

ITEJ P-5.3
MCA 5th Sem,Utkal University 2020
Answer All Questions. Each Question carries equal marks

Unit-I

- Q1 a) What is constructor in java? Write a java program to create a class **Book** having data fields title, author and price of the book. The class should have a constructor **Book(String title, String author, double price)** to initialize the data fields as well as accessor and mutator methods to get and set the values of data fields. Display the book details on the screen.
- b) Write down the advantages of ArrayList over Array. Write a java method to search an element from array of numbers by passing the array to the method.
- OR
- a) Write a java program for payroll calculation of an Employee. The program should have a class named as Employee. Identify the data fields and methods to be encapsulated in the class .Display the net salary of the employee on the screen.
- b) Differentiate between class and Interface. Write down the use of **Iterator** interface with suitable example.

Unit-II

- Q2 a) Write a function in javascript to validate an input-field that contains an e-mail address.
- b) Create a table in HTML to display train details.

Train Name	Starting Place	Destination	Fare

Align the table in the center of the screen. Use a caption for the table '**Time Table For Train**'.

OR

- a) What is the use of event handling in Javascript ? Write a Javascript code to display the current date when a button is clicked.
- b) What is hyperlink ? Write HTML code to create two hyperlinks to open Google and Facebook site.

Unit-III

- Q3 a) Explain about the types of Drivers available in JDBC API.
- b) Using JDBC write a java program to print the marklist of a student from the table named as **Student_mark(Regd_ID,Stu_name,dept,semester,mark_percentage)** .Your program should accept Regd_ID as input.

OR

- a) What is JDBC? Explain the terms Connection , Statement and ResultSet .
- b) Design a java application using JDBC to show an entrance result with Name_student , Mark, Rank stored in a table **Rank(Regd_no,Name_student,mark,rank)** where Regd_no is input to the program.

Unit-IV

- Q4 a) JSP is a servlet.Justify through the life cycle of JSP.
- b) Write down the use of directive tags in JSP . What are different types of page directives attributes in JSP ?

OR

- a) What is exception in JSP ? Write a program in JSP to show the way exceptions are handled .
- b) Write a client-server program in JSP to calculate simple interest . The principal amount, time period and rate of interest are to be provided though an HTML form.

Unit-V

- Q5
- a) What is Java bean? How do you use a Java bean in a JSP program? Give a suitable example.
 - b) What is MVC? Explain MVC model through a suitable diagram.

Or

- a) What is a JAR file? Write down the steps to create a JAR file.
- b) Write a database program using JSP to insert a record into a database STUDENT having fields Roll_No , Name and Stream .