.00	
Ch. No.559431 (24, 11, 16 of Rs.56,00 Head wise Receipts; Heads of A/ca Bank interest Cancelled cheque Total Heads of A/Cs Purchase of books Returned to COF Bank charges Total Enercial Position O.B. as on 1.4, 16 (as per tast A.R.) Receipts Total Expenditure	not encashed by 31.3.17. Amount(Rs.) 806799.00 120610.00 40.00 727449.00 = 3483931.19 = 7207460.00 = 10691391.19 = 8316663.50	35343.35 139661.00	
Ch. No.559431 (24, 11, 16 of Rs.56,00 Head wise Receipts; Heads of Alca Bank interest Cancelled cheque Total Heads of AlCs Purchase of books Purchase of books Purchase of books Returned to COF Bank charges Total 4. Budget fund Alc Enercial Position O.B: as on 1, 4, 16 (as per last A.R.) Receipts Total Expenditure C.B. as on 31, 3, 17 (As per Audit)	not ancashed by 31.3.17. Amount(Rs.) 806799.00 120610.00 46.00 727449.00 = 3483931.19 = 7207460.00 = 10691391.19 = 8316663.50 = 2374727.69	35343.35 139661.00	
Difference Ch. No.559431 (24,11,16 of Rs.56,00 Head wise Receipts: Heads of A/ca Bank interest Cancelled cheque Total Heads of A/Cs Purchase of books Returned to COF Bank charges Total 4.Budget fund A/c Enancial Position 0.8: as on 1.4.16 (as per last A.R.) Receipts Total Expenditure C.B. as on 31.3.17 (As per Audit) C.B. as on 31.3.17 (as per Cash Bool Difference	not ancashed by 31.3.17. Amount(Rs.) 806799.00 120610.00 40.00 727449.00 227449.00 = 3483931.19 = 7207460.00 = 10691391.19 = 8316663.50 = 2374727.69	35343.35 139661.00	

## AUDIT REPORT 20-08-2019

#### Head wise Receipts:

-----

Heads of Alos	Amount(Rs.)	
Bank interest	122933.00	
RUSA granta	7084527.00	
TOTAL	7287460 00	

#### Head wise Expenditure: ...

Heads of A/Cs	Amount(Rs.)
Expenditure from RUSA grants	6652660.00
Returned to COF	504305.00
Bank charges	3760.50
Confingencies	953845.00
Telephone bills	2073.00
Total	8318663.50

#### Bank Reconciliation

C.B. in Bank as on 31.3.17

# 4528077.50 as per bank pass book

SBI A/C no. 35692295621

MOD balance Rs.4517000.00 + Cleared balance Rs.11077.50)

C.B. as on 31.3.17

= 2374727.69 as per Cash Book)

Difference -2153350.00

Cheques issued but not en-cashed by 31.3.17

Cheque no	Date	Amount	
298087	10.04.2017	Rs. 43640/-	
298091	28.03.2017	Rs. 34830/-	
298093	28.03.2017	Rs. 4560/-	
298094	28.03.2017	Rs. 1280/-	
298096	28.03.2017	Rs. 4740/-	_
296096	28.03.2017	Rs. 3880/-	

80

# AUDIT REPORT 20-08-2019

293097	28.03.2017	Rg. 3324/+	
298008	28.03.2017	Rs. 8961)-	
	28.03.2017	Ra 4260-	-
298030	28.03.2017	Rs 2832/-	
296100		Rs 7000/-	_
298101	28.03.2017		
298102	28.03.2017	Bn. 35000-	_
299103	29.03.2017	Ra. 8000/-	
295104	29.03.2017	Hs. 3000/-	
298105	29.03.2017	Ra. 72076/-	
298107	29,03.2017	Ra. 80064/	
296108	29.03.2017	Ra. 110.300/-	
296100	29.03.2017	Ra. 198897/-	
296110	29.03.2017	Rs. 301077/-	
98111	29,03.2017	Rs. 121923/-	
98112	29.03.2017	Rs. 103921/-	
98113	29.03.2017	Rs. 557615/-	
98114	29.03.2017	Rs. 16385/-	
98115	29.03.2017	Rs. 7718/-	
98116	29.03.2017	Rs 173100/-	-
96117	29.03.2017	Rs. 105331/-	
Bite	29.03.2017	Rs. 68507/-	
96119	29.03.2017	Rs 93089/-	
OTAL		2153350/-	

Head wise Recoipts:	
Heads of Alics	Amount(Rs.)
Bank interest	87222:00
RUSA grants	7084527.00
TOTAL	7171749,00
Head wise Expenditure:	
Heads of A/Cs	Amount(Rs.)
Expenditure from RUSA grants	6852680
Returned to COF	504305.00

239



2356

Bank charges			3760.50	
Contingencies			956420.19	
West of the second seco			8319238.69	and a state
Stock position Dotals st	ock (non-consumables) position non oor	sumable item as provided	I by the local authority is gr	Ven Dolow,
Contraction of the second		O.B. as on 1.4.2016	Received during 2016-1	and the second se
SI. No.	Name of the Articles	08	4	12
1.	Air Conditioner	12	SAIL	12
2.	Almitah	NIL.	101	01
3.	Amplifier	NIL	lot .	01
4.	Audio Cable	05	NIL	05
5	Barcode Printer		NIL	10
6,	Barcode Reader	10	NIL	31
7.	Book Self	31	02	02
B.:	Book Trolley	NIL	04	04
2	Carpet	NIL	NIL.	150
10.	Chav	150		82
11	Computer	41	Desktop-40 +Laptop-01	40
12.	Computer Chair	NIL	40	40
13;	Computer Table	NR	40	08
14.	Fire Extinguisher	NIL .	80	
15.	Head Phone	NIL	01	01
16.	IP Comera	NIL	04	04
17	ron Book Rack	11	NIL	11
18	Key Board	NIL	04	04
19.	LED TV	NIL	01	01
20.	Meeting Table	01	NR	01
21	Mcrophone	NIL	NIL.	NIL
22.:	Microphone Transmitter	NIL	NIL	NUL
23.	Mouse	NIL	04	04
24.	Nir	NIL	01	01
25.	Office Table	18	NIL	18
26.	Podium	NIL	01	01
27.	Port Switch	NIL	01	01
28.	Printer	01	02	03
29	Projector	NIL	01	01
i0.	Projector screen	NIL	01	01
8	Rack	251	01-Audio system	252
12	Reading Table	48	NIL	48
13	Sota	ML	01	01
14	Speaker	NL	06	06
15,	Stabilizer	NIL	03	03
6,	Step For Book Keeping	NIL	02	02
7	Tata set-top- Box	NIL	01	01
8.	TB HDD	NIL	01	
9	UPS	NIL	42	01
0	UPS (1 KVA)	NIL		42
1	Vocumm Cleaner	01	01-Audio system	01
2	Well Mount Rack		NIL	01
9		NIL	01	01
A.U.	Water Cooler	04	NIL	04
5				
	postor machine	put	ML	01
38 39 40 45 45 42 44 45 investment : Nil Advence: Nil Advence: Nil	Wireless Receiver Xerox machine	NIL 01	NIL	04 01 01

Excess payment made towards labour charges :

As per Gazette notification no. 1112/24.7.15 of Labour worldare Dept.the minimum wages of unskilled labour is @ Rs. 200/- per day. But on sorutiny of paid vouchers wirit Development fund of cash book it was noticed that a total sum of Rs. 16.356/- ( @ the rate 294/- per day per tabourer) have been paid in excess towards wages of labourers than the admissible rate . Detail of which is given below :

#### AUDIT REPORT

LFA 20-08-2019

1	18	harma at manufactor to	(Rs.294/-(Rs.)	2004	(Rs.)	
-	_	terms of mandays	I Carbairtheort	5	6 7	
1	2	3	2947-x20=5880/-	4000	1880	
1	213/19.5.16	20	294/-x12=3528/-	2400	1128	_
2	216/23 5.16	12	294/-x16=4704/-	3200	1504	
0	231/13.7.16	16	2041-010-11104-1			
*	232/26 7 16	10	294/-x16=4704/-	6200	1504	
100	03/11.8.16	12	294/-x12=3528/-	2400	1128	
6	08/22.8.16	16	294J-x16=4704/-	3200	1504	-
<u>.</u>	09/23.0.16	8	294/-x8=2352/-	1600	752	
8	17/14.9.18	8	294/-x8=2352/-	1600	752	
	18/14.9.16	ā	294/-x8=2352/-	1600	752	_
0	26/5.10.16	12	294/-x12=3528/-	2400	1128	
1	31/14.10.16	8	294/-x8=2352/-	1600	752	
2	53/16:11:16	20	294/-x20=5880/-	4000	1680	_
3	136/18 1.17	18	294/-x18=5292/-	3600	1692	
	TOTAL		54158/-	37800/	16356/-	

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Through the POM page no 212-213/bt 18.3.19 the local authority was asked comply about the excess payment. But till the close of the audit nothing has been complied by the local authority. Hence, the excess payment of Rs. 16356/ made towards labour wages over and above the admissible rate is suggested for recovery from the persons concerned failing which from the officials responsible.

GRANTS-NI

UTILISATION CERTIFICATE-NIL

MISAPPROPRIATION & DEFALCATION- NI

LOSS STOCK & STORE NI

AUDIT ON WORKS- NIL

AUDIT ON UNITS- NIL

AUDIT ON SCHEME/PROGRAMME-NII

MISCELLANEOUS- MI

Non-         Non- <th< th=""><th></th><th></th><th></th><th>F</th><th>treess</th><th>ON</th><th>REC</th><th>HS</th><th>TER</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>1</th></th<>				F	treess	ON	REC	HS	TER									1
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77     1 </td <td>200</td> <td>14/78 C</td> <td>Geren Sheen</td> <td>an also at</td> <td>d the see</td> <td>CHE M.</td> <td>sty et - par p</td> <td>1000</td> <td></td> <td></td> <td></td> <td></td> <td>647 mg</td> <td>The la</td> <td>T ALLA</td> <td></td> <td></td> <td></td>	200	14/78 C	Geren Sheen	an also at	d the see	CHE M.	sty et - par p	1000					647 mg	The la	T ALLA			
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35       isoutherne Naturnal       Die Same Print       in and Same         87       Rog, a. 5       Francis       Conservation       Cons		as Dyna	of Bayers	Piertoodia			A contrarries	1121	83.8		5		274	- 2				
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88     County Present     County Present     County Present       89     1     1     1     1     1     225.5     225.6     225.6       89     1     1     1     1     1     1     225.5     225.6     225.6       90     Dank, Drucchene     Mich & Appendix     Mich & Appendix     1     1     1     1     1     1       91     1     1     1     1     1     1     1     1     1       92     1     2000558     2010558     2010558     2010558     2010558     2010558       93     1     1     1     1     1     1     1     1     1       93     1     1     1     1     1     1     1     1     1       93     1     1     1     1     1     1     1     1     1       93     1     1     1     1     1     1     1     1     1     1       94     Vhanka     S.S.     Urgaschaft antal 21     2011     1     1     1     1     1     1       94     Vhanka     2010     1     1     1     1     1     1	-		A.S. Anwin	City Chevellor that	d tonnes .		Publicable	2423	नवन	-	11.	1.140	100		11.01	100		
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97 58 99	\$5	Key, E	reception	电影开始无无罪 开始空	199.		CHERCE !	0.04	95	6	4 10	=	T		1	No.		
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58 99									1									
99							1		-									
					-													
	MI									1	-			21			-	-

## 4.2.4: Percentage per day usage of library by teachers and students (foot falls and login data for online access) (Data to be provided only for the latest completed academic year)

4.2.4.1: Number of teachers and students using library per day over the last one year

Data to be provided:

- Upload last page of the Accession Register details: Uploaded
- Per day login/online users of the library: NIL
- Number of users using the library through e-access: information will be provided by publishers
- Number of physical users accessing the library: 10689

#### Formula: information

• Details of library usage by teachers and students (Library accession register, online accession details to be provided as supporting documents).





			PAGE NO-01		
Your	wise Visitors, Prof	coord, leaders and 1 2 a E V 11 March 19 7 April	ectures used in the	: Library from time 10	line
Contract of the second se	NO-OF USER	DATEANONTH	NO-OF USER	DATERMONTH	NO-OFUSER
IATE & MONTH	SALI-UI USCK	SEPTEMBER		18-15-2056	7
MARCH	11	01-09-2016	1.7	19-11-2016	4
10-13-2016	11	02-09-2016	35 (Tisleing Programme)	20-11-2016	4
TOTAL.		03-09-2010	16	23-11-2016	4
APRIL.	3	04-09-2016	3	23-11-2016	1
04-54-2016	2	07-08-2015	4	24-51-2010	10
06-04-2016	5	18-199-201n	11	25-11-2016	1
TOTAL.		09-09-2016	6	26+11+2018	
MAY	51	10-09-2016	6	21-13-2016	1
(16-05-200h	2	11-09-2014	7	29-11-2216	5
07-05-2016	3	12.09-2016	4	30-11-2016	1
10-05-2010	1	14-09-2016	4	TOTAL.	131
12-05-2016	4	15-00-2910	1	DICEMBER	
13-05-201h	-	16-09-2010	1	01-12-2010	4
16-05-2016		17-09-2016	1 3	02-13-3916	2
17405-2010	-	18-09-2016	1	03-12-3016	2
18-05-2018	1	19-09-2016	1	04-12-201h	4
10415-2015	2	20-09-2016	3	05-12-3016	3
23-05-2016	2	21-09-2016	4	06-12-2016	3.
TOTAL	29	22-09-2016	1	07-13-3016	6
JUNE		23-09-2016	8	08-12-2016	3
02-06-2018		24-09-2010		09-12-2016	4
04-06-2016	3	25-09-2016	3	10-12-2016	31
19-06-2016	4	28-09-2016	1	13+52-3016	1
10-06-2010	5	and the second se	17	14-12-2016	2
2146-2016	5	20-09-2016	00	15-12-2016	T
28-06-2016	1	TRITAL	226	18-12-2016	4
29-06-2016	4	OCTOBER	44/0	17-12-2016	4
30+06-2016	1	ID-10-2016	Y.	18-12-2010	4
FOTAL	29	02.10.2016	3	19-13-2018	1
303.5		177.000	1	27-12-2016	7.
08-07-2016	4	03-10-2016	6	19-12-2016	0
18-07-2016	4	and the second se	4	TOTAL	68
24-07-2016	+	05-10-2016	4		
28-02-2016	5	06-10-2016	14	-	
-29-07-2010	4	17.10-2016	5	-	

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AUGUST	-	19-10-2016	4
01-08-2016	4	20-10-2016	5
02-08-2016	3	21-10-2016	5
02-08-2016	8	22-10-2016	9
04-08-2016	4	23-10-2016	5
07-08-2016	5	24-10-2016	5
08-08-2016	4	25-10-2016	2
09-08-2016	3	26-10-2016	6
10-08-2016	3	27-10-2016	5
11-08-2016	T	28-10-2016	7
12-08-2016	42	31-10-2016	3
13-08-2016	5	TOTAL	104
14-08-2016	8	NOVEMBER	
15-08-2016	8	01-11-2016	4
15-08-2016	7	02-11-2016	6
17-08-2016	4	03-11-2016	40(Research scholar concluve
18-08-2016	7	04+11-2016	6
19-08-2016	6	05-11-2016	14
20-08-2016	8	06-11-2016	4
22-08-2016	7	07-11-2016	6
23-08-2016	4	08-11-2016	2
24-08-2016	4	09-11-2016	3
25-08-2016	4	10-11-2016	3
26-08-2016	.4	11-11-2016	3
27-08-2016	4	12-11-2016	2
28-08-2016-	3	13-11-2016	2
29-08-2016	4	14-11-2016	4
30-08-2016	5	15-11-2016	4
31-08-2016	5	16-11-2016	3
TOTAL	180	17-11-2016	5

PAGE 2

DATERMENTIL	NO OF USER	10th march 2016 to 3 DATE&MONTH	NO OF USER	DATE & MONTH	NO OF USER
JANUARY	and the second se	05-05-2017	4	JANUARY	
02-01-2017	7	07-05-2017	James Berry	09-01-2018	1
03-01-2017	. 6	09-05-2017	53(Lib.Concluve)	13-01-2018	2
04-01-2017	3	11-05-2017	£	18-01-2018	1
05-01-2017	1	12:05-2017	4	19-01-2018	1
06-01-2017	3	TOTAL	83	20-01-2018	- 39
07-01-2017	3	JULY		TOTAL	-44
09-01-2017	3	11-07-2017	1	FEBRUARY	
10-01-2017	3	12-07-2017	2	19-02-2018	4
11-01-2017	3	13-07-2017	4	MARCH	
12-61-2017	4	21-07-2017	15	51-03-2018	+
13-01-2017		27-07-2017	6	APRIL.	
17-01-2017	3	28-07-2017	4	02-04-2018	4
20-01-2017	5	TOTAL	34	03-04-2018	3
21-01-2017	3	AUGUST		04-04-2018	d.
22-01-3017	5	01-08-2017	1	05-04-2018	3.
27-01-2017	19	02-08-2017	+	06-04-2018	+
28-01-2017	4	04-08-2017	1	24-04-2018	+
30-01-2017	4	16-08-2017	2	25-04-2018	2
11-01-2017	3	18-08-2017	5	TOTAL	24
TOTAL	98	TOTAL	17	JUNE	
FEBRUARY		SEPTEMBER		02-06-2018	3.
33-02-2017	6	04-09-2017	1	11-06-2018	- 4
25-02-2017	37(Thesis Exilabilition)	08-09-2017	4	12-06-2018	+
27-02-2017	philicak	TOTAL	9	TOTAL.	11
TOTAL.	183	OCTOBER		JULY	0.0
MARCH	100	06-10-2017	3	16-07-2011	5
01-03-2017	43	11-10-2017	4	AUGUST	
03-03-2017	38	12-10-2017	4	01-68-2018	5
09-03-2017	6	TOTAL	11	04-08-2018	4
10-03-2017	3	NOVEMBER		11-08-2018	3
14-03-2017	7	05-11-2017	0	28-08-2018	12
TOTAL	00	07-11-2017	-1	TOTAL	10
APRIL.		08-11-2017	1	SEPTEMBER	t
24-04-2017	8	14-11-2017	1	19-09-2018	1
26-04-2017	5	15-11-2017	1	28-09-2018	
27-04-2017		16-11-2917	2	TOTAL.	1
28-04-2017	1 1	17-13-2017	2	OCTOBER	
29.04-2017	1	25-11-2017	42	09-10-2018	4
38-84-2017	6	30-11-2017	1	25-10-2018	0.9
TOTAL	24	TOTAL	59	26-10-2018	
MAY		DECEMBER		TOTAL	13
01-05-2017	4	01-12-2017	3	1 333 CT.	
02-05-2017	4	21-12-2017	1		
03-05-2017	4	22-12-2017	1		
03-02-2017	-	TOTAL	¥		

Year wise Visitors, Professors, Readers and Loctures used in the Library from time to time

