

**Syllabus**  
M. Phil. Courses  
P.G. Department of Anthropology  
**(Centre of Advanced study in Anthropology)**  
**2021-2022 Admission Batch Onwards**



**UTKAL UNIVERSITY, VANI VIHAR,  
BHUBANESWAR.**

## UTKAL UNIVERSITY

### M.Phil Syllabus in Anthropology (Semester System)

#### Regulation (to be effective from the session –2021-2022 Admission Batch onwards)

1. M.Phil course in Anthropology is one- year duration and it comprises two semesters. The total mark of the whole course shall be four hundred marks and two hundred marks for each semester. The eligibility criteria for admission into M. Phil course in Anthropology will be published in the information Bulletin in every academic year. The course structure of M.Phil course is as follows:

#### 1<sup>st</sup> Semester

Paper-101 Indian Society and Issues of Development	100 Marks
Paper-102 (Gr.A) Theories in Social Anthropology	100 Marks
Paper- 102 (Gr.B) Human Evolutionary Genetics	100 Marks
Paper-102 (Gr. C) Methods and Issues in Archaeological Anthropology	100 Marks

#### 2<sup>nd</sup> Semester

Paper-201 (Gr. A) Practical (Advanced Research Methods in Social Anthropology)	100 Marks
Paper-201(Gr.B) Practical (Techniques in Human Molecular Genetics & Biostatistics)	100 Marks
Paper – 201(Gr.C) Practical (Archaeological Survey and Analysis of Antiquity)	100 Marks
Paper- 202 (Gr. A.B.C.) Dissertation	100 Marks

2. The first semester will start with the beginning of the Academic session or after the admission into the said course as per the University schedule.
3. Examination for the first and second semester will be held at the end of the respective semester or may be held together at the end of the session.
4. The semester system of examination will have internal system of valuation for theory papers. Practical/ Dissertation papers will be examined by two examiners, one external and another internal. The board of studies will recommend the names of internal teachers for setting questions for each paper and for valuation of answer scripts of each paper. The question setter will submit one set of questions from each unit of syllabus to the Chairman of the Moderation Board who in turn will submit the moderated questions to the Controller of Examination. Two senior most teachers of the Department will constitute the Moderation Board for semester system of examination.
5. The teacher's council of the Department of Anthropology shall constitute the Conducting Board.
6. For passing the M.Phil a candidate has to secure 50% mark each in theory, practical and dissertation paper as well. The pass mark in aggregate is also 50%. The dissertation and practical paper would be evaluated by two examiners- one internal and another external.
7. The theory papers carrying 100 marks will have an examination of 4 hour duration and questions are to be set covering each unit. The practical paper carrying 100 marks will have an examination of 6 hour duration.
8. If a candidate passes both the semester examinations, he/ she will be declared to have passed the M.Phil (Semester) in Anthropology.
9. The statutory provisions regarding attendance certificate for appearing at the examination shall be strictly followed. In case of not securing required attendance in a

particular semester, the student would be required to take readmission in the next semester or forgo his / her studentship.

10. Repeat for improvement of a semester or a part there of, shall be allowed once during two successive corresponding semester examinations of next two academic sessions.
11. Each student has to prepare a dissertation (Semester-II paper- 202 A/B/C) under the supervision of a teacher/ teachers. The duration of the field work will be normally two months time and the exact time schedule will be decided by the Teachers' Council of the Department. The M.Phil. Dissertation will be examined by both one External and one Internal Examiner including Viva-voce.

## **SEMESTER-I**

### **PAPER-101**

#### **INDIAN SOCIETY AND ISSUES OF DEVELOPMENT**

**Full marks – 100      Duration Examination - 4hours**

##### **Unit:1**

Social problems in India: concept; Poverty; Unemployment; Illiteracy; Youth Unrest; Child Labor; Crime; Juvenile Delinquency; Terrorism; Beggary, Prostitution and AIDS; Corruption.

##### **Unit:2**

Anthropology, Culture and Development: Meaning and Evolution of the Concept of Development; Anthropology, Post-Modernism and Post-development; Anthropology of Development; Anthropologists within Development.

##### **Unit:3**

Approaches to the study of Development: PRA, RRA, Participatory Mapping, Social Capital, Livelihood and Sustainable Development, JFM, Involuntary Displacement and Resettlement,

##### **Unit:4**

Development situation in India- Impact of globalization on rural India: industries, Co-operatives, Micro-enterprise, Non-Farm Employment, Agrarian relations, Poverty Reduction. The 73<sup>rd</sup> Constitutional Amendment and PRIs, E-governance.

