Roll No. | | | | | | | | | | | |

B.TECH
(SEM V) THEORY EXAMINATION 2022-23
WEB TECHNOLOGY

Time: 3 Hours   *Total Marks: 100*

Note: Attempt all Sections. If you require any missing data, then choose suitably.

SECTION A

1. **Attempt *all* questions in brief.**   **2 x 10 = 20**
   - (a)   Discuss the comparison among JDK, JRE and JVM?
   - (b)   Discuss basic elements of a good website design.
   - (c)   Discuss the usage of Cascading style sheets.
   - (d)   What is DHTM?
   - (e)   Define Protocol. Provide the name of protocols governing web.
   - (f)   What to you understand by Datagram?
   - (g)   Discuss difference between ODBC and JDBC.
   - (h)   Discuss do Post() and do Get() method.
   - (i)   Discuss difference between CGI and Servlet.
   - (j)   Discuss JSP Technology.

SECTION B

2. **Attempt any *three* of the following:**   **10 x 3 = 30**
   - (a)   Discuss the Packages in Java. Discuss how to create a user defined package in Java with a suitable example.
   - (b)   Write HTML code to design "a form for online Railway Reservation Website" (Make Assumptions).
   - (c)   What is AJAX and also discuss its Advantages? Explain its working with a suitable Example.
   - (d)   Write down the steps to connect database with web application using JDBC.
   - (e)   Explain the Servlet Life Cycle. Write a servlet code to display a string "WEAR MASK!"

SECTION C

3. **Attempt any *one* part of the following:**   **10 x 1 = 10**
   - (a)   What are 'Exceptions' and how they are 'Handled' in Java? Explain the keywords try, catch, throw, throws with a suitable example.
   - (b)   Discuss what you understand by Inheritance? List out various type Inheritance with suitable example

4. **Attempt any *one* part of the following:**   **10 x 1 = 10**
   - (a)   Write the HTML code to design a Student registration form. (Assume fields).
   - (b)   What is DTD? Discuss its differences with XML Schema.

5. **Attempt any *one* part of the following:**   **10 x 1 = 10**
   - (a)   Discuss in brief how to perform Client Side Validation like Mandatory fields and Email field using Java Script? Justify with a suitable example.
   - (b)   What is CSS? Discuss the different ways to create CSS. Explain with example.

6. **Attempt any *one* part of the following:** 10 x 1 = 10
   (a) What is EJB, also discuss its Architecture. Differentiate between Java Bean and EJB.
   (b) What are java Beans? Why they are used? Write a JSP page and use an existing java bean in JSP page by using the standard action. Write the program with describing the output?

7. **Attempt any *one* part of the following:** 10 x 1 = 10
   (a) Discuss the different types of standard action tags used in JSP. Discuss the implicit objects available to JSP page.
   (b) (i) Create a HTML Form for taking Account Number as User Input.
       (ii) Write a Servlet program receiving this HTML form data and connect it with the Database by using JDBC.
       (iii) Send the current user Account Balance stored in a specific Database back to the User as response.
       (iv) Mention all the assumptions like Table Name, Database Name, Field Name etc

QP23DP1_290

| 25-01-2023 13:24:18 | 117.55.242.132