

# BUDHA DAL PUBLIC SCHOOL, PATIALA

## TERM-II EXAMINATION (SESSION 2024-25) SET:-A

CLASS: - XII, SUBJECT: - INFORMATICS PRACTICES (CODE:- 065)

Time: 3 Hours

Max. Marks: 70

### General Instructions:

1. This question paper contains five sections, Section A to E.
2. All questions are compulsory.
3. Section A has 18 questions carrying 01 mark each.
4. Section B has 07 Very Short Answer type questions carrying 02 marks each.
5. Section C has 05 Short Answer type questions carrying 03 marks each.
6. Section D has 02 questions carrying 04 marks each.
7. Section E has 03 questions carrying 05 marks each.
8. All programming questions are to be answered using Python Language only.

SECTION-A		
<b>Fill in the Blanks:-</b>		
1.	To specify filtering condition for groups, the _____ clause is used in MySQL	1
2.	Group functions are also known as _____ functions.	1
3.	IT Amendment Act, 2008 came into force from the year _____	1
<b>State Whether the following statements are True or False:-</b>		
4.	By default, ORDER BY clause sorts the result set in descending order.	1
5.	The return value of MAX() function is a numeric value.	1
6.	E-waste is very hazardous if not handled carefully.	1
<b>Multiple Choice Questions(MCQs):-</b>		
7.	Which values will not be considered by SQL while executing the following statement? SELECT COUNT (column name) FROM DEPARTMENT; (i) Numeric value      (ii) Text value      (iii) Null value      (iv) Date value	1
8.	Which clause is used in query to place the condition on groups in MySQL? (i) WHERE      (ii) HAVING      (iii) GROUP BY      (iv) Both (i) & (ii)	1
9.	If column "Salary" contains the data set (10000, 15000, 25000, 10000, 15000), what will be the output after the execution of the given query? <b>SELECT SUM (DISTINCT SALARY) FROM EMPLOYEE;</b> (i) 75000      (ii) 25000      (iii) 10000      (iv) 50000	1
10.	What SQL statement do we use to display the record of all students whose last name contains 5 letters ending with "A"? (i) SELECT FROM STUDENTS WHERE LNAME LIKE 'A'; (ii) SELECT * FROM STUDENTS WHERE LNAME LIKE ' (iii) SELECT FROM STUDENTS WHERE LNAME LIKE '????A'; (iv) SELECT FROM STUDENTS WHERE LNAME LIKE 'A';	1
11.	Which of the following functions is used to find the largest value from the given data in MySQL? (i) MAX( )      (ii) MAXIMUM( )      (iii) LARGEST( )      (iv) BIG( )	1
12.	In SQL, which function is used to extract a date from a date expression? (i) Now( )      (ii) Curdate( )      (iii) Date( )      (iv) Day( )	1
13.	Standard security protocol that establishes encrypted links between a web server and a browser is called (i) Online safety technology      (ii) SDT technology (iii) Web encryption technology      (iv) Secure Sockets Layer Technology	1
14.	Credit card fraud may include: (i) Stealing of credit card      (ii) Unauthorized and illegal use of credit card (iii) Stealing information      (iv) Phishing	1
15.	Which of the following is an open-source software? (i) Microsoft Windows      (ii) Adobe Photoshop      (iii) MySQL      (iv) MS PowerPoint	1