##### **Unit:5**

Globalization, Culture and Development; Feminism, Gender and Development; women and self help Groups. Indigenous Knowledge system, Bio-diversity conservation and Intellectual Property rights.

##### **References**

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Singer, Milton (1972) When a Great Tradition Modernizes: An Anthropological Approach to Indian Civilization, New York; Praeger.

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- Gardner, Katy and David Lewis (1996) *Anthropology, Development and the Post-modern challenge*, London: Pluto Press.
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- Jeffery, Roger and Nandini Sundar (eds.) (1999) *A New Moral Economy for India's Dorests? Discourses of Campbell, John R. (2001) Participatory Rural Appraisal as Qualitative Research: Distinguishing Methodological issues from participatory calims*, Human Organization, winter.
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- Chaudhary, S.N. (2004) Dalit and Tribal leadership in panchayats, New Delhi: Concept.
- Sivanna. N. (1990) Panchayati Raj Regorms and Rural Development, Allahabad: Chugh Publications.
- Sharma, B.D. (1997) Self –Rule Laws-MP Gram Sabha, New Delhi: SahyogPustakKuteer.
- Vyasulu, Vinod (2003) Panchayats, Democracy and Development, Jajpur: Rawat.
- Misra, kamal K. (ed.) (2005) Anthropology, New Global order and other Essays, New Delhi; Concept.
- Inda, Jonathan Xavier and Renato Rosaldo (eds.) (2002) The Anthropology of Globalization: A Reader, Malden, MA: Blackwell Publishing.
- Schech, Sussanne and Jane Haggis (200) Culture and Development: A Critical introduction, MA: Blackwell Publishing.
- Appadurai, Arjun(1996) Modernity at Large: Cultural Dimensions of Globalization, Minneapolis: University of Minnesota Press.
- Misra , Kamal K. And M.L.K.Murty (eds.) (2001) peoples and environment in India, New Delhi: Discovery publishing House.
- Warren,D. Et.al (eds.)(1995) The Cultural dimension of Development : indigenous Knowledge Systems, London: Intermediate Technology Publications Ltd.
- Misra, Kamal K. (2005) Indigenous knowledge, Natural resource Management and Develoment: the Konda Reddi Experience, New Delhi: Pratibha Prakashan and Bhopal: IGRMS.

## SEMESTER-I

### Paper-102 (Group- A)

#### THEORIES IN SOCIAL ANTHROPOLOGY

**Full marks – 100      Duration Examination - 4hours**

##### **Unit:I**

From function to meaning: Contribution of Evans- Pritchard Cognitive Anthropology: The use of Linguistic Epistemology in Cultural Analysis: (Tyler. Conklin, Frake, Goodenough).

##### **Unit:II**

Structural- Functional and Functional Theories, Structuralism.

##### **Unit:III**

Post-structuralism in Anthropology, Post- Modernism in Anthropology.

##### **Unit:IV**

Approaches to the study of culture and society: Evolutionism, Diffusionism

##### **Unit:V**

From structure to process: Contributions of Turner, Marry Douglas and David Schneider to symbolism, Interpretive Anthropology: Contributions of Geertz,

##### **References**

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- Bloch. M.(ed.) (1975) Marxist Analyses and social Anthropology (ASA Studies, 3) London: Malaby.
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- Evans Pritchard, E.E. (1940) The Nuer, A description of the modes of livelihood and political institutions of a Nilotic people, Oxford: Clarendon.

Evans Pritchard, E.E. (1962) *Essays on Social Anthropology*, London: Daber & Daber, Harris, Mavin (1968/2001) *The Rise of anthropological Theory*, New York: Thomas Y. Crowell Co. Chapter- 20.

Gellner, Ernest (1980) *Society and Western Anthropology*, New York: Columbia university Press.

Godlier.M. (1977) *Perspectives in Marxist Anthropology*, Cambridge Up.

Greetz, Califford (1973) *Interpretation of Cultures*, New York: Basic Books.

Kahn, J&J. Llobera (1981) *The Anthropology of Pre-Capitalist Societies*, London: MacMillan.

Kuper, Adam(1973) *Anthropology and Anthropologists*, London: Allen Lane.

Layton, Robert (1977) *an Introduction to Theory in Anthropology*, Cambridge: Cambridge Univ. Press, Chapter.7.

