2024

COMPUTER SCIENCE — HONOURS — PRACTICAL

Paper : DSE-B-4P

(Advanced Java)

Full Marks : 30

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

Set - 1

Marks Distribution

Experiment / Source Code :   15

Output   :   05

Sessional   :   04

Viva voce   :   06

Answer *any one* question.

1. Write an application in JSP/Servlet that shows monthly payslip for employees of an organization in tabular format from a database table Employee (id, name, date of birth, date of joining, address, designation, basic). An employee's salary comprises of basic, DA 30%, HRA 15%, Medical allowance of ₹ 500 for manager level or above else ₹ 300. While displaying the net salary of an employee, deduct tax of ₹ 5000 for manager and above else deduct ₹ 2000 per month.

2. Write a JSP/Servlet application that counts and displays the number of times an user has accessed the application and store/update that information into the database table Access(username, count).

3. Write an application in JSP/Servlet that shows a report on employee details in a tabular format from a database table EMP(id, name, designation, manager_id, date_of_join, basic). The system will have a provision to display the number of employees working under each manager.

4. Write an application in JSP / Servlet for base conversion of user input. The system will take the input base (2/10), an input number and the output base (10/2) to perform conversion of input number to resultant base and display the result.

5. Design a purchase order form using html form and servlet. At one time, user must submit any one product details from drop down menu using the order form. Products with number of stocks less than 5 can be ordered with suitable message as "_____ number of Order placed for product id _____" to user, else reply as "Sorry! Your order may not be placed now!".

6. Write a servlet application that shows if a user has logged in for the first time. If the user has accessed the application for more than 10 times then invalidate the session for security reasons with proper message.

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