4			PAGE-3				
feat wise Victorial		s and Lectures used		a time to time			
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## **PHOTOGRAPHS OF PARIJA LIBRARY**



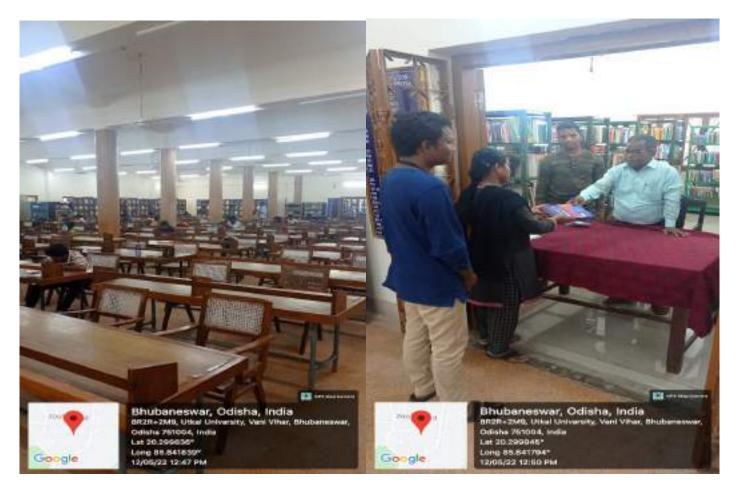
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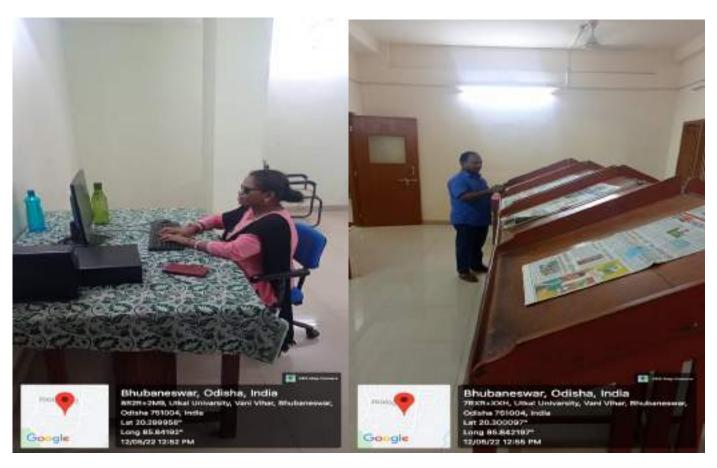
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#### **TEXT BOOK SECTION**



#### **REFERENCE SECTION**

#### **ACQUISITION SECTION**



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#### **NEWSPAPER SECTION**



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**ADMINISTRATIVE SECTION** 

## https://odishabytes.com/reading-hall-inaugurated-in-utkaluniversitys-parija-library/

https://pragativadi.com/utkal-university-reinvents-parijalibrary-inaugurates-new-reading-room/

## PARIJA E-LIBRARY UTKAL UNIVERSITY, VANIVIHAR< BHUABNESWAR



## <u>ABOUT</u>

Utkal University e-library or Digital library is providing the round the clockservice for online access to its students, scholars and users for its digitized audio, video, and written material. It was established as the landmark progression of UtkalParijaPhysical Library on the year 2021. In an aim to support the following Users:

- 1. Anytime and Anywhere Access;
- 2. Content and Materials in Many Formats;
- 3. Multiple Access to the Same Library Material;
- 4. Prevent Book Loss and Theft; and
- 5. Keep Students Safe in the pandemic COVID -19 like situation.

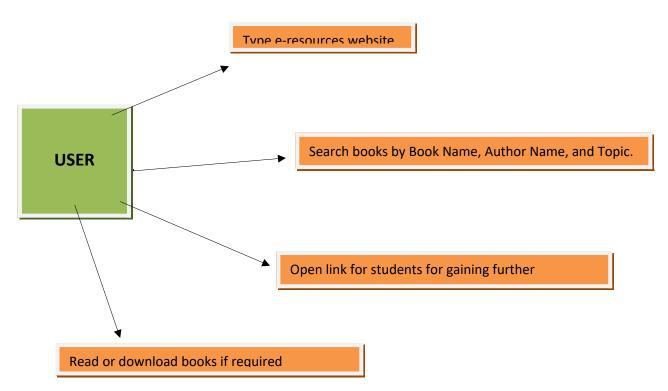
## PARIJA LIBRARY HAS SUBSCRIPTION FOR ITS E-LIBRARY RESOURCES

Library has regular subscription for the following:

- 1. E journals -15340(Proquest)
- 2. E-books 14103(Emerald, Taylor&Francis, IOP Science, Sage)
- 3. E-ShodhSindhu- All Journals of 13 Publishers (7091)
- 4. Shodhganga-4861(theses)

```
5. Databases – 52,18,989(Academic Videos, Dissertations and Theses, Magazines, Newspapers, Reports)
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6. EBSCO



After entering to the home page of the website, student can choose the USER LOGIN option

Where they are asked to enter username & password, and if he/she is a valid user then student login page will be displayed.

## PROQUEST-

Proquest database which was subscribed to parija Library through the initiative of Department of Higher Secondary

Education Govt.of Odisha used to offer following content from 2016-2020.

E-Books-199158, E-Journal-15340, Reports-2590, Newspaper-2272, Magazine-1352, Dissertations and theses-5147073

## E-BOOKS (EMERALD):

Parija Library has subscribed 2119 e-books and the subjects are given below

Accounting Finance & Economics, Business management and strategy, education, HR Learning & Organisation Studies, Library Studies, marketing, Public Policy & Environmental Management, Sociology, Tourism & Hospitality Management.

## **E-BOOKS (TAYLOR & FRANCIS):**

Parija Library has subscribed 10516 e-books. The subjects are given below

Biotechnology, Botany, Cultural Studies, Economics, English, Geography, Pub. Administration, Zoology, Psychology, Pol. Science, Geology, Philosophy, Math & Statistics, Library &inf.science, Sociology, History, Anthropology, Archeology

## E-BOOKS (IOP SCIENCE):

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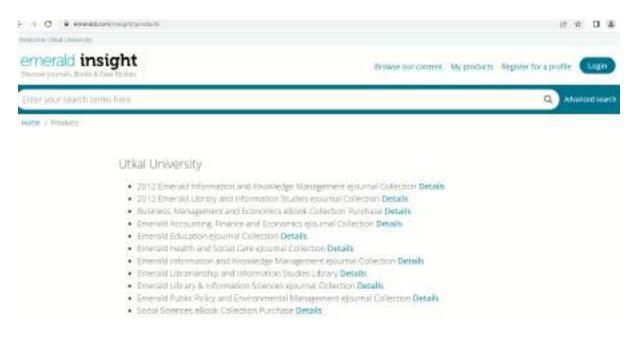
Physics

## E-BOOKS (SAGE):

Parija Library has subscribed 1143 e-books. The subjects are given below

Social Science, Business Management

## **SCREEN SHOTS OF E-RESOURCES**



## https:www.emerald.com/insight/

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## **Users Footfall**

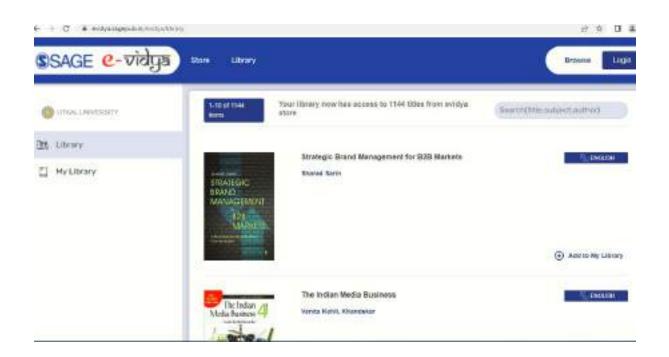


## **Taylor and Francis Usage Statistics**

Taylor & Francis eBooks Usage - UTICAL University (June 2021 - May 2022)

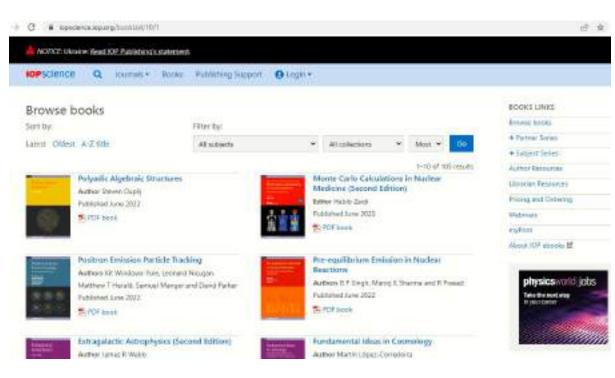
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## http://www.taylorfrancis.com



## http://evidya.sagepub.in

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## http://iopscience.iop.org

## **Users Footfall**

#### 2a. ebooks Unique Item Requests by Month

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November	2021		3	2	2	7					
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February	2022	4	169	78	9	260					
March	2022		7	4	1	12					
Total		4	206	100	21	331					

## **E-SHODHSINDHU**

It is provided by INFLIBNET: an IUC of UGC. The access link is I.P based. So, it can be accessed from anywhere of the campus.Parija library hassubscribed 13 publishers and 7019 e-journals.

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#### **E-GRANTHALAYA & LIBRARY AUTOMATION**

The efforts towards Integrated Library Management System is on in partnership with NIC. The library is all set to become automated with RFID facilities.

#### **SHODHGANGA (THESES):**

SHODHGANGA & UTKAL E-LIBERAY RESOURCES: Utkal University has 4861 theses in Shodhganga . And the Thesis falls to different subject area of:

Department of Agriculture ,Department of Agriculture Chemistry ,Department of Agronomy ,Department of Analytical and Applied Economics ,Department of Ancient Indian History, Culture and Archaeology, Department of Anthropology ,Department Economics ,Department of Applied of Arts ,Department of Ayurveda,Department of Biotechnology ,Department of Administration ,Department Botany ,Department of Business of of Chemistry ,Department Commerce ,Department of Computer Science , Department of Computer Science and Application , Department of Economics, Department of Education, Department of Electrical and Electronics Engineering ,Department of Electrical Engineering ,Department of of English ,Department Engineering ,Department of Environmental of Science , Department Fishery Science , Department of Geography ,Department of Geology ,Department of Hindi ,Department of History ,Department of Science ,Department of Home Humanities ,Department of Labour Welfare ,Department of Law ,Department of Library and Information Science, Department of Life Sciences, Department of Management , Department of Mathematics , Department of Mechanical Engineering ,Department of Metallurgical Engineering ,Department of Microbiology, Department of Music, Department of Nematology, Department Oriya ,Department of Personnel and Industrial of Management of **Relations**, Department Personnel Management and Labour Welfare , Department of Pharmacy , Department of Philosophy , Department of Education ,Department of Physics , Department Political Physical of of Science , Department Psychology, Department of Public Administration ,Department of Sanskrit ,Department of Science ,Department of Sociology ,Department of Soil Science and Agricultural Chemistry, Department of Statistics, Department of Tourism, Department of Women's Studies, Department of Zoology.



#### www.shodhganga.inflibnet.ac.in

#### **EBSCO USERS DETAILS( LAST ONE MONTH)**



#### **Reading Room of E-Library**



#### FIFTH FLOOR

In a step to reinvent Parija Library, Utkal University has inaugurated a newly renovated reading hall in the library on Tuesday. The PhD scholar hall in the library has also been renovated. Approximately 56 lakhs were spent in the project. Anweshan hall houses 16 rooms for the PhD scholars on the second floor and a reading room for students in the name of Manoj Das has been created on the fifth floor of the library. It is set up to inform students about the life and philosophy of Manoj Das. Books on his life and work will be available in the room.



#### **SECOND FLOOR (CUBICLES SECTION)**

The PhD scholar hall of the library has also been renovated. Approximately Rs 56 lakhs were spent on the project. Anweshan hall houses 16 rooms for the PhD scholars on the second floor and a reading room for students in the name of Manoj Das has been created on the second floor of the library, according to a release from the university.



Page 1

#### Notes and Orders Continued

· (Director, RED)

Registran (1/2) As per approval of the Vice Chancellor (copy enclosed) (1/2) the draft copy of office order for reconstitution of Research Advisory Committee (RAC) of Uthal Iniversity is placed for Signature and Usine. lin 23/09/2020

Der 7 335 24/09/20

R-1328 24/9/2020

Mahro no no Director, R&D Ooder of the Direction, Rost on the body of letter is placed below my place be seen. The order letter in prepar and place before the Registre for kind signation. Neurons order of the vice charcelly were be obtain for reconstructions of Period adversing committee. 2512121 · Notis above regenting the recuelitation of Research advisory committee (RAC) may levels be powed As discussed which must vice chancellor this needs to be seconstituted with I is all approval of vier examples for least appored of vice enough Regition - 12. 3.21 for kind approval. Ne Approved. For notification. Scherge



#### Utkal University, Vani Vihar, Bhubaneswar-751004

India

No Dev-1/RAC/1175/

#### /2021

16.9. Date:

#### OFFICE ORDER

Consequent upon the approval of the Vice Chancellor, Utkal University, the Research Advisory Committee (RAC) of Utkal University has been reconstituted with the following members

- 1. Vice-Chancellor, Utkal University
- 2. Director, ILS, Bhubaneswar
- 3. Chairman, P.G. Council, U.U.
- 4. Prof. Bedang Das Mohanty, NISER, Bhubaneswar

1283

- 5. Prof. Saroj Nayak, IIT, Bhubaneswar
- 6. Dr. B. Nayak, IMMT, Bhubaneswar
- 7. Director, IQAC, Utkal University
- 8. RUSA Co-ordinator, Utkal University
- 9. Prof. Bhaswati Patnaik, Utkal University
- 10. Prof. Asim parhi, Utkal University
- 11. Prof. Nabanita Ratha, Utkal University
- 12. Director, CDC /Co-ordinator, W.B. U.U.
- 13. Prof. J. Dandpat, Director R&D, Utkal University

- : Chair Person
- : Member
- : Member & Convener

Registrar n la noy Date: 16.4.21

5.5 1.5

Copy to:

- 1. Persons concerned,
- 2. The Comptroller of Finance, Utkai University,
- 3. PA to the Vice-Chancellor and PA to Registrar, for kind information of the Vice-Chancellor and Registrar.

9. below

No Dev-1/RAC/1175/ 14284 12021



#### Utkal University, Vani Vihar, Bhubaneswar-751004

11:dia /2021

No Dev-1/RAC/1175/

Date:

#### OFFICE ORDER

Consequent upon the approval of the Vice Chancellor, Utkal University, the Research Advisory Committee (RAC) of Utkal University has been reconstituted with the following members

- 1. vice-Chancellor, Utkal University
- 2. Director, ILS, Bhubaneswar
- 3. Chairman, P.G. Council, U.U.
- 4. Prof. Bedang Das Mohanty , NISER, Bhubaneswar
- 5. Prof. Saroj Nayak, IIT, Bhubaneswar
- 6. Dr. B. Nayak, IMMT, Bhubaneswar
- 7. Director, IQAC, Utkal University
- 8. RUSA Co-ordinator, Utkal University
- 9. Prof. Bhaswati Patnaik, Utkal University
- 10. Prof. Asim parhi, Utkal University
- 11. Prof. Nabanita Ratha, Utkal University
- 12. Director, CDC /Co-ordinator, W.B. U.U
- 13. Prof. J. Dandpat, Director R&D, Utkal University

: Chair Person

18 4 23

- : Member
- ; Member
- : Member & Convener

Registrar n Gelvoy 16.4.21 Date:

No Dev-1/RAC/1175/ 14284 12021

Copy to:

- 1. Persons concerned,
- 2. The Comptroller of Finance, Utkal University,
- PA to the Vice-Chancellor and PA to Registrar, for kind information of the Vice-Chancellor and Registrar.



#### UTKAL UNIVERSITY, VANI VIHAR, BHUBANESWAR 751004, Odisha

No. Dev-1/RAC/ 1175/ 21539 /2020

dated 24th September, 2020

#### OFFICE ORDER

Consequent upon the approval of the Vice Chancellor, Utkal University, the Research Advisory Committee (RAC) of Utkal University has been reconstituted with the following members

- 1. Prof. B. K. Mallik, Chairperson, P. G. Council
- 2. Prof. Bedang Das Mohanty , NISER, Bhubaneswar
- 3. Prof. Saroj Nayak, IIT, Bhubaneswar
- 4. Prof. Narottam Acharya, ILS, Bhubaneswar
- 5. Dr. B. Nayak, IMMT, Bhubaneswar
- 6. Prof. P.K. Mohapatra, Director, IQAC, Utkal University
- 7. Prof. P. K. Hota Utkal University
- 8. Prof. Bhaswati Patnaik, Utkal University
- 9. Prof. Asim parhi, Utkal University
- 10. Prof. N. Das, Director, R & D

- : Chairman
- : Member
- : Member & Convener

dated 24th September, 2020

1. Persons concerned

Copy to:

2. The Comptroller of Finance, Utkal University

Memo No. Dev-I/RAC/1175/ 21540 /2020

- 3. PA to Registrar, Utkal University
- 4. PS to the Vice-Chancellor, Utkal University for information

·9.2020



1 59b

#### UTKAL UNIVERSITY VANI VIHAR BHUBANESWAR

No Exam. VII / URC/ 7207(7)2017

Dated 24/08/2017

Form.

The Controller of Examinations, Utkal University, Vani Vihar, Bhubaneswar.

To.

<ol> <li>The Vice- Chancellor Utkal University</li> <li>The Chairman P G Council, Utkal University</li> <li>Principal S C B Medical college Cuttack</li> <li>Prof. K.K. Basa P.G. Department of Anthropology Utkal University</li> <li>Prof. Santosh Kumar Tripathy P.G. Department of PMIR- Utkal University</li> <li>Prof. Swpna Mohapatra P.G. Department of Physics Utkal University.</li> <li>The Controller of Examine Utkal University.</li> </ol>	Chairman Member Member Member y Member Member Convener
---	--

Sub University Research Committee

Sir.

I am directed to inform you that, you have been nominated as a member to the University Research Committee for a period of two year that is 2017-2018 and 2018-2019. From the date of notification as per Ph.D regulation()

Memo No Esim- VII/ Ph.D) 7214

/2017

Controller de Examplifisch Dates 24/08/2017

Copy to-

- 1) The Chairman P.G Council Utkal University
- 2) All the HOD/SRC Chairman P.G. Department of Utkal University
- 3) The secretary to V.C/P.A to Registrar steno to controller of Examination.
- 4) The Section office EC I/ EC II/ EC III/ EC V/ EC VI Utkal University for Information

Controller of



#### UIKAL UNIVERSITY VANI VIHAR, RHUBANESWAR-751004.

No. Exam. VII /URC/  $\Sigma S(q/q)$  /2021,

Dated: 27-01-2621

From:

The Controller of Examinations, Utkal University, Vam Vibar, Bhubaneswar

To

1 The Vice Chancellor of Utical University.

2. Chairman, PG Council, Utkal University.

3. Director, C.D.C. Utkal University.

4. Professor Nigamananda Das, Director R & D, Utkal University.

5 Professor Dr. Sanghamitra Pati, Director RMRC/ICMR, Bhubaneswar.

6. Professor. J. Dandpat OSD New Campus, Utkal University.

7 Professor Ajay Parida, Director ILS, Bhubaneswar.

8 Professor Vedanga Mohanty, NISER, Bhubaneswar,

9. Controller of Examinations, Utkal University: - Convenor.

10 Buf . P.K. Hota Supt of Comm. \_ Sir/Madam,

As directed, I have the honour to inform you that, meeting of URC (University Research Committee) is scheduled to be held on 05.02.2021 at 11.00 A.M in the New Academic Block, Uthal University

You are requested to make it convenient to attend the meeting on the date & time mentioned above.

The agenda of the meeting will be placed on the table."

Yours Faithfully

Dated: 97 01-2021

Memo No. Exam.VII/URC/ S93 (Y) /2021 Copy forwarded to:

1. The Secretary to the Vice-Chancellor, Uthal University for kind information to the Vice-Chancellor,

2. S.O. Store, Utkal University for information and necessary arrangements.

3. The Section Officer, EC-VI, Section Utkal University.

4. The Sr. Caretaker, Utkal University; for information and necessary arrangements.

CONTROLLER OF EX



VAN VINAR, BHUBANESWAR-751004

No. Exam. VII/URC/

Froms

3 2 4 2 9) /2019

The Lontroller of Examinations Utkal University, Vani Viher, Bhubaneswar- 4.

To

- 1. Professor Nigamananda Das, Director R & D
- 2. Professor Dr. Sanghamitra Pati, Director RMRC/ ICMR
- 3 Professor J. Dandpat OSD New Campus.
- 4. Professor Ajay Parida, Director ILS
- 5. Professor Vedanga Mohanty, NISER
- 6. Dr. Srijit Mishra, Director, NCDS.
- . 7. Chairman, P.G. Council, Utkal University,
  - B. Director, C.D.C., Utkal University,
  - 9. Controller of Examinations, Utkal University :- Convener.

#### Sir/ Madam,

As directed, I have the honour to inform that, you have been nominated to the URC by Hon'ble Vice-Chancelloer. The 1<sup>st</sup> meeting of the newly constituted University Research Committee has been scheduled to be held on 14.03.2019 at 4.00 P.M. in the Syndicate Hall.

You are requested to make it convenient to attend the meeting on the date and time mentioned above.

The agenda of the meeting will be placed on the table.

Yours faithfully,

Controller of Examina

Dated

Controller of Examinations Dated: 11 0 3 19

Memo No. Exam. VII/URC/ 325/(6) /2019 Copy forwarded to :

- 1. The Secretary to the Vice- Chancellor, Utkal University,
- 2. The P.A to Registrar, Utkal University.
- 3. The Section Officer, EC-VI Section, Utkal University.
- 4. S.O. Store, Utkal University.
- 5. The Steno to Controller of Examination, Utkal University.

.6. The Sr. Caretaker, Utkal University; for information and necessary action





#### UTKAL UNIVERSITY VANI VIHAR: BHUBANESWAR-4.

### AGENDA FOR URC MEETING TO BE HELD IN THE V.C.'S CONFERENCE HALL ON 02.03.2022

#### AGENDA

 Consideration of registration of Ph.D. proposals of following scholars as a part of University Interface Programme:

(i). Mr. Amitabh Thakur, (ii) Mrs. Nandini Sarangi

2. Acceptance of Model Guideline on "COMMON RESEARCH POLICY AND PROCEDURES FOR STATE UNIVERSITIES OF ODISHA" issued by Odisha State Higher Education Council to be effective from the date of notification by University.

3. Modification in Clause 8.4 (Award of the Degree) of Regulations governing the award of degree of Doctor of Science (D.Sc.), Doctor of Literature (D.Litt.) and Doctor of Law (LL.D.).

- (A) Recommendation of Economy Airfare to the External Examiners invited to conduct Ph.D. Viva Voce Test.
  - (B) Recommendation of increasing remuneration for examiners adjudicating in the Ph.D. thesis as follows:
  - (i) Evaluation of Ph.D. thesis from Rs.2,000.00 to Rs.3,000.00.
  - (ii) Conduct of viva voce test of Ph.D. from Rs.1,000.00 to Rs.2,000.00.

(If recommended, to be placed before Syndicate for approval)

Increase in Ph.D. Registration Fee from Rs.5,000.00 to Rs.10,000.00.

 Consideration of the resolutions taken by the committee on recognition of Ph.D. Nodal Centre in various Nusing Colleges and Institute of Health Sciences.

7. Consideration of cases of scholars applying for interdisciplinary research where the discipline of Ph.D. Course work and registration to Ph.D. programme are different. For example, Ph.D. Course Work in Sanskrit applying for registration to Yoga, Course Work in Mathematics applying for registration to Statistics or Computer Science etc.

 Consideration of the provision of co-supervisor for a Ph.D. scholar. (When research work is multidisciplinary in nature or interdisciplinary with different fields)

Other matters, if any, will be placed on the table with the permission of the Chair.



Shri Sharat Kumar Majhi Controller of Examinations, Utkal University, Vani Vihar, Bhubaneswar- 751 004, Odisha, India.

9437008052(M) E-Mail: coe.utkal@gmail.com http:mail.utkaluniversity.ac.in

No.Ex.VII/

7279 12022.

Dated: 04.05 22

#### NOTIFICATION

Consequent upon the resolutions of the University Research Committee (URC) and approval of the Hon'ble Vice Chancellor following applications have been recommended for registration to Ph.D. programme with given term and condition as a part of Industry-University-Interface.

SI. No.	Name of the Scholar/Supervisor	Department	Term and Condition
01	Scholar - Amitab Thakur Supervisor – Prof. Sabita Acharya	Anthropology	<ul> <li>(1) The synopsis of the proposal be submitted in the office of the Controller of Examinations within a month of publication of this notification.</li> <li>(2) No Objection Certificate from the</li> </ul>
02	Scholar - Nandini Sarangi Supervisor - Prof. Sabita Acharya	Anthropology Sociology Anthropoly	<ul> <li>appropriate authority be submitted alongwith the synopsis.</li> <li>(3) The prescribed fees as per rule be deposited as and when required.</li> <li>(4) As per UGC Rule 2016, topic recommended by Departmental</li> </ul>
	Co-Supervisor – Prof. Navaneeta Rath	Sociology	Research Committee (DRC) cannot ordinarily be changed/modified subsequently. (5) Applicants are exempted from pursuing Ph.D. Course Work. (6) Submission of Bi-annual progress report is mandatory with requisite fee. (7) All rules and regulations relating to award of Ph.D. degree will be in due conformity to UGC guidelines 2016 in

DRC of the concerned departments are requested to accept and recommend the applications following due procedure and forward the proposals to the office of the Controller of Examinations within a month on receipt of application.

CONTROLLER OF EXAMINATIONS

Memo No Ex. VII/ 7:20 (2) /2022,

Dated 14.03.22

Copy to :

- The Chairman, D.R.C., Department of Anthropology, Utkal University for information and necessary action; and
   The P.A. In Vice Chapter Internation and
- The P.A. to Vice Chancellor, Utkal University for kind perusal of the Hon'ble Vice Chancellor, Utkal University.

CONTROLLER OF EXAMINATIONS



#### UTKAL UNIVERSITY VANI VIIIAR, BHUBANESWAR-751004.

No. Exam. VII /URC/ 2525-18/2022. Dated: 2.3. 62.22

From

The Controller of Examinations, Utkal University, Vani Vihar, Bhubaneswar.

To.

I. Chairman, PG Council, Utkal University.

2. Prof. Ajay Parida, Director II.S, Bhubaneswar.

3. Prof. Dr. Sanghamitra Pati, Director RMRC/ICMR, Bhubaneswar,

4. Prof. Nigamananda Das, Director, C.D.C. Utkal University.

5. Prof. J. Dandpat, Director R & D, Utkal University.

6. Prof. P.K Hota, P.G Department of Commerce, Utkal University.

7. Prof. Pravati K. Mahapatra, Director, IQAC, Utkal University.

8. Controller of Examinations, Utkal University: - Convenor.

Siri Madam.

As directed, I have the honour to inform you that, meeting of URC (University Research Committee) is scheduled to be held on 02.03.2022 at 04.00 P.M in the Conference Hall of Vice Chancellor, Utkal University.

You are requested to make it convenient to attend the meeting on the date & time mentioned above.

The agenda of the meeting will be placed on the table.

Yours Faithfully

CONTROLLER OF EXAMI Dated:

Memo No. Exam. VH/URC/ 2533 (9) /2022 Copy forwarded to:

- 1. The Secretary to the Vice-Chancellor, Utkal University for kind information to the Vice-Chancellor.
- 2. S.O. Store, Utkal University for information and necessary arrangements.
- 3. The Section Officer, EC-VI, Section Utkal University.
- 4. The Sr. Caretaker, Utkal University; for information and necessary arrangements,

CONTROLLER OF EXAM



Shri Sharat Kumar Majbi Controller of Examinations. Utkal University, Vani Vibar. Bhubaneswar-751 004. Oduha, India. 9437008092(M) E-Mail: cost utical@ gmmil.com http:mail.utical/onversity.ac.in

No. Ex. VIII 4019 /2021.

Dated, 15.03 2021

