Informatics Practices Class 11th (Term II)

Practice Paper 2* (Unsolved)

General Instructions

1. There are 9 questions in the question paper. All questions are compulsory.

- Time: 2 Hours
 Max. Marks: 35
- There are 9 questions in the question paper. An questions are computed y.
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- 2. Question no. 1 is a Case Based Question, which has five MCQs. Each question carries one mark.
- 3. Question no. 2-6 are Short Answer Type Questions. Each question carries 3 marks.
- 4. Question no. 7-9 are Long Answer Type Questions. Each question carries 5 marks.
- 5. There is no overall choice. However, internal choices have been provided in some questions. Students have to attempt only one of the alternatives in such questions.
- * As exact Blue-print and Pattern for CBSE Term II exams is not released yet. So the pattern of this paper is designed by the author on the basis of trend of past CBSE Papers. Students are advised not to consider the pattern of this paper as official, it is just for practice purpose.

1. Direction Read the case and answer the following questions.

Ravi has recently studied about the basic database concepts. He has come across the terms like database, tables, degree of a table, cardinality of a table, primary key, candidate key, alternate key, etc. He has also learnt that while creating a table, certain constraints may be applied to restrict data in tables and to impose business rules in them .He wants to be more confident about these concepts. Help him by solving the following questions .

(i) If a table "Electronics" has 12 attributes and 10 tuples , the degree of the table is

(a) 12	(b) 10
(c) 120	(d) 22

(ii) The header of a table is used in counting the

(a) degre	e	(b) cardi	nality
<pre></pre>		(m)	

- (c) candidate key count (d) None of these
- (iii) If a table has 3 columns carrying NOT NULL and UNIQUE values, the maximum number of candidate keys can be
- (a) 2 (b) 3 (c) 1 (d) 0
- (iv) Constraints in a table can be added,
 - (a) while creating table (b) after creation of table
 - (c) Both (a) and (b) (d) None of these
- (v) Which of the following equation relates primary key, candidate key and alternate key?
 - (a) Primary key = Candidate key + Alternate key
 - (b) Candidate key = Primary key + Alternate key
 - (c) Aternate key = Candidate key Primary key
 - (d) Both (b) and (c)

- 2. Write some uses of sensors .Explain the sensor components of IoT system.
- *Or* Write MySQL command to create the table STOCK including its constraints. What will the constraint primary Key do?

	Table : STOCK		
Name_of_Column	Туре	Size	Constraint
ID	Decimal	4	Primary Key
Name	Varchar	20	Null
Company	Varchar	20	Null
Price	Decimal	8	Not Null

- **3.** Write in short about fields where virtual reality technology can be applied?
- Or Write a command to create the table PAYMENT given below as per the instance chart . What will the Not Null constraint do?

	Table : PAYMENT		
Field_Name	Туре	Size	Constraint
Loan_Number	Integer	4	Primary Key
Payment_Number	Varchar	3	Null
Payment_Date	Date		Null
Payment_Amount	Integer	8	Not Null

4. Which column can be the primary key of the table? What will be the output of the following queries on the basis of EMPLOYEE table?

Ta	ble : EMPLOYEE	
Emp_Id	Name	Salary
E01	Siya	54000
E02	Joy	NULL
E03	Allena	32000
E04	Neev	42000

(i) SELECT Salary + 100 FROM EMPLOYEE

WHERE Emp_Id = 'EO2';

(ii) SELECT Name FROM EMPLOYEE

WHERE $Emp_Id = 'E04';$

Or Explain how grid computing can be used in solving a complex problem.

5. What is the use of AS keyword with SELECT statement?

6. Consider the table CUSTOMER

C_ID	C_Name	C_City	C_Salary
100	DUSHYANT	MEERUT	15000
101	RAJ	DELHI	12000
102	VIKAS	GOA	10000

(i) Write a MySQL query to display the names of all customers from Meerut.

(ii) Name the data type used for C_City field.

7. Write the syntax for the following SQL commands

- (i) Drop a database
- (ii) Select a database
- (iii) Insert a new row
- (iv) Update a NULL value
- (v) Change the data type of a column
- (vi) Create a table
- (vii) Drop a table
- (viii) Update a table

Or Write SQL commands for the table Garments.

Table : Garments

GID	Gname	Qty	Price	Туре
G01	Trouser	15	775.50	Cotton
G02	Shirt	25	256.55	Cotton
G03	Saree	28	3000.00	Silk
G04	Tie	54	1500.00	Nylon
G05	Handkerchief	65	50.00	Cotton

(i) Display details of "Cotton" and "Silk" garments.

(ii) Increase price of "Silk" garments by 200, if their price is less than 2000.

- (iii) Add a new column Reorder of type integer(4).
- (iv) Remove the column Reorder.

(v) Delete the records of garments whose Gname has first character as "S" and third character as "r".

8. Find errors in the following SQL statements.

(i) SELECT*FROM Student WHERE Name IS = "Amit";

(ii) SELECT*FROM Employee WHERE Salary BETWEEN 1000, 2000;

(iii) SELECT*FROM Employee WHERE Name = "A%";

 $(\mathrm{iv})\,$ SELECT Name,Subject FROM Student WHERE Average >20 and < 30;

(v) SELECT*FROM Student WHERE Name = "Amit" AND Name = "Sumit";

Or Write commands required for the following cases.

- (i) To add a new record
- (ii) To increase a value in an existing record
- (iii) To remove a table with all its data
- (iv) To modify an existing column of table
- (v) To remove a column of a table

9. Explain the uses and characteristics of cloud computing.

Or Describe Internet of Things (IoT) and its advantages.

Answers

1. (i) (a) (ii) (d) (iii) (b) (iv) (c) (v) (d)