Manners, R.A. and D.Kaplan (eds) (1986) *Theory in Anthropology : A source Book* , London: RKP. Pp.475-500.

Spiro, Melford E. (1996) *Postmodernist Anthropology, Subjectivity and science*.

Turner V. (1969) *Ritual Process: The Structure and Anti Structure*, New York.

Tyler , Stephen (ed.) (1987) *Cognitive Anthropology*, Prospect Heights, III, Waveland Press, pp. 1-23 pp. 1-23



## SEMESTER-I

### Paper-102 (Group – B)

### HUMAN EVOLUTIONARY GENETICS

Full marks – 100      Duration Examination - 4hours

#### UNIT :I

Human Evolutionary Genetics, Meaning and scope Fundamentals of Human Genome: Nuclear, Mitochondria and Y- Chromosome

Levels of Diversity of Human Genome: SNPs, Base substitution, mutation, Nuclear and Mitochondrial DNA, VNTR Loci, Microsatellites (STR), Mini satellites, Transposable elements (LINES & SINES), Satellites and telomere

#### UNIT:II

Methods of Assessment of Genome Diversity: Application of PCR, RFLP, RAPD and AFLP, Typing of micro and mini satellite, Typing Alu /LINES, Polymorphism, DNA sequencing.

#### UNIT:III

Process of Shaping Diversity: Equilibrium Law, Mutation and Recombination, Genetic Drift, Selection & Migration, Measures diversity, Nucleotide Diversity, Other Measures of Molecular diversity, apportionment of Diversity, Genetic distance measures, Phylogenetic method

#### UNIT :IV

Origins of Humans: Evidence from different sources, Colonization Process of Human out of Africa in to Asia, Australia etc. Agricultural Expansion and its bearing on genetic structure of population.

#### UNIT :V

Genome Diversity of People of India, Ancient DNA analysis, Health implication of modern genetic diversity, Epigenetic & its importance for Biological Anthropology

#### References

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15. Weiss M. L. and Alan E. Mann. 1981. *Human Biology and Behaviour: an Anthropological Perspective. (3rd edition)*. Little, Brown and Company, USA.
16. Muller, R. F. And I. D. Young. 2001. *Emery's Elements of Medical Genetics, 11<sup>th</sup> Edition*. Churchill Livingstone.
17. Primose, S. B. and R. M. Twyman. 2006. *Principles of Gene Manipulation and Genomics, Seventh Edition*. Blackwell Publishing, USA.
18. Crawford, M. (Ed). 2006 *Anthropological Genetics*. Cambridge University Press.
19. Brown, T. A. 2002. *Genomes 2 Edition*. Wiley-Liss, UK.
20. Jobling M. A., M. E. Hurles and C. Tyler-Smith. 2004. *Human Evolutionary Genetics: Origins, Peoples & Disease*. Garland Science. New York.
21. Sudbery, P. 2009. *Human molecular genetics, 2<sup>nd</sup> Edition*. Pearson (LPE).
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23. Lewin, B. 2008. *Genes IX*. Jones and Bartlett Publishers, Sudbury, Massachusetts.
24. Cavalli-Sforza, L. L. & W. Bodmer-*Evolution, Genetics and Man*. W. H. Freeman, San Francisco
25. Li, Wen-Hsiung. 1997. *Molecular Evolution*. Sinauer Associates, Inc., Publishers, USA.
26. Page, R. D. M. and E. C. Holmes. 1998. *Molecular Evolution: A Phylogenetic Approach*. Blackwell Science, London.
27. Jobling M. A., M. E. Hurles and C. Tyler-Smith. 2004. *Human Evolutionary Genetics: Origins, Peoples & Disease*. Garland Science. New York.
28. Bajema, C. J. 1971. *Natural Selection in Human Populations. The Measurement of Ongoing Genetic Evolution in Contemporary Societies*. John Wiley & Sons, Inc. Canada.
29. Barnard, Alan. 2011. *Social Anthropology and Human Origins*. Cambridge University Press, UK
30. Pollard, T. M. 2008. *Western Diseases: An Evolutionary Perspective*. Cambridge university press, UK.
31. Cavalli-Sforza, L. L., P. Menozzi, A. Piazza. 1994. *The History and Geography of Human Genes*. Princeton University Press, Princeton.
32. Cavalli-Sforza, L. L. and M. Feldman. 1981. *Cultural Transmission and Evolution*. Princeton University Press, Princeton.
33. Stone, Linda; Lurquin, Paul F.; **Cavalli-Sforza, L. Luca** (2007). *Genes, Culture, and Human Evolution: A Synthesis*. Malden (MA): Wiley-Blackwell.

