1. Which SQL query will return the second highest salary from Employee table?
A) SELECT MAX(salary) FROM Employee;
B) SELECT MAX(salary) FROM Employee WHERE salary < (SELECT MAX(salary) FROM Employee);
C) SELECT TOP 2 salary FROM Employee ORDER BY salary DESC;
D) SELECT salary FROM Employee ORDER BY salary LIMIT 2;
Answer: B

2. Which query counts unique department IDs from Employee?
A) SELECT COUNT(dept_id) FROM Employee;
B) SELECT COUNT(DISTINCT dept_id) FROM Employee;
C) SELECT DISTINCT COUNT(dept_id) FROM Employee;
D) SELECT dept_id COUNT(*) FROM Employee;
Answer: B

3. Which SQL keyword is used to rename a column in output?
A) CHANGE
B) RENAME
C) AS
D) UPDATE
Answer: C

4. Which SQL query finds employees who don’t belong to any department?
A) SELECT * FROM Employee WHERE dept_id = NULL;
B) SELECT * FROM Employee WHERE dept_id != NULL;
C) SELECT * FROM Employee WHERE dept_id IS NULL;
D) SELECT * FROM Employee WHERE dept_id NOT NULL;
Answer: C

5. Which query retrieves employees whose salary is between 5000 and 10000?
A) SELECT * FROM Employee WHERE salary IN (5000,10000);
B) SELECT * FROM Employee WHERE salary BETWEEN 5000 AND 10000;
C) SELECT * FROM Employee WHERE salary >= 5000 OR salary <= 10000;
D) SELECT * FROM Employee WHERE salary = 5000 TO 10000;
Answer: B

6. Which query selects employees whose name starts with ‘A’?
A) SELECT * FROM Employee WHERE name = 'A%';
B) SELECT * FROM Employee WHERE name LIKE 'A%';
C) SELECT * FROM Employee WHERE name = '%A';
D) SELECT * FROM Employee WHERE name LIKE '%A';

Answer: B

7. Which query selects employees whose name ends with ‘a’?
A) SELECT * FROM Employee WHERE name LIKE '%a';
B) SELECT * FROM Employee WHERE name LIKE 'a%';
C) SELECT * FROM Employee WHERE name = 'a';
D) SELECT * FROM Employee WHERE name END 'a';
Answer: A

8. Which SQL clause removes duplicates from results?
A) GROUP BY
B) DISTINCT
C) UNIQUE
D) ORDER BY
Answer: B

9. Which query retrieves average salary of each department?
A) SELECT dept_id, salary FROM Employee GROUP BY dept_id;
B) SELECT dept_id, AVG(salary) FROM Employee GROUP BY dept_id;
C) SELECT dept_id, AVG(salary) FROM Employee;
D) SELECT dept_id, salary FROM Employee;
Answer: B

10. Which SQL function counts all rows including NULL values?
A) COUNT(column_name)
B) COUNT(*)
C) COUNT(DISTINCT column_name)
D) COUNT(NULL)
Answer: B

11. Which clause filters groups created by GROUP BY?
A) WHERE
B) HAVING
C) ORDER BY
D) DISTINCT
Answer: B

12. Which SQL keyword is used to combine results of two queries including duplicates?
A) UNION
B) UNION ALL

C) INTERSECT
D) EXCEPT
Answer: B

13. Which SQL keyword combines results but removes duplicates?
A) UNION
B) UNION ALL
C) INTERSECT
D) EXCEPT
Answer: A

14. Which SQL keyword gives common rows of two queries?
A) UNION
B) UNION ALL
C) INTERSECT
D) EXCEPT
Answer: C

15. Which SQL keyword returns rows from first query but not second?
A) UNION
B) UNION ALL
C) INTERSECT
D) EXCEPT
Answer: D

16. Which query lists employee names in ascending order?
A) SELECT name FROM Employee ORDER BY name ASC;
B) SELECT name FROM Employee SORT ASC;
C) SELECT name FROM Employee GROUP ASC;
D) SELECT name FROM Employee BY ASC;
Answer: A

17. Which query finds maximum salary in Employee?
A) SELECT salary FROM Employee MAX;
B) SELECT MAX(salary) FROM Employee;
C) SELECT MAXIMUM(salary) FROM Employee;
D) SELECT salary FROM Employee WHERE salary=MAX;
Answer: B

18. Which query finds number of employees in each department having more than 5 employees?

A) SELECT dept_id, COUNT(*) FROM Employee WHERE COUNT(*) > 5 GROUP BY dept_id;
B) SELECT dept_id, COUNT(*) FROM Employee GROUP BY dept_id HAVING COUNT(*) > 5;
C) SELECT dept_id, COUNT(*) FROM Employee GROUP BY dept_id WHERE COUNT(*) > 5;
D) SELECT dept_id, COUNT(*) FROM Employee;
Answer: B

