ST. XAVIER'S SENIOR SECONDARY SCHOOL, DELHI - 110 054

Class 11 16-9-2023

MID TERM EXAMINATION - INFORMATICS PRACTICE

Time: 3 hrs.

# This question paper contains five sections, Section A to E.

- 1. All questions are compulsory.
- 2. Section A has 18 questions carrying 01 mark each.
- 3. Section B has 07 Very Short Answer type questions carrying 02 marks each.
- 4. Section C has 05 Short Answer type questions carrying 03 marks each.
- 5. Section D has 03 Long Answer type guestions carrying 05 marks each.
- 6. Section E has 02 questions carrying 04 marks each.

# Section-A

- 1. Which operator is used to check nulls in MySQL.
- 2. Which command is used to add a new column?
- b) create a) Input c) update
- 3. Command to remove the table student is
  - a. drop table student;
  - b. drop from student;
  - c. remove from student;
  - d. delete from student;
- 4. Name the keyword used with the alter table command to rename the column of a table.
- 5. Out of these, which of the following is not an advantage of SQL.
- a) Easy to use b) portable c) slow speed 6. Write the correct command after removing the errors :-
  - Select \* from student where stream = "null";
- 7. LIKE operator is used for
- 8. Candidate key is defined as the Primary key.
- 9. Write any two examples of TCL commands.
- 10. A table consists of 15 rows and 10 columns. Later on 5 columns were deleted and 5 rows were added. What will be the latest degree and cardinality?
- 11. Which keyword is used to specify empty or missing values?
- 12. Name the command used to see all the databases in mysql.
- command is used to display information from the table. 13.
- 14. State true or false.  $\rightarrow$  Update is a DDL command.
- 15. Distinct keyword is used to remove duplicate rows from the result of SQL statement. (True or False)
- 16. keyword is used to arrange the records in descending order.
- 17. Which SQL aggregate function is used to find maximum value of a column of a table.
- 18. Fill in the blank with proper operator Select pname from product where manufacturer \_\_\_\_\_ ('Fit express', 'Avon Fitness');

# Section B

- 19. Write difference between :
  - a) substr and instr functions
  - b) round and trunc functions
- 20. Underline and correct the errors in the given guery mysql> select \*, Docid from hospital whose docid  $\neq$  'D5';
- 21. Name the function used to display
  - a) Current Date and Time
  - b) Result like "Monday" "Tuesday" etc.
- 22. What are Multi-row function?

d) alter

d) No coding required

Max. Marks: 70

23. The Pincode column of table 'Post' is given below- (Write output of following commands)

Pincode		
110001		
120012		
300048		
281001		

- i. SELECT Pincode from Post where Pincode LIKE "%12";
- ii. SELECT Pincode from Post Where Pincode LIKE "\_0%";
- 24. Define data type? How is int different from float?

OR

What is order by clause? Name two keywords used with it.

25. Write the purpose of using Pattern matching characters \_\_\_\_ and %? Explain them with example.

### Section C

26. Create a table Doctor from the structure given below:

Column name	datatype	Size	
Deptno	char	5	
Dname	varchar	20	
JoinDate	date		
NoOfPatients	int	4	

27. Write commands in SQL for (a) to (c).

# Table : Emp

Name	Qualification	Gender	Points	Basic
Siddharth	MCA	F	20	6000
Raghav	BCA	М	15	2000
Naman	B.A	М	15	1000
	Siddharth Raghav	Siddharth MCA Raghav BCA	SiddharthMCAFRaghavBCAM	SiddharthMCAF20RaghavBCAM15

a) To Count the total number of records.

- b) To display the total points and minimum basic of the employees.
- c) To display the average points of employees whose name starts with "Ra".

#### OR

- a) To Count unique qualifications.
- b) To display the sum of total Pay of the employees (Total Pay = Points +basic).
- c) To display the total number of employees whose name ends with "an".

#### 28. Write SQL commands based on the table movie:-

MNO	TITLE	TYPE	RATING	STAR	QTY	PRICE	ENTRY_DATE
1	Gone with the wind	drama	G	GABLE	4	39.50	21-01-2001
2	Friday the 13 <sup>th</sup>	horror	R	JASON	2	69.00	27-01-2001
3	Top gun	drama	PG	CRUISE	7	49.00	13-02-2001
4	Splash	comedy	PG13		3	29.50	21-11-2010
5	Independence Day	drama	R	TURNER	3	19.00	01-01-2008

i. Delete the movie whose quantity is less than 2

- ii. Increase the quantity of all comedy movies by 3
- iii. Display all movies whose title starts with C or T