## **SEMESTER-I**

### **PAPER 102 (Group-C) METHODS AND ISSUES IN ARCHAEOLOGICAL ANTHROPOLOGY**

**Marks-100      Duration Examination - 4hours**

#### **Unit:I** Nature and Aims of Archaeology:

Meaning, Definitions, Assumptions and Goal of Archaeology; Ethics in Archaeology; Archaeology as Anthropology; Archaeology and the Sciences; Archaeology and Environment.

The Emergence of Modern Archaeology (from antiquarianism to modern archaeology), Historical Perspective and Anthropological Perspective; Archaeological Anthropology in Independent India: Contribution of Institutions and Individuals.

#### **Unit:II** Methods of Survey and Excavation of Sites and Features:

Surface Survey: Objectives, Methods and Approaches to Surface Survey- Ground Reconnaissance, Aerial Reconnaissance, Recording and Mapping Sites in Reconnaissance Survey; Geographic Information System Reliability of Surface Collection)

Excavation: Purposes and Principles of Excavation; Techniques and Methods of Excavation, Excavation of Architectural Features, Burials, Rock shelter and Caves Stratification, and Petroglyphs; Recovery, Recording, Processing and Classification of Evidences .

#### **Unit:III** Quantitative Methods and Information Science in Archaeology

Place of Quantitative Methods in Archaeological Research.  
Introduction to Simple Statistics and its Application in Archaeology.

#### **Unit:IV** Recent Trends in Indian Archeology:

Progress of Prehistoric Research in India; Application of Geo-Archaeology in Indian Archaeology, Study of Man and Land Relation in India.

Prehistoric Archaeology of Odisha-its Problems and Prospects; Ethno-Archaeological Studies in India with special reference to Odisha; Relevance of Museums in Anthropology and Archaeology in India.

#### **Unit:V** Challenges to Archaeology:

Major Source of Challenges- Looting and Antiquity Collecting, Destruction in the Name of Progress; Facing the Challenges to Archaeology-Contract Archaeology, Conservation Archaeology.

The Responsibilities of Archaeology- Preservation of Archaeological Record, Working with the Concerned Ethnic Group, Publication.

## References

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2. Basa K.K., Md. Rehan, R.K. Gupta 2007, *Museology A Comprehensive Bibliography and Webliography*, Serial Publications, New Delhi.
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7. Bhattacharya, D. K. 2001. *An Outline of Indian Prehistory*. Delhi: PalakaPrakashan.
8. Chakrabarti, D.K. 2001. *India: An Archaeological History: Palaeolithic Beginning to Early Historic Foundation*. New Delhi: Oxford University press.
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10. Clark, Grahame, 1977, *World Prehistory: A New Outline*: Cambridge, England: The University Press.
11. Dikshit, K. N. (Ed.), 1985, *Archaeological Prospective of India since Independence*. New Delhi.
12. Hole, F. and Robert F. Heizer, 1973. *An Introduction to Prehistoric Archaeology*. New York: Holt, Rinehart and Winston.
13. Jain, V.K. 2009, *Prehistory and Protohistory of India*. New Delhi: D.K. Printworld (P) Ltd.
14. Joukowsky, Martha 1986. *A Complete Manual of Field Archaeology: Tool and Techniques of Field Work for Archaeologists*. New York: Prentice Hall Press.
15. Lewis, B., R. Jurmain, L. Kilgore, 2007. *Understanding Physical Anthropology and Archaeology*. United States of America: Thomson Wordsworth.
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17. Nautiyal, K. P.1989, *Protohistoric India*. Delhi: Agam Kala Prakashan. Paddayya, K. (Ed.), 2002, *Recent Studies in Indian Archaeology*. New Delhi.
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29. Konnie L. Wescott, R. Joe Brandon. 1999. Practical Applications of GIS for Archaeologists: A Predictive Modelling Toolkit; CRC Press,
30. Mark Aldenderfer. 1998. Quantitative Methods in Archaeology: A Review of Recent Trends and Developments; *Journal of Archaeological Research*, Vol. 6, No. 2 (June 1998), pp. 91-120
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33. Shennan Stephen. 2014. Quantifying Archaeology; Elsevier
34. Drennan, Robert D. 1996. Statistics for Archaeologists: A Common Sense Approach; Springer Science & Business Media,

## SEMESTER-II

### Paper 201 (Group – A) Practical

#### ADVANCED RESEARCH METHODS IN SOCIAL ANTHROPOLOGY

**Full Mark 100      Duration of Examination- 6 hours**

The students are to conduct the following practical and submit their assignments and term papers accordingly to the following components in the detailed curriculum given below.

