SAMPLE PAPER – 1

INFORMATICS PRACTICES – XI

TERM - 2

Maximum Marks: 35 **Time: 2 hours**

General Instructions

1. The question paper is divided into 3 sections – A, B and C
2. Section A, consists of 7 questions (1-7). Each question carries 2 marks.
3. Section B, consists of 3 questions (8-10). Each question carries 3 marks.
4. Section C, consists of 3 questions (11-13). Each question carries 4 marks.
5. Internal choices have been given for question numbers – 1, 4, 7, 8 and 12.

Section –A

Each question carries 2 marks

Q1. What is the basic difference between IoT and WoT? (2)

OR

How is Virtual Reality (VR) different from Augmented Reality (AR)?

Q2.

(i) A company interested in cloud computing is looking for a provider who offers a set of basic services, such as virtual server provisioning and on demand storage that can be combined into a platform for deploying and running customised application. What type of cloud model fits these requirements? (1)

(ii) _____ refers to the ability of machines to perform cognitive tasks like thinking, perceiving, learning, problem-solving and decision making. (1)

Q3. Suggest the technology which will be implemented to perform the following day to day task. (2)

i) you got a reminder to take medicine
ii) you got an SMS alert that you forgot to lock the door
iii) you got an SMS alert that parking space is available near your block
iv) you turned off your LED TV from your wrist watch

Q4. Give one word for the following: (2)

i) Software used to create, manipulate and maintain a relational database.
ii) It refers to the total number of attributes in a relation.
iii) A single record in a table.
iv) An attribute that can uniquely identify each row of a table.

OR

Differentiate between DDL and DML.

Q5. List any two advantages of using database (DBMS). (2)

Q6. What do you understand by DEGREE and CARDINALITY of a table. (2)

Q7.

(i) What do you mean by data redundancy? (1)

(ii) And how does a database management system avoid redundancy in data through a database. (1)

SECTION – B

Each question carries 3 marks

Q8. . An Organisation wants to create a database **EMP- DEPENDENT** to maintain following details about its employees and their dependent. (3)

EMPLOYEE(AadharNumber, Name, Address, Department , EmployeeID)

i) Name the attributes of employee, which can be used as candidate keys

ii) What is the degree of employee relation?

iii) Can user assign duplicate values to the filed EmployeeID of EMPLOYEE table? Justify.

OR

i) Which SQL clause eliminates duplicate rows from the results of a select statement.

ii) Which SQL command is used to modify rows of a table.

iii) Which of the keywords will you use in the following query to display all the values of table Employee?

Select _____from Employee;

Q9. Nisha is a class teacher of 10. She has created a table **Marks** to record marks of PT exam of different subjects that have been conducted offline. The fields of marks table are RollNo, Name, AdmNo, English, Hindi, SST, Science, Maths, Status. She is facing problem in some tasks. Help her

i) to add a new column computer with integer(3) data type. (1)

ii) to see the structure of the table. (1)

iii) to find a primary key of a marks table. (1)

Q10. Write SQL query to create the 'Sales' table from the given data (3)

Column Name	Data Type	Size	Constraints
Orderid	Integer	4	Primary Key

Pname	Varchar	20	Not Null
Quantity	Integer	5	Not Null
Rate	Integer	5	Not Null
Discount	Integer	3	Null

Section C

Each question carries 4 marks

Q11. Write the output of the queries (a) to (d) based on the table, Graduate given below: (4)

SID	Name	Stipend	Subject	Average	Div
1	Karan	400	Physics	68	1
2	Divakar	450	Computers	68	1
3	Divya	300	Chemistry	62	2
4	Arun	350	Physics	63	1
5	Sabina	500	Mathematics	70	1
6	John	400	Chemistry	55	2
7	Robert	250	Physics	64	1
8	Rubina	450	Mathematics	68	1
9	Vikas	500	Computers	62	1
10	Mohan	300	Mathematics	57	2

i) `SELECT LEFT(NAME,3) FROM Graduate WHERE SNO>7;`

ii)
```
SELECT Name, Stipend FROM Graduate WHERE
Subject="Chemistry" OR Subject="Physics";
```

iii)
```
SELECT * FROM Graduate WHERE Subject LIKE 'C%' AND
Average=68;
```

iv) `SELECT Name FROM Graduate WHERE DIV=2;`

Q12. Consider the following database. **Table: Product:** (4)

ProductCode	Product Name	DateofSale	QtySold	CustomerName	Amount
P001	Pencil	05/10/11	5	Himanshu	25
P002	Eraser	04/01/12	4	Ali	8
P003	Sharpner	09/12/11	6	Deepak	12
P004	Whitener	25/04/11	2	Ankit	30
P005	Glue Pen	20/07/12	3	Ruchi	30

Answer the following questions.

i) Write the name of the field that contains numeric data.

ii) Identify the field type of the DateofSale field.

iii) Identify the names of the fields that contain textual data.

iv) What is the Cardinality of the table Product?

OR

From the above given table **Product.**

Write SQL commands:

i) To show all the information of product.

ii) To list the details of all the products whose amount between 25 to 30.

iii) List the records whose product name is Pencil or Whitner.

iv) To display the list of names of all the products in alphabetical order.

Q13. Write SQL commands for the questions from (i) to (iv) on the basis of table SHOP. (4)

Table : SHOP

S_NO	P_Name	S_Name	Qty	Cost	City
S1	Biscuit	Priyagold	120	12.00	Delhi
S2	Bread	Britannia	200	25.00	Mumbai
S3	Chocolate	Cadbury	350	40.00	Mumbai
S4	Sauce	Kissan	400	45.00	Chennai

i) Display all products whose quantity in between 100 and 400.

ii) Display data for all products sorted by their quantity.

iii) To list S_Name, P_Name, Cost for all the products whose quantity is less than 300.

iv) To display S_NO, P_Name, S_Name, Qty in descending order of quantity from the SHOP table.