#### NOTIFICATION

Consequent upon the resolutions of the University Research Committee (URC) and approval of the Homble Vice Chancettor following applications have been recommended for registration to Ph.D. programme with given term and condition as a part of Industry-University-Interface.

	Name of the applicant	Department	Term and Condition
SI NO		Sociology	(1) The synopsis of the proposal be
01	Roopa Roshan Sahoo	QUUND BY	Controller of Examinations within a month of publication of this
02	Binay Krushna Mahapatra	Business Administration	(2) No Objection Certificate from the appropriate authority be submitted alongwith the synopsis
03	Nihar Raman Sahoo	Law	(3) The prescribed tees as per rule be deposited as and when required. (4) As per UGC Rule 2016, topic
04	Dr. Krishan Kumar	Anthropology	recommended by Departmental Research Committee (DRC) cannot ordinarily be changed/modified
05	Surendra Kumar Sahoo	Business Administration	subsequently (5) Applicants are exempted from pursuing Ph D. Course Work. (6) Submission of Bi-annual progress report is mandatory with requisite fee. (7) All rules and regulations relating to award of Ph D. degree will be in due conformity to UGC guidelines. 2016 in this regard.

DRC of the concerned department are requested to accept and recommend the applications following due procedure and forward the proposals to the office of the Controller of Examinations within a month on receipt of application

CONTROLLER OF EXAMINATIONS

Memo No.Ex.VII/ 4020 /26

/2021

Dated 15.03.2021

Copy to the P.A. to Vice Chancellor, Utkal University for kind perusal of the Hon'bie Vice Chancellor, Utkal University

CONTROLLER OF EXAMINATIONS



#### UTKAL UNIVERSITY VANIVILLAR DITCHANESWAR 781004.

No. Exam. VIL/6316

Daned: 04.08.2020.

#### Notification

Consequent upon resolution of the LiftC (University Research Committee) and approximiting the line him his Vice Characelley, the pending applications for registration to Ph D programme of the selicitie whose case here been recommended by concerned SRC/ DRC are approved on condition of adhering to following procedure in conformity with UGC rminimum standards as procedure for award of M PhiliPh D. Dymeet. regulation 2016 an addition to the carlier process followed.

A subdivisit applications for registration to Ph.D. programme, which have been mercond Site (MRC on or after 18" February 2018 the date of regostration of it

the spontation of SRC DRC by concerned NRC DRC before 18" February, 2028 the date of registration of such scholar in Pace as 18" Fermine 2018 investive of date of recommendation of SRC/DRC to the effect

n All the schotar investeelise of department, where date of registration to Ph.D. programme is on or after 18 Telesury, 2018 have to depart a mandatory processing fee of Rs. 500- in shape of these Draft grawn in favour of compiteller of Finance, Urical University, at the time of adhenission of forcenthils should be support to Controller of Examinations duly centified by supervisor and forwarded by emergescie.

One copy of such report has to be retained by Chairperson, DRC scholar-wase for future reference in this

C. These scholar have to update the above process as in (B) within 6 months of receiving the respective. lenar of registration from University.

The notification will be achered to by all concerned with immediate effect.

CONTROLLER OF EX

Manuar Nut. Exam. VII / 6317 / 2020 Copy forwarded to:

Dated 04 08 2010

- 1 The Chairman PG Crimed Utkal University for kind information.
- 2 All Chairman of the Ditt (Departmental Research Committee) for information and recessary
  - All HOD PG Department of Urkal University for information and necessary account 22
  - All Co-ordinator of Philp Nodal-Centre under Utkal University for information and necessary
- Stense to Vice Characellar for kind atformation is Hon ide Vice Characellor.
- Prof. in Charge of Computer centre Uthat University for information and he is senseried for matrication of University Website for public information.
- 7. The Director, R&D Ushal Louversity for information and accessary action

CONTROLLER OF EXAM



#### UTKAL UNIVERSITY. VANI VIHAR, BHUBANESWAR-751004.

No. Exam. VIL/URC/

/2020.

Dated: 13 -02 2120

Fronti

The Controller of Examinations, Utical University, Vani Vihar, Bhubaneswar.

8168

To

Defessor Nigamananda Das, Director R & D, Utkal University

2-Professor Dr. Sanghamitra Pati, Director RMRC/ICMR, Bhubaneswar

Professor. J. Dandpat OSD New Campus, Utkal University.

Professor Ajay Parida, Director ILS, Bhubaneswar

5. Professor Vedanga Mohanty, NISER, Bhubaneswar.

Co Dr. Srijit Mishra, Director, NCDS, Bhubaneswar

Chairman, PG Council, Utkal University.

-8. Director, C.D.C. Uikal University.

Controller of Examinations, Utkal University - Convener.

Sir/ Madam,

As directed, I have the honour to inform you that, meeting of URC (University Research Committee Scheduled to be held on 18.02 2020 at 11.30 A.M in the P.G Council Hall, Uthni University.

لم You are requested to make it convenient to attend the meeting on the date time mentioned above.

/2828

The agenda of the meeting will be placed on the table.

will reports Yours Faithfully

Dated: 13-06 7420

CONTROLLER OF EX

Memo No. Exam. VIL/URC/ 3/77-(6) Copy forwarded to:

1. The Secretary to the Vice-Chancellor, Utkal University.

2. The P.A to Registrar, Utkal University.

3. The Section Officer, FC-VI, Section Ulkal University.

4, S.O. Store, Utkal University.

5. The Stope to controller of Examination, Urkal University,

6. The Sr. Caretaker, Uthal University: For information and necessary action,

CONTROLLER OF EXA

#### Agenda for URC (University Research Committee) meeting to be held on 18.02.2020 at 11.30 A.M in the P.G Council Hall, Utkal University

Item Not-1:- To Consider the Guide line for Ph.D candidates Admission 2019 for registration as per UGC (Minimum Standards and Procedure for Award of M.PHL/PH.D Degrees) Regulation, 2016.

Item Not-2:- Necessary changes in IRP/ M.Phil course curriculum in conformity to Resolution pass by the academic council meeting held on 29:05:2019 of item no 23 of Regulation amendment committee proposal of 2 year IRP/Ph.D course from 2019-20.

Item Not-3 - To Consider of Ph.D cases.

- a) Santanu Ghosh- EC/VI/1591/2011-Pharmacy.
  b) Debabala Swain EC/VI/170/2012-Comp.Sc.
  - EC/VI/143/2018-Comp.Sc.
- c) Chintamani Jena EC/VI/3047/2017-Odia
- d) Gayatri Rath EC/V1/151/2019-Sanskrit
- e) Rajadarshini Patra EC/VI/3105/2017- Women's studies

Item No.-4.- It has been observed that in registration no of scholar date of registration, is date of SRC. However there are cases where a gap between date of issue of registration letter and date of registration i.e date of SRC which is vary cases to cases. Which date will be taken into consideration.

Item No:-5:- To Consider the application of Sumit Kumar Behera and Anil Kumar Biswal who have complete Ph.D course work in 2015-16 in Journalism and Electronic Communication under P.G Department of Public Administration under supervisor of Prasant Kumar Swain Lecture in University Law College, Vani Vihar.

CONTROLLER OF EXAMINATIONS

#### Page-2

- 2) After approval, the Ph.D, thenis will be submitted by the acholar in the last week of every month For smooth functioning and processing of thesis in the University office.
- by The Examiner list may be submitted by the guide three months before the submission of thesis for approval. of the BoS. The Ph.D. scholar has to submit five copies each of Abstract of thesis (500 words) and Synopsis (1500 words) along with the examiner's list,

#### Item No - (2)

- a) Necessary changes in IRP/ M.Phil. course corriculum in conformity to Resolution pass by the academic council meeting held on 29.05.2019 of item no 23 of Regulation amendment committee proposal of 2 year IRP/Ph.D. course from 2019-20.
- b) Inclusion of the course Research and Publication Ethics (RPE) mandatory with two credit for the Ph.D. students for Pre-registration course work as per the UGC guideline (copy enclose).

Resolved that Controller of Examination authorised to take decision and a committee be called by Controller of Examinations to take decision in the regards.

#### Item No-(3)

To Consider the Ph.D. cases of following scholars.

a) Santanu Ghosh- EC/VI/1591/2011-Pharmacy.- Rejected

b) Debahala Swain - EC/VI/170/2012-Comp.Sc.-

EC/VI/143/2018-Comp.Sc.-

Steps be taken to preparation of soft copy of the Thesis so that Anti-plagiarism report be prepared.

- c) Chintamani Jena EC/VI/3047/2017-Odia 3<sup>rd</sup> Examiner's report may be asked for
- d) Gayatri Rath EC/VI/151/2019-Sanskrit Committee may be constituted consists of member from KISS,
- Shri Jagannath Sanskrit University and Dr. Sirjit Mishra, Director, NCDS to examine the matter. e) Rajadarshini Patra - EC/VI/3105/2017- Women's studies- Rejected

#### Item No- (4)

It has been observed that in registration letter of the scholar the date of registration is the date of recommendation of SRC.

However there are cases where a gap between date of issue of registration letter and date of registration i.e date of SRC exists which vary from case to case.

It was placed before the committee for its kind view

After discussion the committee decided that for the cases which has been placed after 18th February 2018 (i.e. last two years) the date of SRC, will be date of Registration as per previous practice but for the cases where recommendation of SRC has come before 18th February 2018 the date of registration will be fixed at the18th February 2018.

#### Item No - (5)

To consider the applications of Sumit Kumar Behera and Anil Kumar Biswal who have complete Ph.D. course work in 2015-16 in Journalism and Electronic Communication under P.G Department of Public Administration under supervisor of Prasant Kumar Swain, Lecture in University Law College, Vani Vihar,

Resolved that CoE is authorised to take action as per research topic in consultation with the guide.

ITEM NO.08: To consider the Provision for approval of Nodal Centre other than regular teaching department of Utkal University. ITEM

ITEM NO. 09: To consider the suggestion of the committee on research in inter-disciplinary subject that whether it is subject specific or in specialization for example- Ph.D. in Microbiology or Ph.D. in Botany, Zoology, Life Science.

ITEM NO.10: Regarding submission of Ph.D. thesis in the extended date upto 31<sup>st</sup> May 2018 of Mrs. Madhumita Das bearing Ph.D. Regd. No. 03-Psychology-2005-2007, an elaborate discussion was made on Ph.D. registration of the scholar on verification of the relevant record found that the registration of Ph.D. has been cancelled w.e.f. 23.10.2017.

Them NO.11: Regarding submission of thesis of Gyanaranjan Swain bearing Ph.D. Regd. No.31-Odia-2009-2010, recommendation of P.M.C. dated 12.02.2019 for a decision in connection with "Even though date of registration is 28.02.2011 the Ph.D. registration letter was issued on 01.11.2013 and by that time guide of the candidate (Late Rabindranath Naik) was no more as he passed away on 18.01.2013, i.e. ten months before. However, SRC has recommended submission of thesis on 09.11.2018.

#### ITEM NO.12: EC-VI/1591/Pharmacy- Sri Santanu Ghosh.

To consider about the report of the Examiner of the Scholar.

#### Enclosed:

iii) Photocopy of Examiner's Report

iv) Photocopy of Compliance.

2

#### Proceedings of the P.M.C meeting held on 05.08.2019 at 3.30 P.M.

B. Seema Dutta (English):-The SRC has recommended submission of thesis. Two publications are also enclosed. The candidate is recommended for submission of thesis subject to submission of synopsis, abstract and plagiarism report.

9. Santosh Dwivedi (AIHCA):-Recommended for submission of Ph.D. Thesis.

10. Subhra (PMIR):-Recommended for submission of Ph.D. thesis subject to submission of detailed Plagiarism report.

11. Grivance Peution relating to Pre-Ph.D. Coursework: - It was decided that those students, who are having shortage of attendance in Pre-Ph.D. Course work, 2018-2019 may be allowed to pursue extra classes as per the requirement subject to minimum 75% of attendance as per the Orissa University fist statute, 1990 in order to be eligible to appear in the Pre-Ph.D. Course Work Examination. Farther, those students who have failed /not appeared in the Pre-Ph.D. Course Work Examination. Work examination, they may be allowed to appear the Pre-Ph.D. Course work Examination subject to the fulfilment of necessary conditions as decided by the concerned SRC.

This should not be cited as a precedent.

12. Anil Kumar Biswal (Journalism):-The candidate has applied for registration in journalism .However the proposed guide is a recognised guide in Law from Utkal University. So the case could not be recommended and is referred to URC.

13. Sumit Kumar Behera, (Journalism):- The candidate has applied for registration in journalism. However, the proposed guide is a recognised guide in Law from Utkal University. So the case could not be recommended and is referred to URC.

14. Alekha Sachidananda Nayak(Journalism): The candidate is required to submit the Ph.D. guide certificate of proposed guide.

15. Sivani Baral(Political Science): The candidate has given the pre-submission presentation before completion of 8 years of registration and SRC has recommended submission of thesis. The case is recommended for submission of thesis as all other required documents have been submitted.

16 Bhagaban Behera (Commerce): Recommended for submission of Ph.D. Thesis as all required documents have been submitted and SRC has recommended the submission of thesis.

5.8.19 8.8. b Prof. B Prof. B.

Vice Chancellor

#### Proceedings of the P.M.C meeting held on 05.08.2019 at 3.30 P.M.

#### Member Present:

- 1 Prof. B.B. Mishra, Department of Business Administration, Utkal University
- 2. Prof. Pravati Kumari Mahapatra, Department of Zoology, Utkal University,
- 3. Prol Asim R. Parhi, Department of English, Utical University,
- 4. Prof. Bhaswan Patnack, Department of Psychology, Utical University
- 5. Prof. N.N. Das, Department of Chemistry, Utkal University

#### Resolution:-

- Shankarsan Pradhan(Odia) -As Plagiarism software is not available in Odia, the candidate may be recommended for submission of thesis.
- Monulisha Mishra (Geography)-SRC has recommended the submission thesis and the candidate has submitted Ph.D. coursework certificate, two publications and plagiarism certificate. So, recommended for submission of thesis.
- 3 Rakesh Kumar (Education): As per proceedings of PMC held on 25.01.2019 the candidate was recommended for submission of Ph.D. Submission of Thesis is subject to submission of proceedings of SRC by the Chairman.
- 4. Suddala Sirisha (Pharmacy): Keeping in view the superannuation of proposed Co-Guide, Prof. Y. Madhusudan Rap, Kakatiya University, Warangal A.P and recommendation of SRC1 on 05.02.2019, the candidate is recommended for Registration of Ph.D. under the supervision of Dr. Sumit Ku. Sahoo, UDPS, who is recognised as research guide in Pharmacy of Utkal University.
- 5 Nibedita Jena (Odia):-The candidate has submitted the required documents such as two publications, SRC recommendation, synopsis and abstract. The plagiarism software is not available in Odia, so it is not provided. The submission of thesis is subject to submission of Coursework completion Certificate.
- 6. Sarmistha Das(Anthropology):-The Candidate is not a fellowship holder but has completed Ph.D. Coursework in social work at NISWASS. Bhubaneswar, an affiliated institute of Utkal University. Since the SRC has recommended the registration of Ph.D., the candidate is recommended for registration.
- Ruchi Nigam (English):-The candidate is recommended for submission of thesis subject of submission of synopsis, abstract and plagiarism report.

P. K. Mahapatra

A. R. Parhi

B. Pathaik

H H. M

1 | PABEL TO STATE

#### AGENDA FOR UNIVERSITY RESEARCH COMMITTEE (URC) MEETING TO BE HELD ON 14.03.2019 AT 4.00 P.M. IN THE SYNDICATE HALL

- ITEM NO.01: To consider the proposal that D.Litt./D.Sc./LL.D. will be awarded as per Statute. (No proposal/application form be invited for these degree henceforth).
- ITEM NO.2: To consider the matter related to registration of D.Sc./D.Litt. the scholars those who have already registered, apply for registration and for submission of thesis.
- ITEM NO.03: To consider the proposal of adoption of 2016 UGC Guidelines for the scholars who have registered before 5<sup>th</sup> May 2016.
- ITEM NO.04: To consider the request of Chairman SRC/Director, IGIT, Sarang to nominate subject expert outside the institution as and when required to conduct pre-thesis seminar and defence viva test for Ph.D. scholar.
- ITEM NO.05: After the said demise of Prof. B.K.Rath, Department of Computer Science, the Ph.D. scholar under his supervision are to be rehabilitated kind suggestion of the committee in this regardieg (4 to 5).
- ITEM NO. 06: To consider the acceptance of teachers of affiliated colleges under Utkal University with required qualifications prescribed by the UGC as Ph.D. Supervisor under category:
  - (d) Autonomous College
  - (e) Affiliated Colleges (Degree without P.G. Course)
  - (f) Self Financing Colleges.
- ITEM NO.07: To consider the acceptance of Ph.D. Supervisors/Co-Supervisor from the different Public Research Institutes like ICAR/ILS.

- 116 [24 27]

#### ITEM NO.13: EC-VI/3105/Women's Studies- Ms.Rajadarshini Patra.

3

To consider the Report of External Examiner for Re-Examination by a third Examiner

Enclosed: Photocopy of Examiner's Report

#### ITEM NO.14: EC-VI/1701/Computer Science- Ms. Debabala Swain.

Decision may be taken whether Ph.D. Degree awarded to Debabala Swain or be cancelled as per allegation made by Professor Debahuti Mishra.

Enclosed: Photocopy of allegation.

ITEM NO.15:

Other matters if any.

CONTROLLER OF EXAMINATIONS

# Attendance of the URC meeting held on 14.03.2019 at 4 P.M. in the Syndicate Hall, Utkal University.

Name/Designation The Vice-Chancellor, U.U., Prof. Nigamamanda Das, Director, R& D, Prof. Dr. Sanghamitra Pati, Director RMRC/ICMR, Bhubaneswar Prof. J. Dandpat, OSD New Campus, U.U., Prof. Ajaya Parida, Director, ILS, Bhubaneswar Prof. Vedanga Moharity, NiSER, Bhubaneswar Prof. Vedanga Moharity, NiSER, Bhubaneswar Dr. Sujit Midna, Director, NCDS, Bhubaneswar Director, NCDS, Bhubaneswar U.U.
--



## VANI VIHAR, BHUBANESIMAR 751004 UTKAL UNIVERSITY

No. Exam. VII/URC/ From

\$ 249 (a) 12019

11 Dated

> The Controller of Examinations Uthal University, Van Viher, Bruthaneswar a

> > 0

- Professor Nigamananda Das, Director R.& D ----
- Professor Dr. Sanghamitra Pati, Director RMRC/ ICMR
- Professor J. Dandpat OSD New Campus. ÷.
  - Professor Ajay Paritia, Director ILS -
- Professor Vedanga Mohanty, NISER in
  - Dr. Shilt Mithra, Director, NCDS 16
- Chairman, P.G. Council, Utkal University, 100
- Director, C.D.C., Utkal University, -
- Controller of Examinations, Utkal University 1- Convener oi

Sk/ Madam,

As directed, I have the honour to inform that, you have been nominated to the URC by Hun/Itie Vor-Chancelloer. The 1" macting of the newly constituted University Research Committee has been scheduled to be held on 14 03.2019 at 4 00 P.M. In the Syndicate Hall You are requested to make it convenient to attend the meeting on the date and time mentioned above

The agonda of the meeting will be placed on the table

Yours faithfully.

Rethall

**Controller of Examinations** 

Dated: 110317

/2019 325166 Memo No. Exam. VII/URC/

Copy forwarded to :

de The Secretary to the Nice- Chancellor, Utkal University.

The P.A to Registrar, Utkal University,

The Section Officer, EC-Vi Section, Urkal University ÷

5.D. Store, Utkal University. ÷

The Steno to Controller of Examination, Utsal University

The Sr. Earstaker, Urbal University; for information and necessary action

Controller of Examinations

Act



VAN VINAR, BHUBANESWAR-751004

No. Exam. VII/URC/

Froms

3 2 4 2 9) /2019

The Lontroller of Examinations Utkal University, Vani Viher, Bhubaneswar- 4.

To

- 1. Professor Nigamananda Das, Director R & D
- 2. Professor Dr. Sanghamitra Pati, Director RMRC/ ICMR
- 3 Professor J. Dandpat OSD New Campus.
- 4. Professor Ajay Parida, Director ILS
- 5. Professor Vedanga Mohanty, NISER
- 6. Dr. Srijit Mishra, Director, NCDS.
- . 7. Chairman, P.G. Council, Utkal University,
  - B. Director, C.D.C., Utkal University,
  - 9. Controller of Examinations, Utkal University :- Convener.

#### Sir/ Madam,

As directed, I have the honour to inform that, you have been nominated to the URC by Hon'ble Vice-Chancelloer. The 1<sup>st</sup> meeting of the newly constituted University Research Committee has been scheduled to be held on 14.03.2019 at 4.00 P.M. in the Syndicate Hall.

You are requested to make it convenient to attend the meeting on the date and time mentioned above.

The agenda of the meeting will be placed on the table.

Yours faithfully,

Controller of Examina

Dated

Controller of Examinations Dated: 11 0 3 19

Memo No. Exam. VII/URC/ 325/(6) /2019 Copy forwarded to :

- 1. The Secretary to the Vice- Chancellor, Utkal University,
