



R20 Regulation

Subject code: 3P6EC

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A' Grade)

B.Tech VI Semester Regular Examinations, June/July 2023

WEB TECHNOLOGIES

(CSE)

Maximum Marks: 70

Date: 27.06.2023 Duration: 3 hours

- Note:
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks

(10x2M=20 Marks)

- 1 "PHP is a Server side scripting language". Justify
- 2 Give the purpose of setcookie() function in PHP with an example.
- 3 Define Well-formed and Valid XML files.
- 4 What are the advantages of XML Schemas over DTD?
- 5 List all the problems with Servlets.
- 6 Define Session. What is the purpose of HttpSession interface?
- 7 List different Implicit JSP objects.
- 8 Which JSP tag is used to declare variables and methods? Give an example.
- 9 List various primitive data types that JavaScript supports.
- 10 What are the advantages of AJAX?

Part-B

Answer All the following questions.

(5X10M=50Marks)

- 11 A. Explain with examples how \$_GET() and \$_POST() methods are used to read HTML form data in a PHP program. (5M)
B. Explain in detail about the following file handling functions with examples: (5M)
(i) fopen()
(ii) fread()
- OR
- 12 A. List different types of functions in PHP and explain in detail each of them with an example. (5M)
B. Write a PHP program to connect to MySQL database and retrieve details (id, name, department, designation, salary) from Employee table. (5M)
- 13 A. What is the basic structure of an XML file? Create an XML file which stores the details of employees which includes: id, name, department, contact and salary. (5M)
B. Differentiate between DOM and SAX Parsers. (5M)

OR

- 14 A. Define DTD. Design and include an external DTD for the XML file given below: (6M)

catalogue.xml:

```
<catalogue>
  <book id="101">
    <title>Web Technologies</title>
    <author>John Duckett</author>
    <publisher>TMH</publisher>
    <isbn>123-456-789</isbn>
    <edition>4</edition>
    <price currency="INR">500</price>
  </book>
</catalogue>
```

- B. Compare XML with HTML. (4M)

- 15 A. Define JDBC. Explain the JDBC architecture. (5M)
B. Explain with an example how to read Initialization Parameters stored in web.xml file using ServletConfig Interface. (5M)

OR

- 16 A. Define Servlet? Explain in detail Servlet Life Cycle Mechanism. (5M)
B. Differentiate between GET and POST requests. Write a Servlet program that handles HTTP POST request. (5M)

- 17 A. Explain in detail the anatomy of a JSP page. (6M)
B. Write a JSP that reads an integer and determines and displays whether it is an odd or even number. (4M)

OR

- 18 A. Illustrate with examples various JSP Scripting Elements. (5M)
B. Write a JSP page that connects to the database and extracts data from the books table and display them using JDBC. Assume that Books table contains: title, author, publication, edition, quantity and price. (5M)

- 19 A. Explain with examples onClick and onSubmit event handlers in Javascript. (5M)
B. Define AJAX. Differentiate between traditional web application and AJAX based web application. (5M)

OR

- 20 A. Develop a JavaScript program that reads an integer and determines and displays whether it is an odd or even number? (4M)
B. Write about the properties and methods of the following JavaScript DOM Objects. (6M)
i) Document ii) Form iii) Window