16.	Which of the following measures should not be adopted to recycle e-waste safely? (i) Donate to NGO (ii) Sell your old electronics (iii) Burn your e-waste (iv) Give your e-waste to a certified e-waste recycler	1																		
	<b>Q17 and 18 are ASSERTION AND REASONING based questions. Mark the correct choice as</b> a) Both A and R are true and R is the correct explanation for A b) Both A and R are true and R is not the correct explanation for A c) A is True but R is False. d) A is False but R is True.	1																		
17.	<b>Assertion (A):</b> COUNT() function ignores distinct values. <b>Reasoning(B):</b> Distinct clause ignores duplicate values.																			
18.	<b>Assertion (A):</b> Hacking is compromising security on digital devices. <b>Reasoning(B):</b> Hacking involves stealing passwords and other digital information.	1																		
	<b>SECTION-B</b>																			
19.	What is null value in MySQL?	2																		
20.	What are aggregate functions?	2																		
21.	What is the importance of cyber law?	2																		
22.	List two points of network security components.	2																		
23.	Explain phishing?	2																		
24.	Define the term Primary Key in a database. Explain how it is different from a Candidate Key.	2																		
25.	<b>Consider the string: "Database Management System". Write suitable SQL queries for the following:</b> I. To extract and display "Manage" from the string. II. Display the position of the first occurrence of "base" in the given string.	2																		
	<b>SECTION-C</b>																			
26.	What is an ORDER BY clause and GROUP BY clause.	3																		
27.	How is digital piracy related to illegal downloads?	3																		
28.	What do you understand by net etiquettes? Explain any two such etiquettes.	3																		
29.	<b>Ritika's family is replacing their old computer with a new one. They decide to throw the old computer in a nearby empty field/plot.</b> I. Explain any one potential environmental hazard associated with improper e-waste disposal. II. Suggest one responsible way to Ayesha's family for proper disposal of their old computer. III. Describe the importance of recycling in e-waste management	3																		
30.	Write an SQL statement to create a table named STUDENTS, with the following specifications: <table border="1" data-bbox="540 1398 1135 1623"> <thead> <tr> <th>Column Name</th><th>Data Type</th><th>Key</th></tr> </thead> <tbody> <tr> <td>StudentID</td><td>Numeric</td><td>Primary Key</td></tr> <tr> <td>FirstName</td><td>Varchar(20)</td><td></td></tr> <tr> <td>LastName</td><td>Varchar(10)</td><td></td></tr> <tr> <td>DateOfBirth</td><td>Date</td><td></td></tr> <tr> <td>Percentage</td><td>Float(10,2)</td><td></td></tr> </tbody> </table> II. Write SQL Query to insert the following data in the Students Table 1, Harpreet, Singh, 2011-10-12, 80.	Column Name	Data Type	Key	StudentID	Numeric	Primary Key	FirstName	Varchar(20)		LastName	Varchar(10)		DateOfBirth	Date		Percentage	Float(10,2)		3
Column Name	Data Type	Key																		
StudentID	Numeric	Primary Key																		
FirstName	Varchar(20)																			
LastName	Varchar(10)																			
DateOfBirth	Date																			
Percentage	Float(10,2)																			
	<b>SECTION-D</b>																			
31.	Give the output of following commands. i. mysql> SELECT LEFT ('Swati', 4); ii. mysql> SELECT CHAR (83, 72, 85, 67, 72, 73); iii. mysql> SELECT RTRIM(' __ Study is important __ '); iv. SELECT ROUND(3234.343, 1);	4																		
32.	What is identity theft? Explain with the help of an example.	4																		

	SECTION-E																																										
33.	List any four health hazards related to excessive use of technology.						5																																				
34.	Consider the following table CLUB. <b>Table: CLUB</b>						5																																				
	<table><tr><th>COACH_ID</th><th>COACH NAME</th><th>AGE</th><th>SPORTS</th><th>Date_of_Joining</th><th>PAY</th></tr><tr><td>1</td><td>Rajesh</td><td>30</td><td>Karate</td><td>1999-08-25</td><td>1000</td></tr><tr><td>2</td><td>Anuj</td><td>35</td><td>Swimming</td><td>2000-01-05</td><td>750</td></tr><tr><td>3</td><td>Shuchi</td><td>25</td><td>Basketball</td><td>2005-01-04</td><td>1200</td></tr><tr><td>4</td><td>Reetika</td><td>28</td><td>Badminton</td><td>2002-08-25</td><td>1400</td></tr><tr><td>5</td><td>Virendra</td><td>32</td><td>Cricket</td><td>1996-05-17</td><td>1500</td></tr></table>						COACH_ID	COACH NAME	AGE	SPORTS	Date_of_Joining	PAY	1	Rajesh	30	Karate	1999-08-25	1000	2	Anuj	35	Swimming	2000-01-05	750	3	Shuchi	25	Basketball	2005-01-04	1200	4	Reetika	28	Badminton	2002-08-25	1400	5	Virendra	32	Cricket	1996-05-17	1500	
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	Give the answer of the following questions on the basis of the above table.																																										
	i. Write a query to display the substring of 4 characters of the name of each coach, starting from second character, with their age.																																										
	ii. What will be the output of the following query?mysql>SELECT CONCAT (COACHNAME, AGE) FROM CLUB WHERE AGE>30;																																										
	iii. Write a query to display the day for the Date_of_Joining column.																																										
	iv. What will be the output of the following query? mysql>SELECT PAY *0.25 + 1000 FROM CLUB WHERE COACHNAME LIKE 'R%';																																										
	v. Write a query to display 3 characters from left of coach name.																																										
35.	Write suitable SQL query for the following: I. To display the average score from the test_results column (attribute) in the Exams table II. To display the last three characters of the registration_number column (attribute) in the Vehicles table. (Note: The registration numbers are stored in the format DL-01-AV-1234) III. To display the data from the column (attribute) username in the Users table, after eliminating any leading and trailing spaces. IV. To display the maximum value in the salary column (attribute) of the Employees table. V. To determine the count of rows in the Suppliers table.						5																																				