They are required to be familiar with new methods and their applicability in social research

1. Qualitative Research (20)

Logic of Scientific Methods  
Designing Qualitative Research  
Ethics of Qualitative Research  
Literature Review in Qualitative Research.

2. Qualitative Research (20)

The students are required to be exposed to and submit assignments based on

- a. Case Study Research
- b. Grounded Theory Research
- c. Focus Group Research
- d. Action Research
- e. Feminist Research
- f. Critical Research

3. Ethnographic Research (20)

Ethnographic Method  
Ethnographic Observation  
Strategies for Analysis and Representation Ethnographic Data  
Multi- Sited Ethnography

4. Qualitative Research Methods (20)

Census and Published data only by using these methods  
Statistical Inference : Significance of Hypothesis  
Testing – Z Test, t – test, ANOVA  
Simple and Multiple Regression  
Electronic Research – Computer Assisted Qualitative Data Analysis (CAQDA)/ Statistical Package for Social Sciences (SPSS)

5. Viva Voce (20)

## Books Recommended

1. Atkinson, P., Coffey, A., Delamont, S., Loftland, J., and Loftland, L. (eds.) (2001) *Handbook of Ethnography*. London: Sage.
2. Bentz, Valerie Malhotra and Jeremy J. Shapiro (1998) *Mindful Inquiry in Social Research*. New Delhi: Sage Publications.
3. Bernard, Russel (2006) *Research Methods in Anthropology: Qualitative and Quantitative Approaches*. Lanham: Altamira Press.
4. Boyd, R., Jasper, P., AND Trout, J.D. (eds.) (1991) *The Philosophy of Science*. Cambridge, MA: Blackwell Publishers.
5. Bryman, A. (2004) *Social Research Methods (2<sup>nd</sup> ed.)*. Oxford: Oxford University Press.
6. Charmaz, K. (2006) *Constructing Grounded Theory. A Practical Analysis Through Qualitative Analysis*. London: Sage.
7. Creswell, J. (1998) *Qualitative Inquiry and Research Design. Choosing Among FIVE Traditions*. Thousand Oaks, CA: Sage.
8. Czarniawska, B. (2004) *Narratives in Social Science Research*. London: Sage.
9. Denzin, N. And Lincoln, Y.S. (eds.) (2005b) *The Sage Handbook of Qualitative Research (3<sup>rd</sup> ed.)*. London: Sage.
10. Edmunds, H. (2000) *Focus Group Research Handbook*. McGraw Hill.
11. Flick, U. (2006) *An Introduction to Qualitative Research (3<sup>rd</sup> ed.)*. London: Sage.
12. Gaur, A. S., AND Gaur, S.S. (2009) *Statistical Methods for Practice and Research: A Guide to Data Analysis Using SPSS (2<sup>nd</sup> ed.)*. London: Sage.
13. Greenwood, D., and Levin, M. (1998) *Introduction to Action Research*. Thousands Okas, CA: Sage.
14. Gupta, A. Ferguson (1997) *Anthropological Locations: Boundaries and Grounds of a Field Science*. Berkeley: University of California Press.
15. Gupta, S.C., and Kapoor, V.K. (2000) *Fundamentals of Mathematical Statistics: A Modern Approach*. New Delhi: S.Chand.

## SEMESTER-II

### Paper-201 (Group – B) Practical

#### (TECHNIQUES IN HUMAN MOLECULAR GENETICS AND BIOSTATISTICS)

**Full Marks 100      Duration of Examination- 6 hours**

The students are to conduct the following tests and record the results. They are to be familiar with details of each experiment such as aim of the experiment, apparatus required, chemicals needed, procedure, precaution and result of the experiment.