29. Write output of following commands based on the table "student" given below:-

AdmNo	Name	Stream	Fees
120	Arun	Science	3000.00
121	Suman	Science	2800.00
122	Rajan	Commerce	2000.00
123	Rohan	Commerce	1800.00
124	Disha	Science	2800.00

- a) Select max(fees) from student where stream="Science";
- b) Select count(\*) from student ;
- c) Select avg(fees) from student where stream="Commerce";
- 30. Write Select statements to do the following:
  - a) Print left five character from the string "Xavier-Play-Fest".
  - b) Concat the words "Xavier", "#Play#" and "Fest" produce the following output: "Xavier#Play#Fest"
  - c) Display the length of the string "Xavier Play-Fest # 2023"

## Section - D

- 31. What will be the output of following SQL queries :
  - a) SELECT Month( '2023-09-14');
  - b) SELECT ROUND(453.345,2);
  - c) SELECT UPPER('Window 8 RT');
  - d) Select Instr('Window 8 RT', 'do');
  - e) Select POWER(4,2);
- 32. Consider the table "**projects**" and write SQL queries for the tasks that follow:

ID	ProjName	Projsize	StartDate	EndDate	Cost
1	Payroll-MMS	Medium	2006-03-17	2006-09-16	60000
2	Payroll-ITC	Large	2008-02-12	2008-01-11	500000
3	IDMgmt-LITL	Large	2008-06-13	2009-05-21	300000
4	Recruit-LITL		2008-03-18	2008-06-01	50000
5	IDMgmt-MTC	Small	2007-01-15	2007-01-29	20000
6	Recruit-ITC	Medium	2007-03-01	2007-06-28	50000

- a) Display ID and project Name of all projects whose project name ends with "ITC".
- b) Display project name, cost and start date whose project size is not entered.
- c) Display ID, project name, cost whose project size is "Large".
- d) Insert record with ID 4 shown in above table project.
- e) Display the details of all projects whose cost is between 50000 to 60000.
- 33. Answer the following based on table and database given below:

#### Name of the database - Xavier Name of the table - JOB

Job_ID	Name	JoinDate	Dept	Salary
1	Albin	1980-04-17	Sales	19000.00
2	Jacob	1990-05-27	Computer	25000.00
3	Aryan	2001-11-25	Sales	14000.00
4	Albin	2001-11-25	Accounts	19900.00

- a) Identify the attribute best suitable to be declared as a primary key.
- a) Which of the following command(s) will display all employees whose date of joining is before 1<sup>st</sup> November 2000.

- i. Select \* from Job where JoinDate < "01-11-2000";
- ii. Select \* from Job where JoinDate < "2000-01-11";
- iii. Select \* from Job where JoinDate < "2000-11-01";
- iv. Select \* from Job where JoinDate < "2000/11/01";
- c) Insert data in the table JOB  $\rightarrow$  JobId = 5 , Name= "Pramiti" and Price = 25000.00
- d) Lavanya wants to remove a record whose JobId is 4 from the JOB table. Write command she will use to delete that records.
- e) Now Lavanya wants to display the structure of the table JOB\_ID, name of the attributes and their respective data types that she has used in the table. Write the query to display the same.

# Section E

34. Answer the following:

# Name of the Database: Exam

Deptno	Dname	JoinDate	NoofPatients		
D1	Rohan	2018-02-21	5		
D2	Alan	2018-0524	7		
D3	Himesh	2018-07-15	10		
D4	Brijesh	2018-04-25	3		
D5	Clijo	2018-03-03	9		

a) Which command will display the structure of the table.

i) Use Doctor ii) Desc iii) Desc Doctor iv) Show tables

- b) Command to display all the records in descending order of number of patients.
  - i) Select \* from Doctor reverse by NoofPatients;
  - ii) Select \* from Doctor order by desc NoofPatients;
  - iii) Select \* from Doctor order by NoofPatients desc;
  - iv) Select \* from Doctor group by NoofPatients desc;
- c) What will be the cardinality and degree of the table?
  - i) Cardinality = 5, Degree =4
  - ii) Cardinality = 4, Degree =5
  - iii) Cardinality = 6, Degree = 4
  - iv) Cardinality = 5, Degree =5
- d) command to delete the record of deptno D4
  - i) Delete \* from Doctor where Deptno== 'D4' ;
  - ii) Delete \* from Doctor where Deptno = `D4' ;
  - iii) Drop from Doctor where Deptno = 'D4';
  - iv) Delete from Doctor where Deptno = 'D4';
- 35. A department store has to maintain the details of product in the kids zone. Categories available in the kids zone are food, play, clothes.
  - a) Create a database "Kids\_Zone".
  - b) Insert the value prodID --> 101, prod\_name --> 'skirt' in table product.
  - c) Show the structure of the table Product.
  - d) Show the contents of the table Product.

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