- 2. The P.A to Registrar, Utkal University.
- 3. The Section Officer, EC-VI Section, Utkal University.
- 4. S.O. Store, Utkal University.
- 5. The Steno to Controller of Examination, Utkal University.

.6. The Sr. Caretaker, Utkal University; for information and necessary action

### PROCEEDINGS OF THE UNIVERSITY RESEARCH COMMITTEE HELD ON 06.09.2017 IN THE OFFICE OF THE VICE-CHANCELLOR, UTKAL UNIVERSITY

Chairman

Member

Member.

Member

Member

Member

Convenier

#### Members Present:

- 1 The Vice-Chancellor Utkal University
- 2 The Chairman, P.G Council, Utkal University.
- 3 The Principal, SCB Medical College and Hospital, Cuttack.
- 4 Prof. K.K Basa, P.G Department of Anthropology, Utkal University.
- 5 Prof. Santosh Kumar Tripathy P.G Department of PMIR, Utkal University.
- 6 Prof. Swapna Mahapatra P.G Department of Physics Utkal University.
- 7 The Controller of Examinations Utkal University.

At the outsets the Vice-Chancellor extended a warm welcome to all the members present. A threadbare discussion was held on each and every item of the agenda and the resolutions made in presence of above members.

#### Item No-(1)

To consider the matter related to constitution of subject Research Committee for the session 2017-2018 and 2018-2019 and discussion regarding Chairman, Subject Research Committee.

#### Resolution:

It is resolved that the proposal for constitution of Subject Research Committee is accepted and it is decided that, the Senior Most Professor of the department will act as the Chairman of the Subject Research Committee. Where there is no Professor in the department, the senior most Associate Professor/Reader (confirmed in University service) of the P. G. Departments of Utkal University will act as the Chairman/Chairperson of Subject Research Committee.

It is also decided to Constitute Ethic Committee and Animal Ethic Committee as per guidelines of ICMR/ ICSSR with eminent Scientist as member.

#### Item No-(2)

To consider the matter relating to 1.G.I.T Sarangn as nodal centre, which is not affiliated to Utkal University and not abiding by the rules and regulation related to Ph.D course work and issue of course Completion Certificate for Ph.D registration and regarding Guide. This institute is not affiliated under Utkal University and is under B.P.U.T Rourkela. This college has not submitted any documents relating to admission of candidates into Pre-Ph.D course work, publication of result after completion of course work for approval and notification for issue of certificate from the session 2014-2015. Resolution:

It is resolved that, the Director, LG.I.T., Saranga may be intimated again with reference to previous letter to submit the required documents related to course work and issue of course completion certificate for the year 2014-15, 2015-16 & 2016-17 within three months. The case of continuation of the institution as nodal centre for Ph.D. Course work will be reconsidered in the next URC meeting.

WRUTES OF THE VISIT OF THE SUB COMMITTEE TO HOME REGIONAL MEDICAL RESEARCH RATRE ORDED, AT THE DANESWAR DATHE DISTRICT OF KHURDA , CONSHA NOV DATE OF VISIT. THE 12<sup>TH</sup> DECEMBER 2017

under the Charmanethe of the Vice Charactine. Utsul University, Bhukaneswar, Oddaha and in purnance of beter No- Exam VI1339710c.18.10.2017, aude a visit to RMRC. Bhubaneswar10.000k.into the infrastructure The Sub Commine, communed as per the decision of the University Research Comminee held on 06.49 2017 and tacility for Ph.D. in Public Health. >11c

Prof. Dr. Sultartha Das, Dean & Principal, SCB Medical College and Hospital, Cutack The memb

- Perf. Dr. R.C. Grit, Head, Department of Community Medicine, SCB Medical College and Hospital Cuttack -
  - Prof. Dr. Swapea Mahapara, Department of Physics, Uthal University, Bhubaserwar 10

A. The Members of the committee made a detailed while to all the functioning laboratories , interacted with

the scientists and Division Heads regarding all ongoing research projects and facilities available lost undertaking further research in fields that are not currently included.

The Committee reviewed the Annual Report as well file list of publication of research papers publiched B. The Committee also visited the ilbury, our-patients department and animal house of RMRC from RMRC since inteption.

RMBC is also affittend to other Linversities of Sate and netsele of national repute for PLD, and utter D. Existing Ph.D. facility in other subjects available at RMRC under U&al University was also discussed academic activities. During the discussion Director RMRC highlighted the scope and demand of Public Health in view of National Health Policy 2017 vis-a-vis the demand of the state and regime. RMRIC, Bhubaneswar has so for postmood 55 Ph.D.5 in different disciplines under UMaf Liniversity. Odishts in addition to supervising handleds of external students for their dissertation, training and for M.Sc., M.Phil and MD degrees. The Sub Committee also discussed with Director' Scientists on the following states and suggested that, The Sult Committee is of the ananimum view that facilities and infrastructure available at RMRC is very well commemorate to much the requirements of a Nodal Centre for Ph.D. in Public Health selection of students and PMD Guide has to be dote as per U. G.C. regulations.

Hence, the Seb-committee excommends that RARC, Bhutaneswar at Chardrasckburgur may be declared as a Nodal Contro for Ph.D. in Public Health under Uhul University

Dum and Principal, SCB Modical College Frut.Dr. Sudartha Day Cuttack

Signature with date

erac Inster

Head, Department of Community Medicine SCB Medical Cullips and Huspital, Curtact Prof. Dr.R.C. Gri

Until University, Bhuttaneys at Prof. Dr.Swapma Mahagaira, Department of Physics.

WANNATION CHAPTISHEET > W

PROCEEDINGS OF THE UNIVERSITY RESEARCH COMMITTEL HELD ON MARCHITTIN THE OFFICE OF THE VICE CHANCILLOR, UTKAL UNIVERSITY

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Members Prosent

Channas	Mamber	Manhe	Memoler	Member	Merchen	Converse
The Vice-Chancellor Litkal University	The Chairman, P.O. Connols, Ushall University.	The Principal SCB Medical College and Hospital, Cuttack.	Prof. K.S. Bass, P.G Department of Anthropology, Uthal University,	Pool Sumoth Kumhr Tripathy P.G Department of PMIR, Uniod University,	Prof. Swamm Muhampatra P.G. Department of Physicas Uldral University.	real and and Remainstations Divisit University.
-	. 19	0.04	17			1.1

present. A threathare discussion was held on each and every item of the agenda and the At the outsets the Vice-Chancellar extended a write welcome to all the numbers resolutions made in presence of above members.

### Item Ne-(1)

To cossider the matter related to construction of subject Research Committee for the seasion 2017-2018 and 2018-2019 and discussion regarding Charman, Subject Research Committee.

### Resultation

# the Chairman of the Subject Research Committee. Where there is no Professor in the department, the senior most Associate Professor/Reader (confirmed in University It is resolved that the proposal for constitution of Subject Research Committee is accepted and it is decided that, the Seniar Most Prafessor of the department will act as act as of Uthal University will Chairman/Chairperson of Subject Research Committee. of the P. G. Departments (aniver)

It is also decided to Constitute Ethic Committee and Animal Ethic Committee as per guidelines of ICMR/ ICSSR with eminent Scientist as member.

### Item No-(2)

Ph.D course work, publication of result after completion of course work for approval and arritrated to Urkal University and not abiling by the miss and regulation related to Ph.D This college has not schwitted any ilocuments relating to admission of candidates into Pre-To consider the matter relating to 1.6.1.7 Saranga as nodal cantre, which is not course work and insue of course Completion Certificate for Ph.D registration and regarding Guide. This metado is not affiliated under Uthal University and is under B.P.U.T Routicala notification for insue of certificate from the session 2014-2015.

### Resolution

It is resolved that, the Director, LG.I.T., Saranga may be intimated again with reference to previous letter to submit the required documents related to course work and issue of course completion certificate for the year 2014-15, 2015-36 & 2016-17 within three months. The case of continuation of the institution as nodal centre for Ph.D. Course work will be reconsidered in the next URC mering. NUTES OF THE VISIT OF THE SUB COMMUTER TO REMERRIGOOM. MEDICAL RESEARCH HATRE OXBUL AT BHEBANESWAR INTHE DISTRICT OF KHURDA . ODISHA DATE OVISIT: THE 12th DISTRICT OF KHURDA . ODISHA

2

under the Chairmandity of the Vice Chancellur, Uthal University, Bhuhaneswar, Odfaha and itz pursuance of ierter No-Fram VID8397 D. 18:10.2013, intade avisitio RABC, Bhuhaneswar to look into the infrastructure The Sub Committee, contributed as per the decision of the University Research Committee held in 06.09 2017 and that has the Ph.D. in Public Health. Ne la

The metrichers are.

- Prof. Dv. SciSarity Day, Dayn & Principal, SCIII Medical College and Hoopital, Cottack
- Port. Dr. R.C. Giri, Hand, Department of Community Medicine, SCB Medical College and Hospital.
  - Port Dr. Swapna Mahupatra, Department of Physics, Uthal University, Bhuhanetswar Cuttack

The Members of the committee made a detailed visit to all the functioning laboratories , intersected with the scientists and Division Hands regarding all ongoing research projects and facilities available faundertailing further research in feetlis that are not currently included.

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The Committee also visited the fibracy, out-patients department and animal bourse of RMBC. The Committee reveewed the Annual Report as well the first of publication of research papers published from RMRC sloce incontinu. J

RMRU is also affiliated to other Universities of State and coshift of national repute for 20.B, and other D. Existing Ph.D. facility in other subjects available at RMRC under Uxkal University was also discussed ac adentice activities. Durrug the discussion Director RMRC highlighted the scope and itemand of Public Health in view of National Bealth Policy 2017 vis-a-vis the deraund of the state and region. RMBC. Hhutaneswar has so far produced 55 Ph.D.s in different discriptines under Uskal University. Odisha in addition to supervising tumbrols of external students for their dissertation, training and for M.So., M. Phil and M.D. degrees,

The Sub Committee also discussed with Director Substitutes on the following insues and suggested that, relection of stadents and PhD Guide has to be done as per U.G.C. regulations.

The Sub Committee is of the manimeen view that facilities and infrustructure available at RMRC is very uell commensurate to meet the requirements of a Nodal Centre for Ph.D. in Public Health,

Hence, the Sub-committee recommends that RMRC, Bhubaneswar at Chardensekharpur may he declared as a Nodal Centre for Pa.D. in Public Health under Utial University.

Dean and Principal, SCH Medical College Punither Statember Das Cumack

SCB Medical College and Hospital, Cutter's Head, Department of Community Medicine Pull. Dr.R.C. Gri,

Uttait University, Bhuhaneswar Pur Dr.Swapna Mahapana, Dependent of Physics,

NAMENATION COMPANIESCOTT N

ene (uster Filter

Signature with date

Hum No. (3)

Reperting condect of Pri-sultenission seminar prior to these poinths of completion of we and submission of thisis.

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Ser. ¥

Hesolototti

It is resided that the conductate must submit letter for such prior to three manths of completion of scaure/submission of thesis,

them Parents

- To consider the market resident to declaration of Nodes Centre for Pk.D. Course Work
- Indent Academy in -Biotechnology.
  - RAUC in Public Health
- Central Ayarveda Institute of Herperobiliary Divorden.
- I out Japannath Minston College of Naming for Nursing. Bredstrong .,

It is reached that the Irideal Academy in Bio-technology and Lord Jagamath Mission College of Nursing are not allowed for such course wurk, However, the faculty mumbers of Trident Atalenty for subject Bosechasilogy having requisite qualification are election to see as Guide as in affiliant colleges. Further, it is decided the Realth Camire ander HMIRC and Central Ayurveda Institute of Harpetabiliary Disorders may by considered as nodal centre wait the session 2017-18 onwards on the hants of in Frastructure and development subject on the recommendations after impretion report

I be fulling ing two sub-committees constituted as follows-

For Public Health:

- 1. (a) Principal, SCB Medical College & Hospital, Cunach
- (b) Prof. R.C. Girl, SCB Medical Cullege & Hospital, Currack
- (c) Prof. Swapza Muhapatra, Department of Physics, Uthal University,

For Central Ayuranda Institute of Herpetebiliary Disorders:

- (a) Prof. B. Sataputhy, Chnirman, P.G. Council, I that University.
  - (b) Principul, Gopahaudhu Ayurvdic Mahavidyalaya, Pari

(c) Prof. A.K. Das. Gopahnadhu Ayurufic Mohavidyalaya, Pari

# lion No.[3] (Table Date)

-

To consider the matter of Morelise Jus in Mild regarding texast of Ph.D registration inter Sy which SNL is conducted on 12.06.2012.

Revolution:

It is resolved that as the condition has not complied with the office letter No. Fastiss-VILPn.Dr7210.2011 dated 20.06.2011; the case of Montiliss Juri has no sucrit for ensolvention.

(B A BARDA CALL

(5, Day) Primipal SCBMCH

(K.K. Heat, Dept of Anthropology

Inchafalter + 17

(S. Malupatra) Dept. Of Physics SNUDATO ISK TITUTATO

Comole of Examination

VICE CHANCILLOB 10-15 APPROVED



#### UTKAL UNIVERSITY VANI VIHAR, BHUBANESWAR-751004

No Exams-VII/URC/ 7336/2017 Dated: 05-9-14 From

The Controller of Examinations, Utkal University, Vani Vihar, Bhubaneswar,

Tin;

- The Vice-Chancellor Utkal University. т
- 2 The Chairman, P.G. Council, Utkal University,
- 3 The Principal, SCB Medical College and Hespital, Cuttack,
- Prof. K.K. Basa, P.G. Dept. of Anthropology, Utkal University. 4
- Prof. Santosh Kumar Tripathy P.G Dept, Of PMIR, Utkal University 5.
- Prof. Swpna Mohapatra P.G Dept. Of Physics Utkal University. 6
- The Controller of Examination Utkal University. 2

Sir/Madam.

I am directed to inform that the meeting of the University Research Committee has been schedule to be held on 06.09.2017 at 3.30 P.M in the office chamber of the Vice Chancellor.

You are requested to make it convenient to attend the meeting on the date and time mentioned above.

The agenda of the meeting will be placed on the table.

Yours Faithfully

CONTROLLER OF EXAMINATION

Memo No. Exam. VII /URC/ Copy forwarded to:

72017. Dated:

- - 1. The secretary to the Vice-Chancellor, Utkal University;
  - 2. The P.A to Registrar, Utkal University;
  - 3. The Section officer, EC-VI Section, Utkal University;
  - 4. The Steno to Controller of Examination, Utkal University;
  - 5. The Sr. Caretaker, Utkal University,

for information and necessary action.

CONTROLLER OF EX

Chairman

Member

Member

Member

Member

Member

Convenor

### Inter No-151

of Manaphine Southendane in Education and Dr. Chinatyce Summarky in Socialingy respectively. A DIH To complete the minter relating to avend of Ph.D.

### Resolution

It is resolved that, as the visu-voice text is menulatory the award of Ph.D degree in farour of Massessini Rarichandan profinamously caunat be allowed as the rule dona and pursuit for the saint.

is case of Chipmayue Satapathy is Sociology for award of D. Litt., it may be considered for notification.

### THEN NOTED

Sourparty in Odin for which Sobject Research Committee was held on 24,05 2010 and must To consider the matter, relating to the issue of D Lint regreturition to D4. Debit Prasted of Regramation letter in Brown of Sadas fru in Computer Science

### Newsymmetry,

it is resolved that registration may be issued in favour of Dr. Dets Pravad Sampathy retrospectively from the date of submission of regalitie face to Uthat L'miversity.

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favour of Sadan Jha, the candidate may be allowed after completion of Ph.D. Course Further it is resolved that issue of Ph.B. Repistration in Computer Science in WUTE.

### IC-N man

Setuptry and others who had been itsued registration letter and wast to achenic thesis as To consider the matter trigeriting submission of D.So D.Lin thesis of Dr. hystimmes special cases.

### Rentation

It is resolved that the candidate concerned may be informed to automit an a copy of pro-thesis along with the capy of progress report from time to time forwarded by the supervisor and submit to Controller of Examinations for consideration in the next URC. application along with the copy is the referred journals.

#### UTKAL UNIVERSITY VANI VIHAR, BHUBANESWAR-751004

Item to the University Research Committee schedule to be held on dated 06.09.2017 at 03.30 P.M in the office of the Vice-Chancellor.

#### Item No-(1)

To consider the matter related to constitution of subject Research Committee for the session 2017. 2018 and 2018-2019 and discussion regarding Chairman, Subject Research Committee.

#### Item No-(2)

To consider the matter related LG.I.T Saranga as nodal centre. Which is not affiliated to Utkal University and not abide the rules and regulation related to Ph.D Course Work and Issue of Completion Certificate for Ph. D registration and regarding Guide. This institute is not affiliated under Utkal University it is under B.P.U.T Rourkela. This college has not submitted any documents related to admission of candidates into Pre-Ph.D course work, Publication of result after completion of course work for approval and notification for issue of completion certificate from the session 2014-2015.

#### Item No-(3)

Consider regarding conduct of Pre-Ph.D presentation for submission prior to 3(three) months for completion of tenure and submission of thesis.

#### Item No-(4)

To consider the matter related to declaration of nodal centre to:

- 1. Trident Academy in Biotechnology
- 2. Public Health under -RMRC
- 3. Central Ayurveda Institute of Herpetobiliary Disorders
- 4. Lord Jagannath Mission of Nursing

#### Item No-(5)

To consider the matter related of Dr. Chinmyee Satapathy in Sociology award of D.I.itt. after consideration on proceeding of the SRC and Manaswini Ngichandan in Education for award of Ph. D degree after death of the candidate.

#### Item No-(6)

To consider the matter related issue of D.Litt. registration to Dr. Debi Prasad Satapathy in Odia for which Subject Research Committee was held on 24,05,2010 and issue of Registration letter infavour of Sudan Jha in Computer Science.

#### Item No-(7)

Other Item if any

CONTROLLER OF EXAMINATION



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#### UTKAL UNIVERSITY VANI VIHAR BHUBANESWAR

No Exam. VII / URC/ 7207(7)2017

Dated 24/08/2017

Form.

The Controller of Examinations, Utkal University, Vani Vihar, Bhubaneswar.

To.

<ol> <li>The Vice- Chancellor Utkal University</li> <li>The Chairman P G Council, Utkal University</li> <li>Principal S C B Medical college Cuttack</li> <li>Prof. K K Basa P G Department of Anthropology Utkal University</li> <li>Prof. Santosh Kumar Tripathy P.G. Department of PMIR- Utkal University</li> <li>Prof. Swpna Mohapatra P.G. Department of Physics Utkal University.</li> <li>The Controller of Examine Utkal University.</li> </ol>	Chairman Member Member Member y Member Member Convener
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Sub University Research Committee

Sir.

I am directed to inform you that, you have been nominated as a member to the University Research Committee for a period of two year that is 2017-2018 and 2018-2019. From the date of notification as per Ph.D regulation()

Memo No Esim- VII/ Ph.D) 7214

/2017

Controller de Examplifisch Dates 24/08/2017

Copy to-

- 1) The Chairman P.G Council Utkal University
- 2) All the HOD/SRC Chairman P.G. Department of Utkal University
- 3) The secretary to V.C/P.A to Registrar steno to controller of Examination.
- 4) The Section office EC I/ EC II/ EC III/ EC V/ EC VI Utkal University for Information

Controller of

Hem No. 02:-

To consider the matter related to the letter received from the Principal Secretary to Government of Odisha C.G.W.V Sharma, I.A.S. regarding eligibility criteria of 70 years of supervisors in M.Phil./Ph.D.

#### Resolution :-

The superannuated faculty members or Professors who are over 60 (Sixty) years of age and not above 70 (Seventy) years of age can be Ph.D. Guides if they are having research facilities permitted at the respective departments in the form of Emeritus Professors, adjunct Professors etc. However the maximum number of Ph.D. students per such guide will be limited to two (2)

#### Item No. :- (03)

To consider the matter related to Pragyan Mohanty (Ph.D registration 2006 – 07) and others after lapses of eight (8) years as per Ph.D. regulation 2011 correction slip 1351 for submission of thesis.

