III B. TECH I SEMESTER REGULAR EXAMINATIONS, FEB - 2022 ADVANCED JAVA PROGRAMMING (INFORMATION TECHNOLOGY)

Time: 3 Hours Max. Marks: 60

Note: Answer **ONE** question from each unit $(5 \times 12 = 60 \text{ Marks})$

UNIT-I

- 1. a) What are the different types of Result Set? What are the [6M] differences between Result Set and Row Set?
 - b) What is batch processing and how to perform batch processing [6M] in JDBC?

(OR)

- 2. a) Explain Request Message in HTTP? List the different methods [6M] which can be performed on the resource identified by a given Request-URI.
 - b) How to create a nested webpage in HTML?

[6M]

UNIT-II

- 3. a) Consider a class 'Student' with 'name', 'address', 'rollNo', and [6M] 'departmentName' as member variable. Write a program to instantiate an 'Student' object and serializes it to a file named 'student.ser'.
 - b) What is Bound Property? How to implement Bound Property [6M] support within a Bean?

(OR)

- 4. a) Write a program to demonstrate how Java allows the applet to [6M] transfer the control to another URL by using the AppletContext interface.
 - b) Why we use java Beans? Write a program to implement a [6M] JavaBean class named 'Employee' with two private members named 'ID' and 'Name'. Instantiate the class to create an employee object with 45 as its ID and name "Krishna". After creating the object display the Id and Name in the console.

UNIT-III

5. a) What is Servlet? Explain different Stages of the Servlet Life [6M] Cycle.

b) Write a suitable program to explain the following statement: [6M] "Servlet plays a controller role in MVC whereas JSP is the view in MVC approach."

(OR)

- 6. a) What is a session? How to create sessions with a unique [6M] session id for each user in java servlet?
 - b) What are the advantages of JSP over Pure Servlets? Briefly [6M] explain various attributes of page directive?

UNIT-IV

- 7. a) What s dynamic content? How to implement dynamic content in [6M] JSP?
 - b) What are Include directives and JSP Expression tag? Create a [6M] JSP file named 'add.jsp' which is having three integer variable a, b and C, where a = 5, b = 6, and c = a+b; the page also displays the value of c after addition. Use include directives to create another file 'include.jsp'.

(OR)

- 8. a) What is session sharing and data sharing in JSP? Write a [6M] Program to send data from one JSP page to another JSP page?
 - b) Explain error handling methods in JSP.

[6M]

UNIT-V

9. a) Explain Spring Framework architecture in detail.

- [6M]
- b) Which is better constructor injection or setter injection? Explain [6M] with an example.

(OR)

10. a) Draw and discuss struts framework in detail.

- [6M]
- b) Write a program to demonstrate Dependency Injection by [6M] Constructor.

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