<b>A. Molecular Analysis</b>	20
I.      Extraction of DNA and Calculation of OD	
II.     Polymerase Chain Reaction	
<b>B. Bioinformatics</b>	20
I.      Genotype data analysis project: The HAPMAP Website	
II.     Bioinformatics resources: NCBI, Ensemble resources	
III.    Primer Designing and BLAST	
<b>C. Demographic data analysis</b>	20
Construction of Population Pyramid and estimation fertility, mortality and nuptiality rates from Census and other published data (Special reference to SC and ST populations)	
Data analysis through SPSS	
<b>D. Biostatistics</b>	20
Estimation of ABO allele frequency, Mutation Rate, Genetic distance, Intensity of selection, inbreeding coefficient	
Practical Record	10
Viva- Voce	10

#### References:

1. Weiner J.S. and J.A. Lour. 1981. *Practical Human Biology*. Academic Press, New York.
2. Mukherji, D., D. Mukherjee and P. Bharti. 2009. *Laboratory Manual for Biological Anthropology*. Asian Books Pvt. Ltd., New Delhi.
3. Rao, V.K. (Ed.) 1996. *Biostatistics: A Manual of Statistical Methods for use in Health, Nutrition and Anthropology*. Jaypee Brothers Medical Publishers (P) Ltd., New Delhi.
4. Bryman, A. 2009. *Social Research Methods*. Oxford University Press, New York.
5. Madrigal L. 1998. *Statistics for Anthropology*. Cambridge University Press, UK.
6. Malhotra, K. C. (Ed.) 1988. *Statistical Methods in Population Genetics in India*. ISI, Kolkata.
7. Tembhare, D. B. 2008. *Techniques in Life Sciences*. Himalaya Publishing House. Mumbai.



8. Lesk. A. M. 2007. *Introduction to Bioinformatics*, 2<sup>nd</sup> Edition. Oxford University Press.
9. Mohanty, D. And R. Colah. 2008. *Laboratory Manual for screening, Diagnosis and Molecular Analysis of Haemoglobinopathies and Red Cell Enzymopathies*. Bhalani Publishing House, Mumbai.
10. Agrawal, S. 2004. *Molecular Techniques and Bioinformatics Tools*. DBT Sponsored National Workshop on Molecular Techniques in Transplant Biology (Sept.15th-Oct.5<sup>th</sup>). Sanjaya Gandhi Postgraduate Institute of Medical Sciences. Lucknow, UP, India.

## SEMESTER-II

### Paper 201(Group- C) – Practical (Archaeological Surveying and Analysis of Antiquity)

**Full Marks 100      Duration of Examination- 6 hours**

The students are to conduct the following practical to gain expertise on the Surface exploration and excavation of archaeological sites, recovery and recording of data and analysis of antiquities or representative samples. They are to be familiar with details of Reading the topographic map, identification and interpretation of antiquities, preservation and conservation of antiquities, instruments or apparatus required, chemicals or solutions required, procedure, precaution and use of the prepared solution.

#### **PRACTICAL**

**70 marks**

1. Study of topographic map and its interpretation
2. Surveying of the archaeological sites, recording and collecting Antiquities from archaeological site
3. Methods of collection of dating materials.
4. Technical analysis of antiquities ( Lithic, Ceramic and Skeletal) using various Attributes and other methods.
5. Methods of preservation and conservation of antiquates( of Metal, Bone, Ivory, Leather, Feather, Fabric, Paper, objects.)
6. Writing of survey or excavation report, Preparation of drawings, maps and Photographs for publication.
7. Practical Record **10 marks**
8. Field Diary **10 marks**
9. Viva-Voce **10 marks**

#### **References**

1. Atkinson R.J.C – Field Archaeology
2. Brothwall D.R – Science and Archaeology
3. Brothawall D.R. – Digging up Bones : The Excavation, Treatment and Study of Human Skeletal Remains.
4. Cornwall, I.W – Books for the Archaeologist.

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5. Cookson, M.B. – Photography for Archaeologist.
  6. Ghosmaulik, S.K., B. Rath and S.K. Mishra- Practical Anthropology
  7. Heizer Robert, F, and John A. Graham – A Guide to field methods in Anthropology
  8. Jackson, M.L – Chemical Analysis of soil
  9. Jackson, Martha – A complete manual of Field Archeology : Tools and Techniques of Field work for Archaeologists.
  10. Sankalia, H.D. – Stone Age Tools and Techniques.
  11. Survey of India – Map Education.

## **SEMESTER-II**

### **Paper-202 (Group A, B, C): Dissertation**

**Full Mark 100      Duration of Examination- 6 hours**

Each student of each Group is required to submit a dissertation in the basis of two Months fieldwork on topics relating to his /her field of specialization under the supervision of a teacher or teachers. The dissertation will be examined and evaluated by an Internal and External examiner including Viva-Voce.