2022

COMPUTER SCIENCE

(Honours)

Paper : CSC–HC–5016

(Internet Technology)

Full Marks : 60

Time : Three hours

**The figures in the margin indicate
full marks for the questions.**

1. Answer the following questions as directed : **(any seven)** 1×7=7

(a) In a P2P network, each node is independent of the other.

(State true or false)

(b) Port number for Domain Name Service is _____. *(Fill in the blank)*

(c) Which HTML tag is used to declare internal CSS ?

(i) < Script >

(ii) < Link >

(iii) < CSS >

(iv) < Style >

(Choose the correct option)

(d) Which of the following object is the main entry point to all client-side JavaScript features and APIs ?

    (i) Location

    (ii) Position

    (iii) Window

    (iv) Document

               (Choose the correct option)

(e) Syntax for writing regular expression in JavaScript is _____. *(Fill in the blank)*

(f) _____ package contains classes and interfaces for JDBC API.

               (Fill in the blank)

(g) Prepared statement interface is used to execute parameterized query.

               (State true or false)

(h) HTTP cookie is used for session management. *(State true or false)*

(i) The _____ component of MVC is used for all the UI logic of the application.

               (Fill in the blank)

(j) _____ is an implicit JSP object.

               (Fill in the blank)

(k) The JavaBean properties and methods can be exposed to another application.

               (State true or false)

(l) JAR stands for _____.

               (Fill in the blank)

2. Define the following terms : *(any four)*

                          2×4=8

    (a) SMTP

    (b) CSS

    (c) Web server

    (d) Events

    (e) ResultSet object

    (f) API

    (g) MVC

    (h) JavaBean

3. Answer *any three* of the following questions :

                          5×3=15

    (a) Give brief description of the following HTML tags :

        < input >, < td >, < script >, < style >, < br >.

    (b) Explain the features of HTTP.

    (c) Give brief description of *any five* string methods used in JavaScript.

    (d) What is ArrayList in JavaScript ? What is difference between array and ArrayList in JavaScript ?

    (e) Write down the steps to connect any java application with the database using JDBC.

    (f) Write the differences between Servlet and JSP.

(g) Write down the features and components of MVC.

(h) Explain the methods of sharing data between JSP pages.

4. Answer *any three* of the following questions : 10×3=30

(a) Design a HTML page to input coefficients of a quadratic equation and using JavaScript code, display the roots of the equation.

(b) Write a Java program to modify an existing table in a database and update records in it using JDBC API.

(c) Explain the life cycle of JSP.

(d) Explain *any three* implicit objects of JSP. Give example.

(e) Give brief description of datatypes and operators of JavaScript.

(f) What are the types of scripting elements available in JSP ? Explain each.

(g) Write short notes on :
   (i) DNS
   (ii) Client server model

(h) What is JavaBean ? Explain the steps to create JavaBean.

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