1.SELECT * FROM ORDERS WHERE ORDER_DATE BETWEEN '2023-01-01' AND '2023-12-31'; IF THERE IS AN INDEX ON THE "ORDER_DATE" COLUMN, WHAT TYPE OF INDEX WOULD LIKELY PROVIDE THE BEST PERFORMANCE FOR THE QUERY?

- A) HASH INDEX
- B) CLUSTERED INDEX
- C) B-TREE INDEX
- D) BITMAP INDEX
- 2. WHAT WILL BE THE RESULT OF THE FOLLOWING SQL QUERY? SELECT CHARINDEX('S', 'SQL SYNTAX');
- A)0
- B) 1
- C) 2
- D) 3
- 3. WHAT DOES THE FOLLOWING SQL QUERY RETURN? SELECT IFNULL(NULL, 'DEFAULT');
- A) Null
- B) DEFAULT
- C) AN ERROR MESSAGE
- D) IF NULL

4.WHICH SQL FUNCTION IS USED TO RETURN THE INTEGER PORTION OF A NUMERIC VALUE?

- A) INTEGER()
- B) INT()
- C) FLOOR()
- D) TRUNCATE()
- E) OTHER

5.WHICH OF THE FOLLOWING SQL STATEMENTS IS USED TO ADD A FOREIGN KEY CONSTRAINT TO AN EXISTING TABLE?

- A) ADD CONSTRAINT fk_CONSTRAINT FOREIGN KEY (COLUMN_NAME) REFERENCES OTHER TABLE(COLUMN NAME)
- B) ALTER TABLE ADD FOREIGN KEY(COLUMN_NAME) REFERENCES OTHER_TABLE (COLUMN_NAME);
- C) CREATE CONSTRAINT fk_CONSTRAINT FOREIGN KEY (COLUMN NAME) REFERENCES OTHER TABLE(COLUMN NAME);

D) CREATE FOREIGN_KEY (COULMN_NAME) REFERENCES OTHER_TABLE (COLUMN_NAME);

6. WHICH OF THE FOLLOWING SQL STATEMENTS IS USED TO REMOVE ALL DATA FROM A TABLE WITHOUT REMOVING THE TABLE STRUCTURE?

- A) DELETE TABLE
- B) TRUNCATE TABLE
- C) CLEAR TABLE
- D) DROP TABLE

7.WHAT WILL BE THE RESULT OF THE FOLLOWING SQL QUERY? SELECT NULLIF(1,1);

- A) NULL
- B) 1
- C) 0
- D) AN ERROR MESSAGE

8.WHAT WILL BE THE RESULT OF THE FOLLOWING SQL QUERY?

SELECT
CASE
WHEN NULL=NULL THEN 'EQUAL'
ELSE 'NOT EQUAL'
END;

- A) EQUAL
- B) NULL
- C) NOT EOUAL
- D) NONE OF THE ABOVE

9.SELECT E.EMPLOYEE_ID, E.FIRST_NAME, E.LAST_NAME, D.DEPARTMENT_NAME FROM EMPLOYEES E LEFT JOIN DEPARTMENTS D ON E.DEPARTMENT_ID = D.DEPARTMENT_ID; WHAT DOES THIS QUERY RETURN?

- A) THE NAMES OF ALL THE EMPLOYEES ALONG WITH THEIR DEPARTMENT NAMES . IF AN EMPLOYEE DOES NOT BELONG TO ANY DEPARTMENT , THEIR DEPARTMENT NAME WILL BE NULL
- B) THE NAMES OF ALL EMPLOYEES ALONG WITH THEIR DEPARTMENT NAMES . EMPLOYEES WITHOUT A DEPARTMENT WILL NOT BE INCLUDED IN THE RESULT SET

- C) THE NAMES OF ALL EMPLOYEES WHO BELONG TO A DEPARTMENT , ALONG WITH THEIR DEPARTMENT NAMES
- D) THE NAMES OF ALL DEPARTMENTS ALONG WITH THE EMPLOYEES WHO BELONG TO THEM

10.EMBEDDED SQL IS WHICH OF THE FOLLOWING?

- A) HARD-CODED SQL STATEMENTS IN A PROGRAM LANGUAGE SUCH AS JAVA
- B) THE PROCESS OF MAKING AN APPLICATION CAPABLE OF GENERATING SPECIFIC SQL CODE ON THE FLY
- C) HARD-CODED SQL STATEMENTS IN A PROCEDURE
- D) HARD-CODE SQL STATEMENTS IN A TRIGGER

11.WHAT WILL BE THE FOLLOWING SQL QUERY RETURN? SELECT IFNULL(NULL, 0) + COALESCE(NULL, 5);

- A) IFNULL VALIDATION ERROR
- B) 4
- C) NONE OF THESE
- D) COALESCE NOT VALID ERROR

12.IN SQL, WHAT DOES THE TERM "CARDINALITY" REFER TO?

- A) THE NUMBER OF ATTRIBUTES IN A TABLE
- B) THE NUMBER OF ROWS IN A TABLE
- C) THE NUMBER OF UNIQUE VALUES IN A COLUMN
- D) THE NUMBER OF TABLES IN A DATABASE

13.WHICH OF THE FOLLOWING SQL STATEMENTS IS USED TO REMOVE A TABLE NAMED "OLD TABLE" TO "NEW TABLE"?