19. Which query retrieves employees who earn more than average salary?
A) SELECT * FROM Employee WHERE salary > AVG(salary);
B) SELECT * FROM Employee WHERE salary > (SELECT AVG(salary) FROM Employee);
C) SELECT * FROM Employee WHERE salary > (AVG);
D) SELECT * FROM Employee HAVING salary > AVG(salary);
Answer: B

20. Which query finds departments without employees?
A) SELECT dept_id FROM Department WHERE dept_id NOT IN (SELECT dept_id FROM Employee);
B) SELECT dept_id FROM Department WHERE dept_id IN Employee;
C) SELECT dept_id FROM Department EXCEPT Employee;
D) SELECT dept_id FROM Department WHERE dept_id IS EMPTY;
Answer: A

21. Which query lists employees working in both Department A and B?
A) SELECT name FROM Employee WHERE dept='A' AND dept='B';
B) SELECT name FROM Employee WHERE dept IN ('A','B');
C) SELECT name FROM Employee GROUP BY dept HAVING COUNT(DISTINCT dept)=2;
D) SELECT name FROM Employee;
Answer: C

22. Which query retrieves employees with duplicate salaries?
A) SELECT salary FROM Employee GROUP BY salary HAVING COUNT(*)>1;
B) SELECT salary FROM Employee WHERE salary DUPLICATE;
C) SELECT salary FROM Employee WHERE COUNT(salary)>1;
D) SELECT salary FROM Employee HAVING salary>1;
Answer: A

23. Which SQL clause is used to give temporary name to a table?
A) RENAME
B) ALIAS
C) AS
D) TEMP
Answer: C

24. Which query finds employees with salary = MAX of their department?
A) SELECT * FROM Employee WHERE salary=(SELECT MAX(salary) FROM Employee);
B) SELECT * FROM Employee e1 WHERE salary=(SELECT MAX(salary) FROM Employee e2 WHERE e1.dept_id=e2.dept_id);
C) SELECT MAX(salary) FROM Employee GROUP BY dept_id;
D) SELECT dept_id, salary FROM Employee;
Answer: B

25. Which query counts number of managers in Employee table?
A) SELECT COUNT(manager) FROM Employee;
B) SELECT COUNT(DISTINCT manager) FROM Employee;
C) SELECT COUNT(*) FROM Employee WHERE job='Manager';
D) SELECT manager FROM Employee;
Answer: C

26. Which query finds employees earning same as 'John'?
A) SELECT * FROM Employee WHERE salary=(SELECT salary FROM Employee WHERE name='John');
B) SELECT * FROM Employee WHERE salary IN (John);
C) SELECT * FROM Employee WHERE salary=John;
D) SELECT * FROM Employee WHERE name='John' AND salary;
Answer: A

27. Which query finds highest paid employee in each department?
A) SELECT dept_id, MAX(salary) FROM Employee GROUP BY dept_id;
B) SELECT dept_id, salary FROM Employee WHERE salary=MAX(salary);
C) SELECT dept_id, salary FROM Employee GROUP BY dept_id;
D) SELECT dept_id, name FROM Employee;
Answer: A

28. Which query finds total salary paid by each department?
A) SELECT dept_id, SUM(salary) FROM Employee GROUP BY dept_id;
B) SELECT dept_id, salary FROM Employee GROUP BY dept_id;
C) SELECT dept_id, salary FROM Employee;
D) SELECT dept_id, SUM(salary) FROM Employee;
Answer: A

29. Which query finds departments having no employees using LEFT JOIN?
A) SELECT d.dept_id FROM Department d LEFT JOIN Employee e ON d.dept_id=e.dept_id WHERE e.dept_id IS NULL;
B) SELECT dept_id FROM Department WHERE dept_id IN Employee;
C) SELECT dept_id FROM Department MINUS Employee;

D) SELECT dept_id FROM Department;
Answer: A

30. Which query selects employees earning above 90th percentile?
A) SELECT * FROM Employee WHERE salary > PERCENTILE(90);
B) SELECT * FROM Employee WHERE salary > (SELECT PERCENTILE_CONT(0.9) WITHIN GROUP (ORDER BY salary) FROM Employee);
C) SELECT * FROM Employee WHERE salary > AVG(salary);
D) SELECT * FROM Employee WHERE salary > MAX(salary);
Answer: B

