FN01

Q1. Write a Java code to create a base class House. There are two sub-classes called Door and Window available. The House class has members which provide information related to the area of construction, doors, and window details. It delegates the responsibility of computing cost of doors and window construction to the Door and Window classes respectively. Write the program to model the above relationship and find the cost of constructing the house.

Q2. Write a program to create a calculator using JavaScript.

FN02

Q1. Write a Java program to implement flow layout management.

Q2. Write a program to check whether the string is palindrome or not using PHP.

FN03

Q1. Create a base class called Shape. It contains two methods getxyvalue() and showxyvalue() for accepting co-ordinates and to display the same respectively. Create the subclass called Rectangle which contains a method to display the length and breadth of the rectangle called showxyvalue(). Write a Java program to implement the concept using function overriding.

Q2. Write a program to create a login page by using PHP and Session.

FN04

Q1. Write a Java program to implement thread using the Thread class.

Q2. Write a program to insert student details into the student database using PHP and MySQL.

FN05

Q1. Write a Java program to make a student registration GUI using the following controls:

- JTextField – to collect the name of student

- JRadioButton - to collect the gender of student

- JComboBox – to collect the course of student (MSc, MCom, MA, MBA)

- JButton - to submit the details

The program should also include the provision to display the entered student details.

Q2. Write a program to perform form validation using JavaScript on employee registration form.

FN06

Q1. Write a program to implement file management in Java using the following operations:

a) Creating a file

b) Reading a file

c) Writing into a file

d) Deleting a file

Q2. Write a program to create a calendar for the month of September 2022 using HTML.

FN07

Q1. Write a Java program to implement user defined exception mechanism.

Q2. Write a program to create a biodata using HTML.

FN08

Q1. Design a class called 'Complex' with data members for the real and the imaginary parts. Provide a default constructor to initialize the objects. Write a Java program to perform the addition of two complex numbers using the parameterized constructor.

Q2. Write a program to check whether a number is prime or not using JavaScript.

FN09

Q1. Write a Java program to find the area of rectangle and circle using the concept of interface.

Q2. Write a program to create a simple user registration page using PHP and MySQL.

FN10

Q1. Write a Java program using class to multiply two matrices. The program should take input from the user for the dimensions of the matrices and the values of the elements. After multiplying the matrices, the program should display the resulting matrix.

Q2. Design and implement a PHP login page that validates user credentials, creates a session, and restricts access to authorized users.

FN11

Q1. Write a Java program that demonstrates the concept of method overloading to calculate the volume of a cylinder, a cube, and a rectangular box. Include appropriate methods for each shape and test the program with different input values.

Q2. Create a student registration form using HTML and JavaScript. Ensure that all fields (such as name, email, and phone number) are validated properly using JavaScript. Provide appropriate error messages for invalid inputs.

FN12

Q1. Write a Java program that utilizes constructor overloading to calculate the area of a rectangle and a square. Implement separate constructors for each shape, and provide methods to compute their respective areas. Test your program by creating instances of both shapes and displaying their areas.

Q2. Write a PHP program that prompts the user to enter a string and checks whether the string is a palindrome or not. Implement the logic using a function and provide the complete code for the program.

FN13

Q1. Create a class named 'Member' having the following members: Data members 1 - Name 2 - Age 3 - Phone number 4 - Address 5 - Salary It also has a method named 'printSalary()' which prints the salary of the members. Two classes 'Employee' and 'Manager' inherits the 'Member' class. The 'Employee' and 'Manager' classes have data members 'specialization' and 'department' respectively. Now, assign name, age, phone number, address and salary to an employee and a manager by making an object of both of these classes and print the same.

Q2. Write a program in JavaScript that takes a number as input and outputs whether it is a prime number or not.

FN14

Q1. Write a program in Java if number is less than 10 and greater than 50 it generates the exception out of range. Else it displays the square of number.

Q2. Create a PHP program for a simple user registration page that collects details such as name, email, and password. Store the user details in a database and display the registered user's details on a separate page.

FN15

Q1. Write a Java program that demonstrates the creation of threads using the Thread class to find the first 10 even numbers. Use the start () method to start each of the newly created threads. Inside the run() method there is a sleep() method for suspending the thread for 500 milliseconds.

Q2. Write a program in HTML to create a biodata, including personal information, education details, and skills, using appropriate HTML tags and attributes. Ensure proper structuring and styling of the biodata.

FN16

Q1. Write a program in Java for String handling which performs the following:

i) Checks the capacity of StringBuffer objects

ii) Reverse the contents of a string given on the console and convert the resultant string in upper case.

iii) Read a string from the console and append it to the resultant string of (ii).

Q2. Write a PHP program to create a web page for an online quiz using PHP and MySQL, including functionality to display questions, accept user answers, and calculate scores.

FN17

Q1. Write a Java program to make a package Balance in which has Account class with Display_Balance method in it. Import Balance package in another program to access Display_Balance method of Account class.

Q2. Create an HTML page to design and validate an employee registration form using JavaScript and HTML. The form should include fields for the employee's name, email, phone number, and a submit button. Implement JavaScript validation to ensure all fields are filled correctly.

FN18

Q1. Write a program in Java that implement interface Student which has two methods displayGrade() and calcAtrendance() for PG_Students and UG_Students (PG_Students and UG_Students are two different classes for post graduate and under graduate students respectively)

Q2. Design an HTML page that displays a calendar for the month of June 2023, including all the days, weekdays, and dates arranged in a grid format. Use appropriate HTML tags.