#### Resolution:-

Resolved that the candidate whose registration number was allotted on or after 01.01.2007 and their registration has been lapsed, they are allowed to submit their Ph.D thesis within one (01) year from the date of notification and have to deposit with usual fees along with renewal fees and with a penalty amount of Rs.10,000.00 (Rupees Ten Thousand ) only.

#### Item No. (04):-

To consider the matter related to D.Litt.Registration in Odiya of Dr.Debandra Kumar Pati as per new regulation.

#### Resolution :-

Resolved that the case is accepted for registration and the Controller of Examinations is authorised to verify the documents before issue of the registration letter.

Item No.: (05)

To consider the matter related to Ph.D registration of Mr. Manoj Bale, M.B.A 2011 as recommended by SRC dtd. 25.02.2011.

#### UTKAL UNIVERSITY : VANI VIHAR, BHUBANESWAR : 751004.

Proceeding of the meeting of the university Research Committee held on dated 17.01.2017 at 4.30 pm in the office Chamber of the Vice – Chancellor.

Members Presents :-

1	The Vice - Chancellor, Utkal University, Vani Vihar.		Chairman
2	The Chairman, P.G.Council, Utkal University, Vani vihar		Member
3.	The Director, Higher Education, BBSR.		Member
4,	Prof. P.K.Chand, P.G.Deptt.of Botany, UU.		Member
5.	Principal, SCB Medical College and Hospital, CTC.	4	Member
6.	Prof. K.K.Basa, P.G.Deptt.of Anthropology,UU.	21	Member
	The Director, Research & Development, UU.	23	Member
8	The Controller of Examinations, UU.	- 63	Convenor

At the outset the Vice Chancellor Extending a hearty welcome to all the members present. A threadbare discussion was held on each and every item of the Agenda and resolution as deemed proper were passed.

#### Item No. 01.

To consider the matter related to regulation circulated by UGC regarding Ph.D/M.Phil. Registration/Supervisor and Guide in the Notification dtd.05 May 2016.

#### Resolution:

It is resolved that at Utkal University the UGC revise regulation regarding M.Phil and Ph.D. student and Guide will be followed in Toto with the following modification:

(a) The total M.Phil. Students per department will continue to be 10 (Ten) students limits until the full faculty strength are recruited and in place.

(b) The superannuated faculty members or Professors who are over 60 (Sixty) years of age and not above 70 (Seventy)years of age can be Ph.D. Guides if they are having research facilities permitted at the respective departments in the form of Emeritus Professors, adjunct Professors etc. However the maximum number of Ph.D. students per such guide will be limited to two (2).

#### Item No. 4

To consider the matter on the letter of Director, Institute of Material Science includes two seats for Ph. D. Registration.

Resolution:- Resolved that, the Director (R&D) is authorized to study the proposal.

#### Item No. 5

To consider the matter regarding submission of Thesis within stipulated date as per Ph. D. Regulation within 8 years.

Resolution - Resolved that, the case is deferred to next URC meeting.

#### Item No. 6:

To consider the matter regarding supervisor Dr. Jagdish Kumar and Dr. Sushanta Kumar Samal and others on the basis of research experiences.

Resolution: Resolved that all applications are accepted and allowed.

#### Item No.7

Other matters, if any. The applications related to 14, research seed grants.

Resolution: Resolved that, the proposals for seed grants were approved.

The Chairman P. G. Council, Utkal University

S.C.B. Medical College, Cuttack

The Principal,

and Muna Chaws

Prof. P. K. Chand P. G. Dept. of Botany, Utkal University

Inahapatia 2016 The Director

R & D, Utkal University

11-2016 Controller of Examin Utkal University

Approved

Vice Chancellor

UTRAL UNIVERSITY VANI VIIIAR : BHUBANESWAR -4

/17

Dated

8A4 NO. Ex.VII/URC/

From	The Controller of Examinations Utkal University.		
to -			Chairman
	1. The Vice Chancellor		
	Urkal University	-	Member
	2. The Chairman		
	P.G. Council, Utkal University		Member
	<ol> <li>The Director Higher Education, Odisha, Bhubaneswar</li> </ol>		
	4. Prof. P.K. Chand		Member
	9. Prot. Pike Chang P.G.Dept. of Botany, Utkal University		
	The second se		Member
	<ol> <li>Principal, SCB Medical College &amp; Hospital Cuttack</li> </ol>		
	A Prof K K Basa	65	Member
	P.G.Dept. of Anthropology, Utkal University		
	7. The Director	18	Member
	Research & Development, Utkal University		
	8. The Controller of Examinations	(e. 1)	Convener
	Utical University		

Sir.

I am directed to inform you that the meeting of the University Research Committee has been scheduled to be held on 17.01.2017 at 4 P.M. in the office chamber of the Vice Chancellor.

You are requested to make it convenient to attend the meeting on the date and time mentioned above.

The agenda of the meeting will be placed on the table.

Yours faithfully,

13/01/2017:

CONTROLLER OF EXAMINATIONS /17 Dated 13/01/20

Memo No. Ex.VII/URC/ Copy to the :

Secretary to the Vice Chancellor, Utkal University for information ;

2. P.A to the Registrar, Utical University for information ;

845

3. Section officer, EC-VI, Utkal University for information and necessary action ;

4. Steno to the Controller of Examinations, Utkal University for information ;

5. Sr. Caretaker, Utkal University for information and necessary action.

CONTROLLER OF EXAL

#### UTKAL UNIVERSITY VANI VIHAR: BHUBANESWAR-751 004

Proceedings of the meeting of the University Research Committee held on dated: 11.11.2016 at 4.30 P.M. in the Office of the Chamber of the Vice Chancellor.

#### Members Presents:

..... Chairman

- The Vice Chancellor Utkal University, Vani Vihar,
   The Chairman,
- P. G. Council, Utkal University
- Prof. P. K. Chand,
   P. G. Dept. of Botany, Utkal University
- The Principal, S.C.B. Medical College, Cuttack
- The Director, Research & Development, Utkal University
- The Controller of Examinations, Utkal University

..... Convener

#### Item No. 1

To consider the matter relating to regulation circulated by UGC regarding Ph. D. Registration/Supervisors/Guide notification dated; 5<sup>th</sup> May, 2016.

Resolution:- Resolved that, with discussion the case is deferred to next meeting of URC.

#### Item No.2

To consider matter related to letter received from the Principal Secretary to Government of Odisha, Shri G.V.V. Saran, IAS regarding eligibility criteria of 70 years for supervisor M. Phi./Ph.D.

Resolution: - Resolved that, the case is deferred to next meeting without discussion.

#### Item No. 3

To consider the matter on the letter of Institute of Mathematics & Application, Bhubaneswar to be declared as Nodal Centre for Ph. D. Registration.

Resolution:- Resolved that, the case has no merit and not accepted by the Committee.

#### UTKAL UNIVERSITY VANI VIHAR, BHUBANESWAR -4.

	VILLE	/2016.	Dure:	
From	The Co Uskal L	enroller of Examinations, Iniversity		
Te	i.,	The Vice Chancellor, Utkal University	12	Chairman
	2	The Chairman, P.O. Council, Utkal University	1	Member
	х	The Director, Higher Education, Odisha, Bhubaneswar.		Member
	4.1	Prof. P.K.Chand, P.G. Department of Botany, Utkal University		Member
	5.	Principal, SCB Medical College and Hospital, Cuttack	•	Member
	6.	Prof. K.K. Basa, P.G. Deptt. of Anthropology, Utkal University	-	Member
	7.	The Director, Research & Development, Utkal University		Member
	8.	The Controller of Examinations, Utkal University	2	Convener
and the second se				

Sir.

I am directed to inform you that the Meeting of the University Research Committee has been scheduled to be held on 11.11.2016 at 4.30 P.M. in the office chamber of the Vice Chancellor.

You are requested to make it convenient to attend the Meeting on the date and time mentioned above

The agenda of the meeting will be placed on the table.

Yours faithfully,

11-14 Controller of Examinations

Date:

Memo No.Ex.VII/URC/ Copy to the:-

1. Secretary to the Vice Chancellor, Utkal University for information,

/2016;

- P.A. to the Registrar, Utkal University for information;
   Section Officer, Ec-VI, Utkal University for information and necessary action;
   Steno to the Controller of Examinations, Utkal University for information;
- 5. Sr. Caretaker, Utkal University for information and necessary action.

Controller of Examinations

		VANI VIHAR: BHUBANESWA	R-4	atulan
No.Ex.V	/II/URC/	19 148 12016.	Date:	08/11/2016
From	The Cor	nuroller of Examinations. Iniversity		0
To	i.	The Vice Chancellor,		Chairman Anth
		Utkal University		Member
	2.	The Chairman, P.G.Council, Utkal University		Member STRED POST
	3.	The Director, Higher Education, Odisha, Bhubaneswar.		
	4.	Prof. P.K.Chand, P.G. Department of Botany, Utkal University		Member SPEED- PO17
	5.	Principal, SCB Medical College and Hospital, Cuttack		Member AFE 40 1 /
	6.	Prof. K.K.Basa, P.G Deptt. of Anthropology, Utkal University.	*	Member 11-15
	7.	The Director, Research & Development, Utkal University	-	Member Smahapati
	8.	The Controller of Examinations, Utkal University	*	Convener Arapity
2412-04.0	-			normal Committee has been

Sir/Madam

I am directed to inform you that the Meeting of the University Research C scheduled to be held on 11.11.2016 at 4.30 P.M. in the office chamber of the Vice Chancellor

You are requested to make it convenient to attend the Meeting on the date and time mentioned

above.

The agenda of the meeting will be placed on the table.

Yours faithfully,

11.16 Controller of Examinations Date:

Memo No.Ex.VII/URC/

Copy to the:-1. Secretary to the Vice Chancellor, Utkal University for information;

/2016;

2. P.A. to the Registrar, Utkal University for information;

3. Section Officer, Ec-VI, Utkal University for information and necessary action;

4. Steno to the Controller of Examinations, Utkal University for information;

5. Sr. Caretaker, Utkal University for information and necessary action.

Controller of Examinal

#### UTKAL UNIVERSITY VANI VIHAR: BHUBANESWAR-4.

#### NOTIFICATION

NO.EX.VIV 7/46 12016.

Date : 18/4/16

The Vice Chancellor has been pleased to approve the resolution of the Univerwsity Research Committee Meeting held on 28.3.2016 regarding submission of Ph.D. thesis and to allow the candidate to deposit their thesis within 8 (eight ) years from the date of issue of registration letter.

5.04/194

CONTROLLER OF EXAMINATIONS

Date : 18/4/16

Memo No.Ex. VII/ 7/472016.

Copy to :

- 1. All the HOD / Chairman, SRC under Utkal University for information and necessary action ;
- 2. The Charman, SRC, Nodal Centres under Utkal University for information and necessary action :
- 3. The Chairman, P.G. Council, Utkal University for information and necessary nction :
- 4. The P.S.to the Vice Chancellor, Utkal University for information ;
- 5. The P.A. to the Controller of Examination / Registrar, Utkal University for information ; And

CONTROLLER OF EXAMINATIONS

#### UTKAL UNIVERSITY VANI VIHAR: BHUBANESWAR - 4.

No.Ex.	VILVIRCI 6187 12016.	Date: 2.2.3-14
From	The Controller of Examinations, Utkal University, Vani Vihar, Bhubaneswar – 4	
To	The Vice Chancellor     Utkal University.     The Chairman	- Chairman
	P.G.Council Utkal University. 3. The Director.	
	Higher Education, Odisha, Bhubaneswar	
	P.G. Department of Botany, Utkal University.	
	<ol> <li>Dr. P.C. Mohapatra, Principal, SCB Medical College and Hospital, Cuttack.</li> </ol>	
	6. Prof. K.K.Basa,	
<u>e</u>	PG Deptt. of Anthropology, Utkal University.	
	<ol> <li>Profssor-In-Charge, (R &amp; D), Utkal University.</li> </ol>	
	S. The Controller of Examinations     Utkal University.	- Convener

Sir.

I am directed to inform you that the Meeting of the University Research Committee has been scheduled to be held on 12 3 14 at 3 3000 in the office chamber of the Vice Chancellor ...

You are requested to make it convenient to attend the Meeting on the date, time and venue mentioned above.

The agenda of the meeting will be placed on the table.

Yours faithfully,

S.U. 21813 CONTROLLER OF EXAMINATION

Dute: 22 3.16

Mento No.Ex. VII/URC/ 6195-12016. Copy to the:-

- 1. Secretary to the Vice Chancellor, Utkal University for information;
- P.A. to the Registrar, Utkal University for information;
   Section Officer, Ec-VI, Utkal University for information and necessary action;
- 4. Steno to the Controller of Examinations, Utkal University for information;
- 5. Sr. Care Taker, Utkal University for information and necessary action.

5 k. 23

CONTROLLER OF EXAMINATIONS

To consider the matter regarding exemption from Course Work for Ph.D. iten No-6: Programme of Anuradha Mishra. Resolved that the candidate be intimated to submit an equivalent certificate Resolution: from JNU that she has completed pre Ph.D. Course Work as per UGC Regulation, 2009. To consider the matter regarding change of Guide in favour of Julli Hem No-7: Tripathy, Ph.D. registration No -01-Eco-2009-2010 dated 02.02 2009.

Resolved that the candidate is allowed to change her Guide through SRC Resolution: within stipulated time.

The meeting ended with a vote of thanks to the Chair.

28/2/16 P.G. Council

Prot. P. K. Chand / 3/2016

Anahapata Directar 28.3.16 Professor In Charge (R&D)

3

Une Le mare

Prof. K.K.Basa

5.12 2 314 Dr. S.K.Das 2 314

Controller of Examinations

APPROVED

VICE CHANCELLOR

#### UTKAL UNIVERSITY VANI VIHAR: BHUBANESWAR-4.

#### PROCEEDINGS OF THE UNIVERSITY RESEARCH COMMITTEE HELD ON 28.3.2016 AT 3.30 P.M. IN THE OFFICE CHAMBER OF THE VICE CHANCELLOR.

#### MEMBERS PRESENT:-

- The Vice Chancellor, Chairman Utkal University.
- The Chairman, Member
   P.G.Council, Utkal University.
- Professor-In-Charge (R&D), Utkal University.
- Prof. P.K.Chand, P.G. Deptt. of Botany, Utkal University.
- Prof. K.K.Basa, P.G. Department of Anthropology, Utkal University.
- Controller of Examinations, Utkal University.

Member

Member

Convener

r

At the outset the Vice Chancellor extended a hearty welcome to all the members present. A threadbare discussion was held on each and every item of the Agenda and resolutions as deemed proper were passed.

Item No-1: To consider the matter related to improvement in Research Facilities.

Resolution: Resolved that the decision of the Syndicate be implemented and step should be taken for enhancement of quality Research and encouragement of young faculty members.

Item No-2: To consider the matter regarding declaration of Nodal Centre.

Resolution (i)Resolved that the URC Sub- Committee report, in respect NCDS, Bhubaneswar is accepted and the said Institution is declared as Nodal Centre for doing Research work under Utkal University in Development Studies.

> (ii) Resolved that a Sub-Committee of URC with following members be constituted to suggest modification of Ph.D. regulation for placing it in the Academic Council for consideration.

#### MEMBER:

- 1. The Chairman, P.G. Council, Utkal University:
- 2. Professor-In-Charge, (R & D ), Utkal University;
- 3. Prof. P.K. Chand, P.G. Deptt. of Botany;
- 4. Prof. K.K.Basa, P.G. Deptt. of Anth., Utkal University.

(iii)A Sub-Committee consisting of the following members be constituted to inspect SVNIRTAR as a Nodal Research Centre in Physiotherapy.

#### MEMBER:

- 1. The Principal, S.C.B. Medical College, Cuttack;
- 2. Prof. & Head, Department of Orthopedics, SCB medical College,
  - Cuttack;
- Director
   Professor-In-Charge (R & D ), Utkal University;
- 4. The Director, DDCE, Utkal University.
- Item No-3: To consider the matter regarding submission of thesis of the candidates who have received the official letter after six months from the date of Ph.D. Registration.
- Resolution: Resolved that the candidates whose Registration Number is issued after more than six months delay from the date of SRC recommendation be allowed to submit thesis within 8 years from the date of issue of Registration letter.

This be placed in the Academic Council for ratification.

Item No-4: To consider the matter regarding Ph.D. Registration of Hemanta Kumar Barik in Odia.

Resolution:

fiem No-5:

 Resolved that the candidate is allowed for Ph.D. Registration as per regulation.

(ii) Further resolved that the regulation regarding eligibility for Ph.D. registration may be decided in the next Academic Council.

To consider the matter regarding allowing Mr. Manoj Biswar, MBA for Ph.D. Registration without Course Work.

Resolution: Resolved that the case has no merit for discussion as per Ph.D. Regulation and the candidate may be intimated to do Course Work before Ph.D. Registration through proper process.

2

#### TROCEEDING OF THE (URC) UNIVERSITY RESEARCH COMMITTEE HELD ON 18.02.2020 AT 11.30A M IN THE CONFERENCE HALL P.G. COUNCIL, UTKAL UNIVERSITY.

-AREI 105

#### Members Present:

<ol> <li>Prof. Soumendra Mohan Patnaik, Vice-Chancellor, U.U</li> <li>Prof. Sabita Acharya, Chairperson P.G Council, U.U &amp; Director C.D.C</li> <li>Prof. Or. Sanghamitra Pati, Director RMRC/ICMR, Bhabaneswar</li> <li>Prof. Ajaya Parida, Director ILS, Bhabaneswar</li> <li>Or. Srijit Mishra, Director, NCDS, Bhabaneswar</li> <li>Prof. Nigamananda Das, Director, R&amp;D</li> <li>Prof. J. Daniapat, OSD New Campas, U.U</li> <li>Shri Sharat Kumar Majhi, Controller of Examinations, U.U</li> </ol>	Chairman Member Member Member Member Member Convene
--	---

At the outset the Vice-Chancellor extended a warm welcome to all the members present in the meeting. Before going to agenda items for deliberation Hon'ble Vice-Chancellor threw lights on the guideline inconformity to UGC regulation 2016. He expressed that it will be helpful to scholars, supervisors and examination section as well.

#### Item No-1

as 21+

To consider the Guidelines for admission of scholars to Ph.D. Programme 2019 and their registration as per UGC (Minimum Standards and Procedure for Award of M.Phil. /Ph.D. Degrees) Regulation, 2016. (Guidelines mclosed).

- Resolved that the proposed guidelines for admission of scholars to Ph.D. Programme 2019 is accepted with following inclusion in the guidelines.
- a) Notification of the entrance test (CRET) shall be published by the Controller of Examinations for Ph.D. / IRP programmes taking the available vacancy into consideration.
- b) For every scholar there will be a 03 (three) members RAC (Research Advisory Committee) including
  - (i) One member from within Department
  - (ii) One External to the Department
  - (iii) Supervisor is the Convener.
  - (All the members must be eligible for Ph.D. Supervisor)

c) Process of Ph.D. registration has the two stages

- (i) Provisional registration (Admission of Ph.D. course work)
- (ii) Conformation of registration

For confirmation of research topic, a candidate has to apply to Chairman of DRC (Department Research Committee) through the supervisor(s) and finally DRC will decide to grant confirmation. This confirmation of registration will be done after the completion of course work in a confirmation seminar.

- d) Any minor modification requested by scholar, will only be allowed after approval of University Research Committee (URC).
- c) At department level, records will be maintained on the progress of research scholars as per the UGC guidelines which will be procedured at the end with a certificate to this effect by RAC.
- 6) After completion of research work, the DRC will conduct per-submission board for submission of thesis following due procedure on recommendation of RAC without waiting for any official approval.



#### UTKAL UNIVERSITY VANI VIHAR, BHUBANESWAR-751994.

No. Exam. VII /URC/

#### 5139 /2020,

Dated: 3.8-01-2020

From

The Controller of Examinations, Utkal University, Vani Vihar, Bluebaneswar-4.

To

All member of the URC (University Research Committee), Utkal University, Vani Vibar Bhubaneswar-4.

Sir/Madam,

I am sending herewith the copy of the proceedings of the meeting of URC (University Research Committee) held on 18.02.2020 for your kind information.

Yours Pathfully

Dated:. 38 05 20 20

### CONTROLLER OF EXAMINATIONS

Memo No. Exam.VII/URC/ S135 (35) /2020 Copy forwarded to:

1. All chairman of the DRC Utkal University for information.

2. All HOD of the Departments of Utkal University for information.

3. The Course coordinator of Ph.D. Nodal Centre under Utkal University For information.

4. The steno to the Vice-chancellor for kind information to Hon'ble Vice-chancellor.

 The Section Officer, EC-VI, Section Utkal University for information necessary action accordingly.

 Prof. incharge Utkal University Computer Centre, Vani vihar, Bhuhaneswar for Information. He is requested to kindly upload this proceeding in the Utkal University, website

CONTROLLER OF EXAMINATIONS

Hem No.- (6)

Other items on the table :-

 After the permission of chair, the issue related to different National institutes like IMMT, RPRC etc., was discussed.

It was unanimously resolved that these institutions may apply to Utkal University in their own interest to be the nodal centre of Utkal University for research. There after permission be given to the recognized Ph.D. supervisor by the appropriate authority to guide the scholars under Utkal University.

