1. In MongoDB, which of the following command is used to create collection by name "mycollection"?

   A. create mydb ("mycollection")
   B. db.createCollection("mycollection")
   C. createDatabase mydb
   D. createDatabase mydb("mycollection")

2. A table contains information of employee details and projects to which employee is assigned. Each employee works on many projects. For the given table primary key is composite key formed by empno, projectno. The table contains following columns: empno, empname, salary, projectno, pname, plocation. Then which of the following normalization form the table does not support?

   A. 1 NF
   B. 2 NF
   C. given information is insufficient
   D. None of the above

3. Which of the following command/commands will delete all the rows from emp table?

   A. delete from emp where 1=1
   B. delete from emp where 2=1
   C. delete from emp
   D. Both A and C

4. Which of the following function will operate on group of rows excluding rows with NULLS? (Assume 'sal' is a column name.)

   A. SUM(sal)
   B. AVG(sal)
   C. count(sal)
   D. count(*)

5. There exists 2 tables empindia, empJapan. Table empindia stores information of all employees working in India office. Table empJapan stores information of all employees working in Japan office. Some of the employees work in India office for 6 months and Japan office for 6 months; so information of those employees is available in both tables. Which of the following query will display all employees who work only in India office and not in Japan office?

   A. select * from empIndia union select * from empJapan;
   B. select * from empIndia minus select * from empJapan;
   C. select * from empIndia intersection select * from empJapan;
   D. select * from empIndia union All select * from empJapan;

6. While calling procedure to modify it within procedure, which of the following type of arguments value can be assigned?

   A. out type parameter
   B. in type arguments
   C. inout type arguments
   D. All of the above

7. Complete the following code to display error message and stop execution whenever a duplicate key occurs while inserting record in emp table.

```
DELIMITER $$
CREATE PROCEDURE insertdata(IN pid INT, IN pname varchar)
BEGIN
-------------------------------------------------
INSERT INTO emp(eid,ename)
VALUES(pid,pname);
SELECT COUNT(*) FROM emp;
END
```

A. DECLARE CONTINUE HANDLER FOR 1062
   SELECT 'duplicate keys found' AS msg;

B. DECLARE CONTINUE HANDLER FOR SQLException
   SELECT 'duplicate keys found' AS msg;

C. DECLARE EXIT HANDLER FOR 1062
   SELECT 'duplicate keys found' AS msg;

D. All of the above

8. Which of the following will generate after insert trigger?
   The trigger should change the salary to 1000, if user tries to insert a record with salary < 1000.

A. CREATE TRIGGER check_sal
   AFTER INSERT ON emp
   FOR EACH ROW
   IF NEW.sal < 1000 THEN
   NEW.sal = 1000;
   END

B. CREATE TRIGGER check_sal
   AFTER INSERT ON emp
   FOR EACH ROW
   IF NEW.sal < 1000 THEN
   SET NEW.sal = 1000;
   END

C. CREATE TRIGGER check_sal
   AFTER INSERTING ON emp TABLE
   IF NEW.sal < 1000 THEN
   SET NEW.sal = 1000;
   END

D. none of the above

9. Which of the following will create index on table product based on field price?

A. create unique index price-indx on product(price)
B. create index price-indx on product(price)
C. create index price-indx on price for car
D. None of the above

10. Which of the following statements is not true regarding Index?

    A. Index is a database object that functions as a "performance tuning" method for allowing faster retrieval of records.

    B. Index is used to increase the speed of update records.

    C. Index can be unique index.

    D. Both A and C

11. What is the output of following command?
        SELECT LPAD('Hello',10,'*');

    A. *****Hello

    B. Hello

    C. *****

    D. ****H

12. Which of the following statements is true about clustering in MySQL?

    A. It provides high availability

    B. It provides write-scalability and real time performance

    C. It is similar to sharing in NoSQL

    D. All of the above

13. Which of the following is not a feature of NoSQL?

    A. It supports sharing

    B. Replica is possible

    C. schema is structured

    D. every document has primary key

14. Which of the following statements will check whether price key exists and the value is null in product collection?

    A. db.product.find({"price":{$in:[null],$exists:true}})

    B. db.product.find({"price":null })

    C. db.product.find({"price":null, $exists:true })

    D. db.product.find({"price":null, $exists:false })

15. Which of the following will create temporary table in MySQL?

    A. Create table mytable(
       Id int primary key temporary,
       Name varchar(10),
       Addr varchar(20));

    B. Create table mytable(
       Id int primary key,
       Name varchar(10),
       Addr varchar(20)) temporary;

    C. Create temporary table mytable(
       Id int primary key,
       Name varchar(10),
       Addr varchar(20));

    D. You cannot create temporary table

16. Which of the following will list all movies with rating either 3 or 4 or 5?

    A. db.movie.find({rating:{$in:[3,4,5]}})
    B. db.movie.find({rating:{$gte:3,$lte:5}})
    C. db.movie.find({rating:{$gt:3,$lt:5}})
    D. Both A and B