31. Which SQL clause is used to restrict rows returned?
A) GROUP BY
B) WHERE
C) HAVING
D) ORDER BY
Answer: B

32. Which SQL clause is used to restrict groups?
A) WHERE
B) HAVING
C) ORDER BY
D) DISTINCT
Answer: B

33. Which query returns employees not assigned to any manager?
A) SELECT * FROM Employee WHERE manager IS NULL;
B) SELECT * FROM Employee WHERE manager=NULL;
C) SELECT * FROM Employee WHERE manager='NULL';
D) SELECT * FROM Employee WHERE manager NOT NULL;
Answer: A

34. Which SQL function returns number of characters in a string?
A) LENGTH()
B) COUNT()
C) SIZE()
D) CHARCOUNT()
Answer: A

35. Which SQL function converts string to uppercase?
A) UPPER()

B) UCASE()
C) TOUPPER()
D) CAPITAL()
Answer: A

36. Which SQL function concatenates strings?
A) CONCAT()
B) MERGE()
C) JOIN()
D) COMBINE()
Answer: A

37. Which query finds employee with minimum salary in each department?
A) SELECT dept_id, MIN(salary) FROM Employee GROUP BY dept_id;
B) SELECT dept_id, salary FROM Employee WHERE salary=MIN(salary);
C) SELECT MIN(salary) FROM Employee;
D) SELECT dept_id FROM Employee;
Answer: A

38. Which query finds employees having salary greater than all managers?
A) SELECT * FROM Employee WHERE salary > ALL(SELECT salary FROM Employee WHERE job='Manager');
B) SELECT * FROM Employee WHERE salary > (SELECT salary FROM Employee WHERE job='Manager');
C) SELECT * FROM Employee WHERE salary IN (Manager);
D) SELECT * FROM Employee WHERE job='Manager';
Answer: A

39. Which query finds employees having salary greater than any manager?
A) SELECT * FROM Employee WHERE salary > ANY(SELECT salary FROM Employee WHERE job='Manager');
B) SELECT * FROM Employee WHERE salary > ALL(Manager);
C) SELECT * FROM Employee WHERE salary=Manager;
D) SELECT * FROM Employee WHERE job='Manager';
Answer: A

40. Which query finds employees who joined in 2023?
A) SELECT * FROM Employee WHERE YEAR(join_date)=2023;
B) SELECT * FROM Employee WHERE join_date LIKE '2023%';
C) SELECT * FROM Employee WHERE join_date=2023;
D) SELECT * FROM Employee WHERE join_date='23';
Answer: A

41. Which query lists top 3 highest salaries?
A) SELECT salary FROM Employee ORDER BY salary DESC LIMIT 3;
B) SELECT salary FROM Employee WHERE ROWNUM<=3 ORDER BY salary DESC;
C) SELECT TOP 3 salary FROM Employee ORDER BY salary DESC;
D) All of the above depending on DBMS
Answer: D

42. Which query finds employees whose salary is NULL?
A) SELECT * FROM Employee WHERE salary=NULL;
B) SELECT * FROM Employee WHERE salary IS NULL;
C) SELECT * FROM Employee WHERE salary='NULL';
D) SELECT * FROM Employee WHERE salary NOT EXISTS;
Answer: B

43. Which SQL operator checks membership in a list?
A) IN
B) ANY
C) ALL
D) EXISTS
Answer: A

44. Which SQL operator checks for existence of rows in subquery?
A) IN
B) ANY
C) ALL
D) EXISTS
Answer: D

45. Which SQL operator checks if value is greater than all values in subquery?
A) IN
B) ANY
C) ALL
D) EXISTS
Answer: C

46. Which SQL operator checks if value is greater than at least one value in subquery?
A) IN
B) ANY
C) ALL
D) EXISTS

Answer: B

47. Which SQL clause sorts rows by default?
A) ASC
B) DESC
C) ORDER BY ASC
D) ORDER BY
Answer: D

48. Which query finds employees with the same salary as at least one other employee?
A) SELECT * FROM Employee e1 WHERE EXISTS(SELECT 1 FROM Employee e2 WHERE e1.salary=e2.salary AND e1.id<>e2.id);
B) SELECT * FROM Employee WHERE salary=DUPLICATE;
C) SELECT salary FROM Employee GROUP BY salary HAVING salary>1;
D) SELECT * FROM Employee;
Answer: A

49. Which SQL keyword removes all rows from a table but not the table itself?
A) DROP
B) DELETE
C) TRUNCATE
D) CLEAR
Answer: C

50. Which SQL clause is evaluated first in query processing?
A) WHERE
B) GROUP BY
C) SELECT
D) ORDER BY
Answer: A