Name of the student: **Date: 02.08.2024**
Grade: XII   **Time: 90 min**
Subject: IP   **Marks: 35**

General Instructions:
This question paper is divided into 5 sections – A, B, C, D and E
•Section A, consists of 9 questions (1 – 9). Each question carries 1 mark.
•Section B, consists of 4 questions (10 – 13). Each question carries 2 marks.
•Section C, consists of 3 questions (14 – 16). Each question carries 3 marks.
•Section D, consists of 1 question (17). It carries 4 marks.
•Section E, consists of 1 question (18). It carries 5 marks.
•Internal choices have been given for question numbers – 11, 16, 18.

SECTION-A   **9X1=9 Marks**

1. If column "Price" contains the data set (100,150,200,100,150) in table Student, what will be the output after the execution of the given query?

   SELECT SUM (DISTINCT Price) FROM student;

   (a) 700   (b) 450   (c) 350   (d) 400

2. POWER( ) function comes under the following category:

   (a) Numeric Function   (b) Aggregate Function

   (c) Text Function   (d) Date and Time Function

3. Write the output of the following statement:

   SELECT POWER(LENGTH("WELCOME"),LENGTH(RIGHT("WEST",2)));

   (a) 49   (b) 16   (c) 2   (d) None of these

4. MID( ) function works similar to

   (a) INSTR( )   (b) SUBSTR( )   (c) TRIM( )   (d) None of these

5. Select DDL Command out of the following:

   (a) Insert   (b) Alter Table   (c) Delete   (d) Update

6. Consider the SQL string: "WEST GODAVARI". Write command to display: "ARI"

   (a) SELECT SUBSTR("WEST GODAVARI", 11,3);

   (b) SELECT SUBSTR("WEST GODAVARI",11)

   (c) SELECT RIGHT("WEST GODAVARI",3)

   (d) All of the above

7. Which of the following SQL queries is used to retrieve rows from the " customers" table where the "email" column contains NULL values?

   (a) SELECT FROM customers WHERE email NULL;

   (b) SELECT FROM customers WHERE email IS NOT NULL;

   (c) SELECT FROM customers WHERE IS NULL(email);

   (d) SELECT FROM customers WHERE email IS NULL;

8. In SQL, which function is used to display current date and time?

   (a) Date ( )   (b) Time ( )   (c) Current ( )   (d) Now ( )

9. Find the output of the following SQL queries :

   Select INSTR("Data Science is a Science","ie");

(a) 8	(b) -5	(c) NULL	(d) 21

SECTION-B   **4X2=8 Marks**

10. Define the following:

      a. Database   b. Primary Key

11. What is the cardinality and degree of the following table "Student".

Roll	Name
1	Rajesh
2	Pavan
3	Sunitha

(OR)

Consider the following table 'Transporter' that stores the order details about items to be transported.

Table : **TRANSPORTER**

ORDERNO	DRIVERNAME	DRIVERGRADE	ITEM	TRAVELDATE	DESTINATION
OR101	Ram	A	Television	2023-08-15	Mumbai
OR102	Sravan	B	Refrigerator	2023-07-30	Chennai
OR103	Pavan	A	Television	2023-08-20	Hyderabad
OR104	Mohan	A	Washing Machine	2023-08-25	Hyderabad

(a) Write a query to display names of drivers whose names are three characters long

(b) Write the output of the following query:

    SELECT MOD(LENGTH(DRIVERNAME),LENGTH(DRIVERGRADE) FROM TRANSPORTER;

12. Write all the database related commands. (Database name is "NEWS").

13. Consider the following table student.

SNo	SName	Marks
1	Naresh Kumar	90
2	Jeevan Babu	85
3	Mohan Lal	55
4	Santosh Kumar	70

Write the output of the following:

  (a) SELECT INSTR(SNAME, "k") FROM STUDENT;

  (b) SELECT LENGTH(SUBSTR(SNAME,4))+1 FROM STUDENT;

SECTION-C   **3X3=9 Marks**

14. Explain about the following 3 string functions with examples.

  (a) LOWER( )   **(b)** RTRIM( )   **(c)** LEFT( )

15. Write SQL Queries based on the following table : SHOPPE

ID	SName	Area
S01	ABC Computronics	CP
S02	All Infotech Media	GK II
S03	Tech Shopee	CP
S04	Geeks Techno Soft	Nehru Place
S05	Hitech Store	Nehru Place

(a) To display the details of the table in the descending order of SName.

(b) To display Store Name and Area of "Nehru Place" area stores.

(c) To delete the details of "Hitech Store".

16. Consider the following table : Vegetable

VNo	VegName	Price
V1	Brinjal	60
V2	Onion	30
V3	Chilly	80

(a) Write a command to create the above table.

(b) Write a command to insert the above data into the table.

(c) Write a command to Modify Brinjal Price to 100

(OR)

Consider the following table: **Pensioners**

PType	Amount	TotalNumber
Disable	6000	50
OldAge	4000	220
Widow	4000	120
Single Women	4000	4
DMHO	15002	6

(a) Write a query to add new column – TotalAmount with data type int

(b) Write a query to make "PType" as Primary Key

(c) Write a query to change data type of Amount from int to float.

SECTION-D   **1X4=4 Marks**

17. Consider the following table:

Table : SALESMAN

Scode	Sname	Area	Qtysold	Dateofjoin
S001	Ravi	North	120	2015-10-01
S002	Sandeep	South	105	2012-08-01
S003	Sunil	NULL	68	2018-02-01
S004	Subh	West	280	2010-04-01
S005	Ankit	East	90	2018-10-01
S006	Raman	North	NULL	2019-12-01

Write outputs for the following SQL Queries:

(i) SELECT RIGHT(AREA,2) FROM SALESMAN;

(ii) SELECT DISTINCT(Area) FROM SALESMAN;

(iii) SELECT SNAME,QTYSOLD*2 AS "FULL QUANTITY" FROM SALESMAN;

(iv) SELECT SNAME,AREA FROM SALESMAN WHERE SNAME IN ("Ravi","Sandeep");

SECTION-E   **1X5=5 Marks**

18. Answer the following Outputs based on Round( ) function.

(i) SELECT ROUND(726483.567283,0);

(ii) SELECT ROUND(726483.567283,1);

(iii) SELECT ROUND(726483.567283,3);

(iv) SELECT ROUND(726483.567283,-1);

(v) SELECT ROUND(726483.567283,-3);

(OR)

Consider the following table "Customers". Write SQL Queries for the following:

(i) Create customers table with the customer ID, customer Name, country as attributes where customer id is the

primary key.

(ii) Insert the following details in the customers table.

Customer ID	CustomerName	Country
C1001	Suresh	India
C1002	Mohan	USA
C1003	Lakshmi	India
C1004	Srujana	Srilanka
C1005	Rahul	USA

(iii) Display first 3 characters from CustomerName and last 3 characters from Country.

(iv) To display CustomerID and CustomerName in ascending order of CustomerName.

(v) To change the Country of Mohan to Africa.