- A) RENAME TABLE OLD TABLE TO NEW TABLE;
- B) ALTER TABLE OLD TABLE RENAME TO NEW TABLE;
- C) ALTER TABLE NEW TABLE RENAME OLD TABLE;
- D) UPDATE TABLE OLD TABLE SET NAME = 'NEW TABLE';

14.WHICH SQL FUNCTION IS USED TO RETURN THE CURRENT SYSTEM DATE AND TIME?

- A) GETDATE()
- B) CURRENT TIME()
- C) NOW()
- D) SYSDATE()

15.WHAT DOES THE SQL KEYWORD "CUBE" DO IN A GROUP BY CLAUSE?

- A) IT COMPUTES AGGREGATE VALUES ACROSS MULTIPLE DIMENSIONS
- B) IT ORDERS THE RESULT SET IN A SPECIFIED SEQUENCE
- C) IT EXCLUDES NULL VALUES FROM THE RESULT SET
- D) IT GROUPS THE RESULT SET BY THE SPECIFIED COLUMNS AND THEIR COMBINATIONS ;

16.WHAT IS THE RESULT OF THE FOLLOWING SQL QUERY?

SELECT * FROM TABLE 1 FULL OUTER JOIN TABLE2 ON TABLE1.ID =TABLE2.ID;

- A) RETURNS ALL THE ROWS WHEN THERE IS A MATCH IN EITHER TABLE1 OR TABLE2, AND NULL VALUES WHERE THERE IS NO MATCH
- B) RETURNS ALL ROWS WHEN THERE IS A MATCH IN BOTH TABLE1 AND TABLE2, AND NULL VALUES WHERE THERE IS NO MATCH
- C) RETURN ALL ROWS FROM TABLE1 AND TABLE2 WITH NULL VALUES WHERE THERE IS NO MATCH
- D) RETURNS ONLY ROWS THAT HAVE A MATCHING ID IN BOTH TABLE1 AND TABLE2

17.FROM THE FOLLOWING STATEMENTS WHICH OF THEM IS/ARE TRUE ABOUT SQL

- A) ALL ATTRIBUTES USED IN THE GROUP BY CLAUSE MUST APPEAR IN THE SELECT CLAUSE
- B) AN SQL QUERY CAN CONTAIN A HAVING CLAUSE ONLY IF IT HAS A GROUP BY CLAUSE
- C) AN SQL QUERY CAN CONTAIN A HAVING CLAUSE EVEN IF IT DOES NOT HAVE A GROUP BY CLAUSE
- D) NOT ALL ATTRIBUTES USED IN THE GROUP BY CLAUSE NEED TO APPEAR IN THE SELECT CLAUSE
- a) 3 and 4
- b) 1 and 2
- c) 1,3 and 4
- d) ALL OF THE ABOVE

18.WHICH STATEMENTS OPERATIONS ARE PERMANENT?

A) DDL

- B) DML
- C) TCL

19.IN SQL, WHAT DOES THE TERM "TUPLE" REFER TO?

- A) A COLUMN IN A TABLE
- B) A ROW IN A TABLE
- C) A TABLE IN A DATABASE
- D) A COMBINATION OF TABLES
- E) OTHER

20.WHAT WILL BE THE OUTPUT OF THIS SQL QUERY?
SELECT CASE
WHEN NULL = NULL THE N 'EQUAL'
WHEN NULL <> NULL THEN 'NOT EQUAL'
ELSE 'UNKNOWN'
END;

- A) EQUAL
- B) NOT EQUAL
- C) UNKNOWN
- D) NULL

21 GIVEN THE FOLLOWING TABLE ORDERS WHAT WILL BE THE RESULT OF THE FOLLOWING QUERY?

SELECT CUSTOMERID, SUM(AMOUNT) FROM ORDERS GROUP BY CUSTOMERID HAVING COUNT(ORDERID) >2;

ORDERID	CUSTOMERID	ORDERDATE	AMOUNT
1	101	2024-01-10	500
2	101	2024-01-15	700
3	102	2024-02-10	300
4	102	2024-02-12	200
5	101	2024-03-01	600

- A) (101, 1800)
- B) (101, 1500),(102, 500)
- C) (102,500)
- D) NO ROWS RETURNED

22. WHICH OF THE FOLLOWING SQL STATEMENTS CORRECTLY ADDS A NOT NULL CONSTRAINT TO AN EXISTING COLUMN NAMED "EMAIL" IN A TABLE NAMED "USERS"?

- A) ALTER TABLE USERS MODIFY COLUMN EMAIL VARCHAR(255) NOT NULL;
- B) ALTER TABLE USERS CHANGE COLUMN EMAIL VARCHAR(255) NOT NULL;
- C) ALTER TABLE USERS ALTER COLUMN EMAIL SET NOT NULL;
- D) ALTER TABLE USERS ADD CONSTRAINT EMAIL_NOT_NULL CHECK(EMAIL IS NOT NULL);

23.IN SQL , WHAT IS THE PURPOSE OF THE "ROLLUP" KEYWORD IN A GROUP BY CLAUSE?

- A) IT ORDERS THE RESULT SET IN ASCENDING ORDER
- B) IT INCLUDES THE GRAND TOTAL OF ALL GROUPED ROWS IN THE RESULT SET
- C) IT FILTERS THE RESULT SET BASED ON A SPECIFIED CONDITION
- D) IT GROUPS THE RESULT SET BY THE SPECIFIED COLUMNS