17. In a LIKE clause, you can ask for any value ending in "ton" by writing:

    A. LIKE 'ton$'
    B. LIKE '^.*ton$'
    C. LIKE '%ton'
    D. LIKE '*ton'

18. Which of the following is not valid in PL/SQL?

    A. Select ... into
    B. Update
    C. Create
    D. Delete

19. Which of the following is not available in MySQL?

    A. REVOKE
    B. FETCH
    C. LIKE
    D. JOIN

20. REPLACE ('JACK AND JUE', 'J', 'BL') will return:

    A. JACK AND BLUE
    B. BLACK AND JACK
    C. BLACK AND BLUE
    D. None of the above

21. Which of the following is not correct about a View statement?

    A. To protect some of the columns of a table from other users
    B. Occupies data storage space
    C. To hide complexity of a query
    D. To hide complexity of a calculations

22. The _____ method returns a document that includes a metrics field.

    A. db.serverStats()
    B. db.serverStatus()
    C. db.status()
    D. db.statusServer()

23. You want to search for strings that contain 'SA_' in the JOB_ID column. Which SQL statement do you use?

    A. SELECT employee_id, last_name, job_id
       FROM employees
       WHERE job_id LIKE '%SA_%' ESCAPE '\';

    B. SELECT employee_id, last_name, job_id
       FROM employees
       WHERE job_id LIKE '%SA_';

    C. SELECT employee_id, last_name, job_id
       FROM employees
       WHERE job_id LIKE '%SA_' ESCAPE '\';

    D. SELECT employee_id, last_name, job_id
       FROM employees
       WHERE job_id = '%SA_';

24. Which operator is used to compare a value to a specified list of values?

    A. BETWEEN
    B. ANY
    C. IN
    D. ALL

25. Which of the following is used to delete an entire MYSQL database?

    A. mysql_drop_database
    B. mysql_drop_entiredb
    C. mysql_drop_db
    D. mysql_drop_dbase

26. An entity set that does not have sufficient attributes to form a primary key is a:

    A. strong entity set.
    B. weak entity set.
    C. simple entity set.
    D. primary entity set.

27. In a Hierarchical model, records are organized as:

A. Graph.
B. Document.
C. Links.
D. Tree.

28. The file organization that provides very fast access to any arbitrary record of a file is:

A. Ordered file
B. Unordered file
C. Hashed file
D. B-tree

29. Which of the following is the preferred method for enforcing data integrity?

A. Cursors
B. Constraints
C. Triggers
D. None of the above

30. NoSQL databases are used mainly for handling large volumes of _____ data.

A. unstructured
B. structured
C. semi-structured
D. semistructured and unstructured

31. Which of the following methods is used to query documents in collections?

A. find
B. search
C. move
D. update

32. _____ can best be described as a programming model used to develop Hadoop-based applications that can process massive amounts of data.

A. Map Reduce
B. Mahout
C. Oozie
D. Pulsar

33. All of the following accurately describe Hadoop, except:

A. Open source
B. Real-time
C. Java-based
D. Distributed computing approach

34. _____ is frequently referred to as *k*-means clustering.

    A. Non-hierarchical clustering

    B. Optimizing partitioning

    C. Divisive clustering

    D. Agglomerative clustering

35. If tbl_1 is a table consisting of 8 rows and tbl_2 is a table consisting of 6 rows, the number of combinations through which the search is performed is:

        SELECT tbl_1.i1, tbl_2.i2

        FROM tbl_1 INNER JOIN tbl_2

        WHERE tbl_1.i1 = tbl_2.i2;

    A. 14

    B. 48

    C. 40

    D. 8

36. Primary indexes, secondary indexes and cluster indexes are all types of:

    A. ordered indexes

    B. unordered indexes

    C. linear indexes

    D. relative search indexes

37. The process of making a normalized schema un-normalized is called as:

    A. Unnormalization

    B. Denormalization

    C. Renormalization

    D. Annormalization

38. The value of INSTR('CALIFORNIA', 'A') is:

    A. 2

    B. 1

    C. 9

    D. 10

39. In which join does all the rows from the left table appear in the output irrespective of the content of the other table?

    A. RIGHT JOIN

    B. LEFT JOIN

    C. INNER JOIN

    D. OUTER JOIN

40. Deletion of an employee from one table also deletes that employee from another table. This kind of delete is called:

A. Transparent
B. Concrete
C. Elaborate
D. Cascaded