

Name:

Course Preferred:

Contact No:

Course Assigned:

Marks Scored:

Trainer's Name:

Counsellor's Name:

Aptitude : _____ HTML & CSS : _____ JS: _____ MySQL: _____

1. Complete the series: 3, 7, 15, 31, 63, __

2. C can complete a job in 8 days, and D can complete the same job in 16 days. If they work together, how many days will they take to complete the job?

3. Two trains, each 180 meters long, are moving in opposite directions on parallel tracks. One train is moving at 60 km/h and the other at 90 km/h. How much time will they take to cross each other completely?

4. "A says, 'The boy playing in the park is the son of the only daughter of my grandfather.' What is A's relation to that boy?"

5. A box contains 5 red, 7 green, and 8 blue balls. Three balls are drawn at random without replacement. What is the probability that exactly two of the balls drawn are red?

6. A man is walking at 4 km/h in the same direction as a train. The train is 150 meters long and passes the man in 9 seconds. Find the speed of the train in km/h.

7. In 2 kg of paper, there are 8 packets of equal weight. Each packet can make 5 notebooks of 150 pages each. What is the maximum number of 250-page notebooks that can be made from 5 kg of the same paper?

8. Which word is different?

Rose, Fern, Tulip, Sunflower, Daisy

9. In a certain code, Tree is written as 5200, and Leaf is written as 4600. Which word would be written as 2800 in that code?

10. How do you create a fixed navigation bar at the top of the page using CSS?

11. Write an HTML form and a JavaScript function to validate that the email input is in the correct format before submission.

12. How do you toggle the visibility of a paragraph when a button is clicked?

13. Write a JavaScript function to:

- toggle a class on an element when a button is clicked.
- Implement a function to show an alert and then disable a button after clicking.

- Create a like button that changes color and count on click and prevents double-clicking.

14. How do you select an element by ID/class/tag in JavaScript?

15. How do you add an event listener to a button using js

16. What is the result of `console.log(true + 1)`?

17. What will `typeof NaN` return?

18. Scenario: Display a List of Employees with Their Salaries using JS

Use an array of employee objects, each having name, employeeid, and salary.

Tasks:

- Filter those earning above \$50,000
- Calculate the average salary
- Sort employees by salary (descending)
- Highlight top earners (e.g., salary > \$80,000)
- Count how many earn above and below \$50,000

Write a sql queries based on the table

1. Employee Table

Column	Data Type	Description
emp_id	INT	Employee ID (Primary Key)
emp_name	VARCHAR	Employee Name
salary	DECIMAL	Employee Salary
dept_id	INT	Department ID (Foreign Key)
manager_id	INT	Manager's Employee ID (Nullable)

2. Department Table

Column	Data Type	Description
dept_id	INT	Department ID (Primary Key)
dept_name	VARCHAR	Department Name

3. Customers Table

Column	Data Type	Description
customer_id	INT	Customer ID (Primary Key)
customer_name	VARCHAR	Customer Name

4. Orders Table

Column	Data Type	Description
order_id	INT	Order ID (Primary Key)
customer_id	INT	Customer ID (Foreign Key)
order_amount	DECIMAL	Order Amount
order_date	DATE	Date of the Order

19. Find the third highest salary in the Employee table

20. Find employees who earn lesser than the average salary of their department (Employee table)

21. Find employees who have a salary lesser than their manager's salary (Employee table)

22. Write a query to find the top 3 customers with the lowest total order amount

Tables:

- Customers(customer_id, customer_name)
- Orders(order_id, customer_id, order_amount)

Find employees who earn more than the average salary of their department

Tables:

- Employee(emp_id, emp_name, salary, dept_id)
- Department(dept_id, dept_name)

23. i) Write a procedure to add a new employee only if the department exists

ii) Create a function that returns the total number of projects per employee

24. Write a transaction to insert a new order and its order details, rollback if any insert fails

- Ensure atomicity when updating multiple related tables

25. i) Delete customers who have never placed an order

ii) Delete suppliers who have no products supplied