- b) It was also decided that one day workshop for the supervisor shall be organized to aware them about the new guidelines
- c) As a part of industry-University interface, 2% of the total no of Ph.D. to be enrolled/offered in a year (as per notification) will be made available for the Extraordinary achievers / person of excellence from the fields like industry, corporate eminence section and Govt, organizations.

After receiving applications from the concerns achievers / persons of excellence, URC will take a final decision in the selection of scholars in this regard.

No Ph.D. course work will be necessary for the scholar of this category.

d) It was also decided that to bring transparency and accountability of the Ph.D. section. The Controller of Examinations may take initiation to install CCTV in front of office of examination wings dealing with in the Ph.D. matters.

Meeting ended with vote of thanks to the chair and members presents.

Sanghamitra Pati Director, RMRC/ICMR Nigamananda Das Director, R & D J. Dandpat OSD, New Campus

Ajay Parida Director, ILS Srijit Mishm Director, NCDS Sabita Acharya Chairman, PG Council

Sharat Kumir Majili Controller of Examinations

Subita Acharya Director, C.D.C

APPROVED

VICE-CHANCELLOR

#### AGENDA FOR THE UNIVERSITY RESEARCH COMMITTEE(URC) SCHEDULED TO BE HELD ON 11 11 2016 AT 4 30 P.M. IN THE OFFICE CHAMBER OF THE VICE-CHANCELLOR

Item No.1. To consider the matter related to regulation circulated by U.G.C. regarding Ph.D. Registration/Supervisor/Guide Notification dated 5<sup>th</sup> May 2016.

Item No.2: To consider the matter related to letter received from Principal Secretary to Govt. of Odisha Shri G.V.V. Sarma, IAS regarding eligibility criteria of 70 years for Supervisor, M.Phil/Ph.D.

Item No.3: To consider the matter on the letter of Institute of Mathematics, Bhubaneswar to be declared as Nodal Centre for Ph.D. Registration.

Item No.4: To consider the matter on the letter of Director, Institute of Material Science includes two seats for Ph.D. registration.

Item No.5: To consider the matter regarding submission of thesis within stipulated date as per Ph.D. regulation duration is 8 years.

Item No.6: To consider the matter regarding Supervisors, Jagdish Kumar & Sushanta Kumar Samal and others.

Item No.7: Other matters if any.

Controller of Examinations

Resolution :-

Resolved that the applicant will be allowed for Ph.D. registration if the SRC recommendation was before notification of Ph.D. regulation of 2009 for implementation.

#### Item No.: (06)

To consider the matter related to submission of D.Litt.Thesis of Dr.Minati Mohanty in Education.

#### Resolution :

Resolved that the candidate is permitted to submit the Thesis and the evaluation will be made as per new regulation.

#### Item No. (07):-

To consider the matter of Asian School of public health to be declare as the nodal centre for allowing the candidate to doing Ph.D work.

Resolution:-

Resolved that the SRC may be constituted for public health to visit the Asian School of public health to examine the facilities and infrastructure in which the Principal SCB Medical College and the Professor and Head of P.G.Department of Bio Technology, Utkal University(by designation) shall be included.

Inahapates Director (R &D) 17.1.2017

Utkal University.

1018

Chairman

P.G.Council, Utkal University,

Prot.P.K.Chand, 17-1-2017

Controller of Examinations,

Utkal University.

Vice Chancellor Utkal University,

P.G.Dept. of Botany,

Utkal University,



VANU VIHAR, BHUBANESWAR-751004

No. Exam: VII/URC/

Dated:

The Controller of Examination: Litkal University, Vani Vibar, Bhubaneswar- 4

To

- 1. Professor Nigamananda Das, Director R & D
- 2. Professor Dr. Sanghamitra Pati, Director RMRC/ ICMR
- 3. Professor J. Dandpat OSD New Campus.
- 4. Professor Ajay Parida, Director ILS
- 5. Professor Vedanga Mohanty, NISER
- 6. Dr. Srijit Mishra, Director, NCDS.
- 7. Chairman, P.G. Council, Utkal University,
  - 8. Director, C.D.C., Utkal University,
  - 9. Controller of Examinations, Utkal University :- Convener.

#### Sir/ Madam,

As directed, I have the honour to inform that, you have been nominated to the URC by Hon'ble Vice-Chancelloer. The 1<sup>st</sup> meeting of the newly constituted University Research Committee has been scheduled to be held on 14.03.2019 at 4.00 P.M. in the Syndicate Hall.

You are requested to make it convenient to attend the meeting on the date and time mentioned above.

The agenda of the meeting will be placed on the table.

Yours faithfully,

Controller of Examina

Controller of Examinations Dated: 110319

Memo No. Exam. VII/URC/ 325/(6) /2019 Copy forwarded to :

- 1. The Secretary to the Vice- Chancellor, Utkal University.
- 2. The P.A to Registrar, Utkal University.
- 3. The Section Officer, EC-VI Section, Utkal University.
- 4. S.O. Store, Utkal University.
- 5. The Steno to Controller of Examination, Utkal University.
- .6. The Sr. Caretaker, Utkal University; for Information and necessary action



// em/A1

Sec.

#### UTKAL UNIVERSITY VANI VIHAR: BHUBANESWAR-4.

AGENDA FOR URC MEETING TO BE HELD IN THE V.C.'S CONFERENCE HALL ON 02.03.2022

#### AGENDA

1. Consideration of registration of Ph.D. proposals of following scholars as a part of University Interface Programme:

(i). Mr. Amitabh Thakur, (ii) Mrs. Nandini Sarangi

2 Acceptance of Model Guideline on "COMMON RESEARCH POLICY AND PROCEDURES FOR STATE UNIVERSITIES OF ODISHA" issued by Odisha State Higher Education Council to be effective from the date of notification by University.

3. Modification in Clause 8.4 (Award of the Degree) of Regulations governing the award of degree of Doctor of Science (D.Sc.), Doctor of Literature (D.Litt.) and Doctor of Law (LL.D.).

- (A) Recommendation of Economy Airfare to the External Examiners invited to conduct Ph.D. Viva Voce Test.
  - (B) Recommendation of increasing remuneration for examiners adjudicating in the Ph.D. thesis as follows:
  - (i) Evaluation of Ph.D. thesis from Rs.2,000.00 to Rs.3,000.00.
  - (ii) Conduct of viva voce test of Ph.D. from Rs.1,000.00 to Rs.2,000.00.

(If recommended, to be placed before Syndicate for approval)

Increase in Ph.D. Registration Fee from Rs.5,000.00 to Rs.10,000.00.

 Consideration of the resolutions taken by the committee on recognition of Ph.D. Nodal Centre in various Nusing Colleges and Institute of Health Sciences.

7. Consideration of cases of scholars applying for interdisciplinary research where the discipline of Ph.D. Course work and registration to Ph.D. programme are different. For example, Ph.D. Course Work in Sanskrit applying for registration to Yoga, Course Work in Mathematics applying for registration to Statistics or Computer Science etc.

 Consideration of the provision of co-supervisor for a Ph.D. scholar. (When research work is multidisciplinary in nature or interdisciplinary with different fields)

Other matters, if any, will be placed on the table with the permission of the Chair.



Shri Sharat Kumar Majhi Controller of Examinations, Utkal University, Vani Vihar, Bhubaneswar- 751 004. Odisha, India.

7279 12022.

No.Ex.VII/

9437008052(M) E-Mail: coe.utkał@gmail.com http:mail.utkaluniversity.ac.in

Dated: 04.05 2-2-

NOTIFICATION

Consequent upon the resolutions of the University Research Committee (URC) and approval of the Hon'ble Vice Chancellor following applications have been recommended for registration to Ph.D. programme with given term and condition as a part of Industry-University-Interface.

SI No.	Name of the Scholar/Supervisor	Department	Term and Condition
01	Scholar - Amitab Thakur Supervisor - Prof. Sabita Acharya	Anthropology	<ul> <li>(1) The synopsis of the proposal be submitted in the office of the Controller of Examinations within a month of publication of this notification.</li> <li>(2) No Objection Certificate from the</li> </ul>
02	Scholar - Nandini Sarangi	Anthropoiogy Sociology	<ul> <li>appropriate authority be submitted alongwith the synopsis.</li> <li>(3) The prescribed fees as per rule be deposited as and when required.</li> </ul>
	Supervisor – Prof. Sabita Acharya	Anthroppy	(4) As per UGC Rule 2016, topic recommended by Departmental Research Committee (DRC) cannot ordinarily be changed/modified
	Co-Supervisor – Prof. Navaneeta Rath	Sociology	<ul> <li>subsequently.</li> <li>(5) Applicants are exempted from pursuing Ph.D. Course Work.</li> <li>(6) Submission of Bi-annual progress report is mandatory with requisite fee.</li> <li>(7) All rules and regulations relating to award of Ph.D. degree will be in due conformity to UGC guidelines 2016 in this regard.</li> </ul>

DRC of the concerned departments are requested to accept and recommend the applications following due procedure and forward the proposals to the office of the Controllet of Examinations within a month on receipt of application.

CONTROLLER OF EXAMINATIONS

Memo No.Ex.VII/ 7280 (2) /2022,

Dated 14.01 22

- Copy to .
- The Chairman, D.R.C., Department of Anthropology, Utkal University for information and necessary action; and
- The P.A. to Vice Chancellor, Utkal University for kind perusal of the Hon'ble Vice Chancellor, Utkal University.

CONTROLLER OF EXAMINATIONS

118



#### UTKAL UNIVERSITY VANI VIIIAR, BHUBANESWAR-751004.

No. Exam. VII /URC/ 2521 18/2022. Dated: 2.3. 62.22

From

The Controller of Examinations. Utkal University, Vani Vihar, Bhubaneswar.

To

- 1. Chairman, PG Council, Utkal University,
- 2. Prof Ajay Parida, Director ILS, Bhubaneswar.
- 3. Prof. Dr. Sanghamitra Pati, Director RMRC/ICMR, Bhubaneswar,
- 4. Prof. Nigamananda Das, Director, C.D.C, Uskal University.
- 5. Prof. J. Dandpat, Director R & D, Utkal University
- 6. Prof. P.K Hota, P.G Department of Commerce, Uikal University.
- 7. Prof. Pravati K. Mahapatra, Director, IQAC, Utkal University.
- 8. Controller of Examinations, Utkal University: Convenor.

Sir/ Madam.

As directed, I have the honour to inform you that, meeting of URC (University Research Committee) is scheduled to be held on 02.03.2022 at 04.00 P.M in the Conference Hall of Vice Chancellor, Utkal University.

You are requested to make it convenient to attend the meeting on the date & time mentioned above.

The agenda of the meeting will be placed on the table.

Yours Faithfully

CONTROLLER OF EXAMIN Dated: 123 82-22

Memo No. Exam. VII/URC/ 2.533 (9) /2022 Copy forwarded to:

- 1. The Secretary to the Vice-Chancellor, Utkal University for kind information to the Vice-Chancellor.
- 2. S.O. Store, Utkal University for information and necessary arrangements.
- 3. The Section Officer, EC-VI, Section Utkal University.
- 4. The Sr. Caretaker, Utkal University, for information and necessary arrangements,

CONTROLLER OF EXAMINA



94370000522M) E-54ail: cor utkal0 gmoil.com http:mail.utkalumiversity.ail.in

Shri Sharat Kumar Majhi Controller of Examinations. Utkal University, Vassi Vihat. Bhubanerwar-751 004. Odmha, India.

No.Ex.VIII 4019 /2021.

Dated: 15.03.2021

#### NOTIFICATION

Consequent upon the resolutions of the University Research Committee (URC) and approval of the Horible Vice Chancellor following applications have been recommended for registration to Ph.D. programme with given term and condition as a part of Industry-University-Interface.

builder and the		Department	Term and Condition
SI NO	Name of the applicant		(1) The synopsis of the proposal be
01	Roopa Roshan Sahoo	Sociology	Submitted in the office of the
02	Binay Krushna Mahapatra	Business Administration	(2) No Objection Cartificate from the appropriate authority be submitted alongwith the synopsis
03	Nihar Ranjan Sahoo	Law	(3) The prescribed fees as per rule be deposited as and when required (A) as per LIGC Rule 2015, topic
64	Dr. Krishan Kumar	Anthropology	recommended by Departmental Research Committee (DRC) cannot ordinarily be changed/modified
95	Surendra Kumar Sahoo	Business Administration	<ul> <li>subsequently.</li> <li>(5) Applicants are exempted from pursuing Ph.D. Course Work.</li> <li>(6) Submission of Bi-annual progress report is mandatory with requisite fee.</li> <li>(7) All rules and regulations relating to award of Ph.D. degree will be in due conformity to UGC guidelines 2016 in this regard.</li> </ul>

DRC of the concerned department are requested to accept and recommend the applications following due procedure and forward the proposals to the office of the Controller of Examinations within a month on receipt of application

CONTROLLER OF EXAMINATIONS

CONTROLLER OF EXAMINATIONS

Memo No.Ex.VII/ 4020 /2021.

Dated 15 03 2021

Copy to the P.A. to Vice Chancellor, Utkal University for kind perusal of the Hon'ble Vice Chancellor, Utkal University



#### UTKAL UNIVERSITY VANISTHAR BHURANESWAR 751004

No. Exam. VII. 6376

13ared 194.08 2020.

#### Notification

Consequent upon resolution of the LIRE (Linteersity Research Committee) and approval of the line/htm Vice Channelley, the punding applications for registration to Ph D programme of the scheme show case. have been recommended by concerned SRC/ DRC are approved on condition of adhering to following procedure in conforming with UGR, (minimum standards as procedure for award of M PER Ph D Degrees) regulation 2016 in addition to the earlier process followed

A 10 For all applications for registration to Ph.D. programme, which have been recomand SRC DRC on or after 19" February, 2018 the data of registration of the

terrommunation of SRC DRC to concerned SRC DNC believ 18" February, 2018 the date of registration of such scholar in fixed as 18" Fabruary 2018 incapeative of date of recommendation of SRC/DRC to the effect.

B All the scholar independence of department, where date of registration to Ph.D. programme is on it after 18" Fubrillary, 2018 have to depart a maniferery processing fee of Rs. 500- in shape of likes Draft. arouse in favour of comptraties of Finance, Likal University, at the time of submittees of a contributhe cost of the Controller of Paaronations duly certified by supervisor and forwarded by charpersing

One copy of such report has to be retained by Chairperson, DRC schalarswise for future reference in this the section of the

C. These scholar have to update the above process as in (B) within 6 months of receiving the re-partive loter of tenistration from University.

The non-frequence will be adhered to by all concerned with immediate effect.

CONTROLLER OF EX

Mermir Not. Exam. VII / 6317 /2020 Capy forwarded no.

Dated 01/08/2020

- 1. The Chairman PG Council Lineal Linearsity for kind information.
- 2. All Charman of the DRC (Departmental Research Committee) for information and necessary
- All HOD PG Department of Utkal University for information and necessary action.
- All Co-ordinator of Ph D. Nodel-Centre under Uther University for information and necessary
- Stend to Vice Characellar for kind information to Han'ide Vice Chancellar.
- in Print in Charge of Computer score Uthal University for intermation and he is recovered for actification in University Website for public information.
- 7 The Director, R&D Ulkal Conversity for information and necessary action

CONTROLLER OF EXAM



#### UTKAL UNIVERSITY VANI VIIIAR, BHUBANESWAR-751004.

/2020.

#### No. Exam. VIL/URC/ 2168

Dated: 13 .02.2120

From

The Controller of Examinations, Utkal University, Vani Vihar, Bhubaneswar

To

Prefessor Nigamananda Das, Director R & D, Utkal University

2-Professor Dr. Sanghamitra Pati, Director RMRC/ICMR, Bhubaneswar

Professor. J. Dandpat OSD New Campus, Elkal University.

Professor Ajay Parida, Director ILS, Bhubaneswar

5. Professor Vedanga Mohanty, NISER, Blubancswar.

Co. DL Srijit Mishra, Director, NCDS, Bhubaneswar,

Chairman, PG Council, Utkal University.

Birector, C.D.C, Utkal University.

. Controller of Examinations, Utkal University - Convener.

#### Sir/ Madam,

As directed, I have the honour to inform you that, meeting of URC (University Research Committee Scheduled to be held on 18.02 2020 at 11.30 A.M in the P.G Council Hall, Litkal University

You are requested to make it convenient to attend the meeting on the date time mentioned

The agenda of the meeting will be placed on the table.

Yours Faithfully ()

CONTROLLER OF EXAMINATIO

Memo No. Exam.VII/URC/ 3/77 (6) /2020 Copy forwarded to: Dated: 13-04 2120

- 1. The Secretary to the Vice Chancellor, Utkai University,
- 2. The P.A to Registrar, Utkai University.
- 3. The Section Officer, EC-VI, Section Utkal University.

4 S.O. Store, Utkal University.

5. The Stone to controller of Estamination, Uttal University.

6. The Sr. Caretaker, Udual University: For information and necessary action.

CONTROLLER OF EXAMINATION

## Agenda for URC (University Research Committee) meeting to be held on 18.02.2020 at 11.30 A.M in the P.G Council Hall, Utkal University

Item No:-1:- To Consider the Guide line for Ph.D candidates Admission 2019 for registration as per UGC (Minimum Standards and Procedure for Award of M.PHL./PH.D Degrees) Regulation, 2016.

Item No:-2 - Necessary changes in IRP/ M.Phil course curriculum in conformity to Resolution pass by the academic council meeting held on 29:65:2019 of item no 23 of Regulation amendment committee proposal of 2 year IRP/Ph.D course from 2019-20.

Item No:-3:- To Consider of Ph.D cases.

- a) Santanu Ghosh- EC/VI/1591/2011-Pharmacy.
- b) Debabala Swain EC/VI/170/2012-Comp.Sc.
  - EC/VI/143/2018-Comp.Sc.
- c) Chintamani Jena EC/VI/3047/2017-Odia
- d) Gayatri Rath-EC/VI/151/2019-Sanskrit
- e) Rajadarshini Patra EC/VE3105/2017- Women's studies

Item No:-4:- It has been observed that in registration no of scholar date of registration, is date of SRC. However there are cases where a gap between date of issue of registration letter and date of registration i.e date of SRC which is vary cases to cases. Which date will be taken into consideration.

Item No:-5:- To Consider the application of Sumit Kumar Behera and Anil Kumar Biswal who have complete Ph.D course work in 2015-16 in Journalism and Electronic Communication under P.G Department of Public Administration under supervisor of Prasant Kumar Swain Lecture in University Law College, Vani Vihar.

CONTROLLER OF EXAMIN

#### Page-2

- g) After approval, the Ph.D. thesis will be submitted by the scholar in the last week of every month For smooth functioning and processing of thenis in the University office.
- b) The Examiner list may be submitted by the guide three months before the submission of thesis for approval of the BoS. The Ph.D. scholar has to submit five copies each of Almtract of thesis (500 words) and Synopsia (1500 words) along with the examiner's list.

#### Item No - (2)

- a) Necessary changes in IRP/ M.Phil, course curriculum in conformity to Resolution pans by the academic council meeting held on 29.05.2019 of item no 23 of Regulation amendment committee proposal of 2 year IRP/Ph D. course from 2019-20.
  - b) Inclusion of the course Research and Publication Ethics (RPE) mandatory with two credit for the Ph.D. students for Pre-registration course work as per the UGC guideline (copy enclose).

Resolved that Controller of Examination authorised to take decision and a committee be called by Controller of Examinations to take decision in the regards.

#### Itom No - (3)

- To Consider the Ph.D. cases of following scholars.
- a) Santanu Ghosh- EC/VI/1591/2011-Pharmacy.- Rejected
- h) Debabala Swain EC/VI/170/2012-Comp.Sc.-
  - EC/VI/143/2018-Comp.Sc.-

Steps be taken to preparation of soft copy of the Thesis so that Anti-plagiarism report be prepared.

- c) Chintamani Jena EC/VL/3047/2017-Odia 3rd Examiner's report may be asked for
- d) Gayatri Rath EC/VI/151/2019-Sanskrit Committee may be constituted consists of member from KISS,

Shri Jagansath Sanskrit University and Dr. Sirjit Mishra, Director, NCDS to examine the matter. e) Rajadarshini Patra - EC/VI/3105/2017- Women's studies- Rejected

Item No - (4) It has been observed that in registration letter of the scholar the date of registration is the date of recommendation of SRC.

However there are cases where a gap between date of issue of registration letter and date of registration i.e date of SRC exists which vary from case to case.

It was placed before the committee for its kind view

After discussion the committee decided that for the cases which has been placed after 18th February 2018 (i.e. last two years) the date of SRC, will be date of Registration as per previous practice but for the cases where recommendation of SRC has come before 18th February 2018 the date of registration will be fixed at the18th Februiry 2018.

#### Rem No - (5)

To consider the applications of Sumit Kumar Behera and Anii Kumar Biswal who have complete Ph.D. course work in 2015-16 in Journalism and Electronic Communication under P.G Department of Public Administration under supervisor of Prasunt Kumar Swain, Lecture in University Law College, Vani Vihar.

Resolved that CoE is authorised to take action as per research topic in consultation with the guide.

ITEM NO.08: To consider the Provision for approval of Nodal Centre other than regular teaching department of Utkal University. ITEM

