

U.G. 5th Semester Examination - 2021**COMPUTER SCIENCE****[HONOURS]****Course Code : COM.SC-H-CC-P-512****[PRACTICAL]****(Internet Technologies Lab)**

Full Marks : 75

Time : 4 Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*Answer any **one** question.

Marks Allotment :

Experiment = 60, Lab Notebook = 5, Vice = 10

1. Write a JSP program to display the following pattern:

```

      1
    1 1
  1 2 1
1 3 3 1
1 4 6 4 1

```

2. Make two files as follows: a. main.html: shows 2 text boxes and 3 radio buttons with values "addition",

"subtraction" and "multiplication" b. operate.jsp: depending on what the user selects perform the corresponding function (Give two implementations: using request.getParameter() and using expression language)

3. Using JSP Program validate user input entered in a form. The input must include Name, DOB, Email ID, Lucky Number, Favourite food etc.
4. Write a JSP program to upload file into server and print current date and time.
5. Write a JSP program to count number of visitors on website.
6. Write a JSP Program to validate username and password to open an authentic session.
7. Write a JSP program to display a given number in words.
8. Create a table 'Student' and 'Teacher' in 'College' database and insert two rows in this newly created table using JDBC API and do the following:
 - a) Update an already created table 'Teacher' in 'College' database by updating a teachers' name, with "Dr." appended before the name, whose name is "Rita".

[Turn over]

- b) Repeat the same thing for all the teachers using PreparedStatement.
 - c) Delete the student with ID=3 from 'Student' database.
 - d) Insert two students to the Result Set returned by the query which selects all students with First Name="Ayush".
 - e) The database must also get updated along with Result Set.
9. Create a procedure in MySQL to count the number of Rows in table 'Student'. Use Callable Statement to call this method from Java code.
 10. Write a program using JDBC API to create a table 'Student' in the data base. Insert 5 records in the table 'Student'. Display all the records.
 11. Write a program using JDBC API to delete some records from 'Student' table created previously in the database system.
 12. Write a java script
 - a) To change the color of text using Set Time Out()
 - b) To move an image across screen using Set Interval()
 13. Write a java script to implement static password protection.
 14. Create a student registration form. Create functions using java script to perform the following checks: a.

Rollnumber is a 7-digit numeric value b. Name should be an alphabetical value (String) c. Non-empty fields like DOB.

15. Create a java script to remove all whitespaces from a text inputted from a form.
16. Create a java script to get the dimensions of an image.
17. Write a program to create an array of 10 integers. Accept values from the user in that array. Input another number from the user and find out how many numbers are equal to the number passed, how many are greater and how many are less than the number passed.
18. Write java program for the following matrix operations: (a) Addition of two matrices (b) Summation of two matrices (c) Transpose of a matrix Input the elements of matrices from user
19. Write a java program that computes the area of a circle, rectangle and a Cylinder using function overloading.
20. Write a java program to input 10 integers into an array and find the second minimum and second maximum number.
21. Write a java program to input N (N is user input) numbers and find out all the duplicate numbers in the array.
22. Write a java program to merge two sorted arrays.