ITEM NO. 09: To consider the suggestion of the committee on research in Inter-disciplinary subject that whether it is subject specific or in specialization for example- Ph.D. in Microbiology or Ph.D. in Botany, Zoology, Life Science

ITEM NO.10: Regarding submission of Ph.D. thesis in the extended date upto 31<sup>st</sup> May 2018 of Mrs. Madhumita Das bearing Ph.D. Regd. No. 03-Psychology-2006-2007, an elaborate discussion was made on Ph.D. registration of the scholar on verification of the relevant record found that the registration of Ph.D. has been cancelled w.e.f. 23.10.2017.

TEM NO.11: Regarding submission of thesis of Gyanaranjan Swain bearing Ph.D. Regd. No 31-Odia-2009-2010, recommendation of P.M.C. dated 12.02.2019 for a decision in connection with "Even though date of registration is 28.02.2011 the Ph.D. registration letter was issued on 01.11.2013 and by that time guide of the candidate (Late Rabindranath Naik) was no more as he passed away on 18.01.2013, i.e. ten months before. However, SRC has recommended submission of thesis on 09.11.2018.

# ITEM NO.12: EC-VI/1591/Pharmacy- Sri Santanu Ghosh.

To consider about the report of the Examiner of the Scholar.

#### Enclosed:

iii) Photocopy of Examiner's Report

iv) Photocopy of Compliance.

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# Proceedings of the P.M.C meeting held on 05.08.2019 at 3.30 P.M.

B. Seema Dutta (English):-The SRC has recommended submission of thesis. Two publications are also enclosed. The candidate is recommended for submission of thesis subject to submission of synopsis, abstract and plagiarism report.

Di una

9. Santosh Dwivedi (AIHCA):-Recommended for submission of Ph.D. Thesis

10. Subhra (PMIR):-Recommended for submission of Ph.D. thesis subject to submission of detailed Plaglarism report.

11 Grivance Petition relating to Pre-PhD. Coursework: - It was decided that those students, who are having shortage of attendance in Pre-PhD. Course work, 2018-2019 may be allowed to pursue extra classes as per the requirement subject to minimum 75% of attendance as per the Orissa University fist statute, 1990 in order to be eligible to appear in the Pre-Ph.D. Course Work Examination. Further, those students who have failed /not appeared in the Pre-Ph.D. Course Work examination, they may be allowed to appear the Pre-Ph.D. Course work Examination subject to the fulfilment of necessary conditions as decided by the concerned SRC.

This should not be cited as a precedent.

12. Anil Kumar Biswal (Journalism):-The candidate has applied for registration in journalism .However the proposed guide is a recognised guide in Law from Utkal University. So the case could not be recommended and is referred to URC.

13. Sumit Kumar Behera (Journalism) - The candidate has applied for registration in journalism. However, the proposed guide is a recognised guide in Law from Utkal University. So the case could not be recommended and is referred to URC.

14. Alekha Sachidananda Nayak(Journalism): The candidate is required to submit the Ph.D. guide certificate of proposed guide.

15. Sivani Baral(Political Science): The candidate has given the pre-submission presentation before completion of 8 years of registration and SRC has recommended submission of thesis. The case is recommended for submission of thesis as all other required documents have been submitted.

16. Bhagaban Behera (Commerce) -Recommended for submission of Ph.D. Thesis as all required documents have been submitted and SRC has recommended the submission of thesis.

.8.19 8. b Prof. B. rpt. P. Prof. B. Vice Chancellor

# Proceedings of the P.M.C meeting held on 05.08.2019 at 3.30 P.M.

#### Member Present:

- 1. Prof. B.B. Michra, Department of Business Administration, Utkal University
- 2 Prof. Pravati Kumari Mahapatra, Department of Zoology, Utkal University.
- 3. Prof. Asim R. Parhi, Department of English, Utical University
- 4. Prof. Bhaswatt Patnaik, Department of Psychology, Utical University
- 5. Prof. N.N. Das, Department of Chemistry, Uckal University

#### Resolution:-

- 1. Shankarsan Pradhan(Qdia)-As Plaglarism software is not available in Odia , the candidate may be recommended for submission of thesis
- 2. Monalisha Mishra (Geography): SRC has recommended the submission thesis and the candidate has submitted Ph.D. coursework certificate, two publications and plagiarism certificate. So recommended for submission of thesis
- 3. Rakesh Kumar (Education): As per proceedings of PMC held on 25.01.2019 the candidate was recommended for submission of Ph.D. Submission of Thesis in subject to submission of proceedings of SRC by the Chairman
- 4. Suddala Sirisha (Pharmacy):-Reeping in view the superannuation of proposed Co-Guide, Prof. Y. Madhusudan Rao, Kakatiya University, Warangal A.P. and recommendation of SRC on 05.02.2019, the candidate is recommended for Registration of Ph.D. under the supervision of Dr. Sumit Ku. Sahoo, UDPS, who is recognised as research guide in Pharmacy of Utkal University
- 5. Nibedita Jena (Odia): The candidate has submitted the required documents such as two publications, SRC recommendation, synopsis and abstract. The plagiarism software is not available in Odia, so it is not provided. The submission of thesis is subject to submission of Coursework completion Certificate.
- 6. Sarmistha Das[Anthropology] -The Candidate is not a fellowship holder but has completed Ph.D. Coursework in social work at NISWASS, Bhubaneswar, an affiliated institute of Utkhl University. Since the SRC has recommended the registration of Ph.D., the candidate is recommended for registration.
- 7. Ruchi Rigam (English) -The candidate is recommended for submission of thesia subject of submission of synopsis, abstract and plagtarism report

P. K. Mahapatra

10.25

the rate an

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第1月日前前,

A. R. Parhi

## AGENDA FOR UNIVERSITY RESEARCH COMMITTEE (URC) MEETING TO BE HELD ON 14.03.2019 AT 4.00 P.M. IN THE SYNDICATE HALL

- ITEM NO.01: To consider the proposal that D.Litt./D.Sc./LL.D. will be awarded as per Statute. (No proposal/application form be invited for these degree henceforth).
- ITEM NO.2: To consider the matter related to registration of D.Sc./D.Litt. the scholars those who have already registered, apply for registration and for submission of thesis.
- ITEM NO.03: To consider the proposal of adoption of 2016 UGC Guidelines for the scholars who have registered before 5<sup>th</sup> May 2016.
- ITEM NO.04: To consider the request of Chairman SRC/Director, IGIT, Sarang to nominate subject expert outside the institution as and when required to conduct pre-thesis seminar and defence viva test for Ph.D. scholar.
- ITEM NO.05: After the said demise of Prof. B.K.Rath, Department of Computer Science, the Ph.D. scholar under his supervision are to be rehabilitated kind suggestion of the committee in this regardieg (4 to 5).
- ITEM NO. 06: To consider the acceptance of teachers of affiliated colleges under Utkal University with required qualifications prescribed by the UGC as Ph.D. Supervisor under category:
  - (d) Autonomous College
  - (e) Affiliated Colleges (Degree without P.G. Course)
  - (f) Self Financing Colleges
- ITEM NO.07: To consider the acceptance of Ph D. Supervisors/Co-Supervisor from the different Public Research Institutes like ICAR/ILS.

## ITEM NO.13: EC-VI/3105/Women's Studies- Ms.Rajadarshini Patra.

To consider the Report of External Examiner for Re-Examination by a third Examiner

Enclosed: Photocopy of Examiner's Report.

## ITEM NO.14: EC-VI/1701/Computer Science- Ms. Debabala Swain.

Decision may be taken whether Ph.D. Degree awarded to Debabala Swain or be cancelled as per allegation made by Professor Debahuti Mishra.

Enclosed: Photocopy of allegation.

ITEM NO.15:

Other matters if any.

- A 15 End 19 11

CONTROLLER OF EXAMINATIONS

# Attendance of the URC meeting held on 14.03.2019 at 4 P.M. in the Syndicate Hall, Utkal University.

2m

6. 1 1 L			As directed, I have the honour to inform that, you have been nominated to the URC by Hor ble Vice-Chancelber. The 1 <sup>rd</sup> meeting of the newly constituted University Research Committee has been scheduled to be held on 14.03.0019 at 4.000 P.M. In the Syndicate Hall.	You are requested to make it convenient to attend the meeting on the date and time it above.	n vours faithfully. 名号行う Controller of Examinations	Dated 110315	sity nut necessary action Autolier of Examinations
ry AN-751004 Dated		D MRC/ ICMR IV - Consener.	As directed, I have the honour to inform that, you have been nominated to the by Hurr ble Vice-Chancelber. The 1 <sup>rd</sup> meeting of the newly constituted University Rese Committee has been scheduled to be held on 14.03.2019 at 4.00 P.M. In the Syndicate Hall	tend the meeting o	be taale Yours faithfully. Redin Controller of Exan	Date Niversity.	5.0. Store, Uthal University, The Stend to Controller of Examination, Uthal University The St. Caretaker, Uthal Liniversity; for information and necessary action The St. Caretaker, Uthal Liniversity; for information and necessary action Controller of Examination
VANI VIHAR, BHUBANISWAR 751004	ŧ	Professor Nigaminanda Das, Director R.& D Professor Dr. Sanghamitra Pati, Director R.MBC/ (CMR Professor 1: Dandpart DSD New Campus. Professor Ajay Parida, Director 11.5 Professor Vodanga Mohanty, NISEI Defessor Vodanga Mohanty, NISEI Ur. Srijit Mehra, Director 10.5 Chaitman, P.G. Council Uthal University, Director, C.D.C., Uthal University, Controlee of Examinations, Uthal University :- Convener	ur to inform that meeting of the r ed on 14.03-2015	convenient to at	The atenda of the meeting will be placed on the table <b>C</b>	<ol> <li>Exam. WI/URC/ 3351 ( 6.) /2039</li> <li>Narded to:</li> <li>The Secretary to the Vice- Chancellor, Utkal University.</li> <li>The P.A.to Registrar, Utkal University.</li> <li>The Section Officer, EC.VITacrico, 19541 Intercent.</li> </ol>	5.0. Store, Uthal University. The Sterie to Controller of Examination, Uthal University The St. Caretaker, Uthal Liniversity; for information and r Cor
VANU VITAL VANU VITAL BUAR DH	The Controller of Examinations Uthal University, Vani Vihar, Bhutaireswar-4,	Professor Nigamunanda Das, Director R. Professor Dr. Sanghamitra Pati, Director R. Professor 1: Dandpat OSD Naw Campus. Professor Ajay Pacida, Director 115 Professor Vodanga Mohanty, NISEI Dr. Srijin Mishra, Director, NEDS Chairman, P. G. Countil, Utkal University, Director, C.D.C., Utkal University, Controler of Examinations, Uthal Univer-	I have the hono celloer. The 1 <sup>rd</sup> checkled to be th	ested to make it	of the meeting w	Memo No. Exam. VII/URC/ 335/ (6) /2019 Copy forwarded to . def The Secretary to the Vice- Chancellor, URS 2. The P.A.to Registrar, Utkal University. 3. The Section Officer, EC-VITaertice, UNALU	4: 5:0. Store, Uthal University. 5. The Stend to Controller of Ex 2. The St. Caretaker, Uthal Lank
No. Exam. VII/URC/ From	The Controller of Utbal University Bhutaneowar-4	<ol> <li>Profess</li> <li>Profess</li></ol>	As directed, r Vice-Channeller Ness been se	You are requirentioned above.	he alenda (	Memo No. Exam. VII/URC Copy forwarded to : dir The Secretar 2. The P.A.to R. 3. The Section :	5.0. Store, U The Stend to The St. Caref



VANU VIHAR, BHUBANESWAR-751004

No. Exam: VII/URC/

Dated:

The Controller of Examination: Litkal University, Vani Vibar, Bhubaneswar- 4

To

- 1. Professor Nigamananda Das, Director R & D
- 2. Professor Dr. Sanghamitra Pati, Director RMRC/ ICMR
- 3. Professor J. Dandpat OSD New Campus.
- 4. Professor Ajay Parida, Director ILS
- 5. Professor Vedanga Mohanty, NISER
- 6. Dr. Srijit Mishra, Director, NCDS.
- 7. Chairman, P.G. Council, Utkal University,
  - 8. Director, C.D.C., Utkal University,
  - 9. Controller of Examinations, Utkal University :- Convener.

#### Sir/ Madam,

As directed, I have the honour to inform that, you have been nominated to the URC by Hon'ble Vice-Chancelloer. The 1<sup>st</sup> meeting of the newly constituted University Research Committee has been scheduled to be held on 14.03.2019 at 4.00 P.M. in the Syndicate Hall.

You are requested to make it convenient to attend the meeting on the date and time mentioned above.

The agenda of the meeting will be placed on the table.

Yours faithfully,

Controller of Examina

Controller of Examinations Dated: 110319

Memo No. Exam. VII/URC/ 325/(6) /2019 Copy forwarded to :

- 1. The Secretary to the Vice- Chancellor, Utkal University.
- 2. The P.A to Registrar, Utkal University.
- 3. The Section Officer, EC-VI Section, Utkal University.
- 4. S.O. Store, Utkal University.
- 5. The Steno to Controller of Examination, Utkal University.
- .6. The Sr. Caretaker, Utkal University; for Information and necessary action

# PROCEEDINGS OF THE UNIVERSITY RESEARCH COMMITTEE HELD ON 06.09.2017 IN THE OFFICE OF THE VICE-CHANCELLOR, UTKAL UNIVERSITY

#### Members Present:

1		Chairman
2	The Chairman, P.G Council, Utkal University.	Member
3	The Principal SCB Medical College and Hospital, Cuttack.	Member
a.	Prof K & Bass P.G Department of Anthropology, Utkal University.	Member
5	Prof Santosh Kumar Tripathy P.G Department of PMIR, Utkal University,	Member
6	Prof. Swapna Mohapatra P.G Department of Physics Utkal University.	Member
4	The Controller of Examinations Utkal University.	Convene

At the outset, the Vice-Chancellor extended a warm welcome to all the members y present. A threadbare discussion was held on each and every item of the agenda and the resolutions made in presence of above members.

#### Item No-(1)

To consider the matter related to constitution of subject Research Committee for the session 2017-2018 and 2018-2019 and discussion regarding Chairman, Subject Research Committee.

#### Resolution:

It is resolved that the proposal for constitution of Subject Research Committee is accepted and it is decided that, the Senior Most Professor of the department will act as the Chairman of the Subject Research Committee. Where there is no Professor in the department, the senior most Associate Professor/Reader (confirmed in University service) of the P. G. Departments of Utkal University will act as the Chairman/Chairperson of Subject Research Committee.

It is also decided to Constitute Ethic Committee and Animal Ethic Committee as per guidelines of ICMR/ ICSSR with eminent Scientist as member.

#### Item No-(2)

To consider the matter relating to I.G.I.T Saranga as nodal centre, which is not affiliated to Utkal University and not abiding by the rules and regulation related to Ph.D course work and issue of course Completion Certificate for Ph.D registration and regarding Guide. This institute is not affiliated under Utkal University and is under B.P.U.T Rourkela. This college has not submitted any documents relating to admission of candidates into Pre-Ph.D course work, publication of result after completion of course work for approval and notification for issue of certificate from the session 2014-2015. Resolution:

It is resolved that, the Director, I.G.I.T., Saranga may be intimated again with reference to previous letter to submit the required documents related to course work and issue of course completion certificate for the year 2014-15, 2015-16 & 2016-17 within three months. The case of continuation of the institution as nodal centre for Ph.D. Course work will be reconsidered in the next URC meeting.

MNUTES OF JUE VISIT OF THE SUB COMMUTTEE TO KTHE REGIONAL MEDICAL RESEARCH CANTRE WRITCLAT HIRURANESWAR DATHE DISTRICT OF KHEIRDA , ODSHA DATE OF VISIT, THE 1219 DECEMBER 2017 Se

The Sub Committee, concluted as per the decision of the University Research Committee beld in 06.09.2012 under the Chairmanchin of the Vice Chuncellee, Uthal University, Bhuthaneswar, Odhiha and in pursuance of letter No- Exam V11/339710t, 18:10/2017, made a visit to R/MCL Bluthaneswar to fook into the infrastructure and thothy for Ph.D. in Public Health. Vier's

The reembers are

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- Prof. Dr. Sidharths Das, Denn & Principul, SCB Medical Cellege and Horpital, Certack 17
- 2. Port. Dr. R.C. Gri, Hust, Department of Community Medinine, SCB Medical College and Housing Cuttack
  - Piot Dr. Swipna Mahapatra, Department of Physics, Urbal University, Bhubanetwar ŝ

A. The Members of the committer mude a detailed visit to all the functioning laboratories , interacted with the scientists and Division Heads regarding all ongoing research projects and facilities available figundertaking further research in fields that are not carriedly included.

C. The Committee reviewed the Annual Report as well the list of publication of restarch papets published B. The Committee also visited the library, out-patients department and unimal house of RMRC from RMRC since inception

RMRC is also additized to other Universities of State and outside of national repute for Ph.D. and other D. Existing Ph.D. facility in other subjects available at RMRC under Uthat University was also discussed scademic activities.

During the discussion Decetor RARC highlighted the scope and dumard of Public Health in view of National Health Policy 2017 viscovers the descand of the state and region. RMRC . Bluchungswar has so far produced 55 Ph D's in different dissiplines ander Utkal University. Ouistra in addition to supervising hundred) of otternal modents for their dissertation, training and for M.Se., M.Phil and MD degrees.

The Sub Committee is of the ununimous view that fucilities and infrintructure available at RAIRC is very The Sub Committee also discussed with Director' Scientists on the following feature and suggested that, well commensurate to meet the requirements of a Nodal Centre for Ph.D. in Public Health submitten of underity and PhO Guide has to be descens per U.G.C. regulations.

Hence, the Sub-committee recommends that RMRC, Bhuhmeswar at Chandrasekhurpur mus, he declared as a Nodal Costra for Ph.D. in Public Health under Uthaf University.

Dem and Principal, SCB Medical College Frid Dr. Sulliartha Day Cumick

SCR Medical College and Baspital, Curtach Head, Expansion of Community Medicine Prof. Dr.R.C. Girl

Unal University, Bhurnneywar Prof. DuSwapna Manapatta, Department of Physiqu.

Addition Or Diale / Sector

Signature with date

A. Mr. Lapana

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PROCEEDINGS OF THE UNIVERSITY RESEARCH COMMUTTEE HILD ON 10.09.2917 IN THE OFFICE OF THE VICE CHANCILLOR, UTKAL UNIVERSITY.

C

Nontrus Present.

- The Vice-Chancelly Ultin University
- The Chairman, P.O. Council, Uthal University,
- The Principal, SCB Medical College and Hospital, Curack,

Member.

Mathter

Chairman

- Purf. K. K. Barn, P. G. Department of Anthropology, Until University,
- Menher Perf. Samooh Kumur Tripothy P.G. Department of PMIR, Uldas University.
  - Mambar Mumber
    - Prof. Swapma Mudrapatra P.43 Department of Physics Ushal Liniscraits
      - The Compolier of Examinations Dead University

Contenes

At the eutoti the Wire-Chancellor extended a warm velocing to all the minimerpresent. A threathare discussion was held on each and every item of the spends and the resolutions made in presence of above multiper-

# Hen No-(1)

scenim 2017-2018 and 2018-2019 and Grounsien regarding Chnimur, Subject Research To consider the matter rolated to accet tution of subject Research Committee for the Committee.

# Resolution:

It is resolved that the proposal for constitution of Subject Research Committee in neuropted and it is decided that, the Senine Most Professor of the department will act as the Chairman of the Subject Research Committee Where there is no Professor in the department, the number must Associate ProfessoriReader (confirmed in University as the act P. G. Departments of Udial University will Chuirman/Chuirpersen of Sabjeet Research Committee. service) of the

It is also decided to Constitute Ethic Committee and Animal Ethic Committee as per guidelines of ICMR/ ICSSR with eminent Scientist as member.

# Item Ner(2)

affiliand to Utsal University and not abiting by the rules and regulation related to Ph.D. Ph.D course work, publication of result after completion of course work for approval and To consider the matter relating to 1.6.1.1. Saturgo an nodal centre, which is not This college has not submitted any documents relating to admission of candidates into Procourse work and issue of course Completion Contificant for Ph.D registration and registrating Gude. This metione is not affiliated under Uthal University and is under B.P.U.T &notacla notification for issue of certificate from the action 2014-2015.

# Resultation

It is resolved that, the Director, LGLT, Saranga may be intimated again with and issue of course completion certificate for the year 2014-15, 2015-16 & 2016-17 reference to previous letter to submit the required documents related to course work within three months. The case of continuation of the institution as and a centre for Ph.D. Course work will be reconsidered in the next URC monthing.