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TERM II
II PRE-BOARD EXAMINATION FEBRUARY 2022
SESSION: 2021-22
CLASS: XII
SUBJECT : INFORMATICS PRACTICES (065)

Maximum Marks: 35   *Time Allowed: 2 Hours*

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

Section – A
Each question carries 2 marks

Q. No.	Part No.	Question	Marks
1		Anupam is a class 12 computer science student. He knows about browser and it's various settings, but he is not very much clear about the term Add-ons and Plugins. As a good friend of Anupam, explain him the difference between Add-ons and Plugins.	2
		OR	
		Aman is a brilliant child of class VIII. Due to some unavoidable reason, he missed his one computer class in which his teacher taught the difference between Webpage and Website. As his elder brother explain him the difference between Webpage and Website.	
2	i.	I am a topology in which all the computers are directly connecting to a single cable called backbone. If the backbone cable break the entire network will be down. Name the topology.	1
	ii.	What is browser?	1
3		Write the output of the following :	2
	i.	SELECT POWER(2,0);	
	ii.	SELECT ROUND(345.876);	
		OR	
		Briefly explain the purpose of the following SQL functions:	
	i.	MOD()	
	ii.	POW()	

4	Explain DNS in brief.	**2**
5	Write the output of the following:	**2**

     i.   SELECT MOD(11,3);

     ii.   SELECT ROUND(123.456,2);

6	What is the difference between 'where' and 'having' clause in MySQL. Explain with example.	
7	Mr. Rakesh created the following table 'Student' to store the details of students:	**2**

TABLE: STUDENT		
NAME	**CLASS**	**DOB**
AMAN	9	2001-08-28
SUMIT	10	2000-01-28
NAMAN	9	2001-12-05
RANI	11	1999-09-03

He has written the following queries:

i.   Select min(year(DOB)) from Student;

ii.   Select * from Student where day(DOB) = 28;

Write the output of the above queries.

<div align="center">

OR

</div>

Write the queries for the following on the basis of above table : STUDENT   **2**

i.   Display the name of the student who born in year 2000.

ii.   Display the detail of the students who born in the month of 'May'

<div align="center">

SECTION – B

Each question carries 3 marks

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8	Write the output of the following queries:

i.   Select length(trim(" Computer "));

ii.   Select mid("Informatics Practices", 7, 7);

iii. Select instr("Computer Science", "e");

<div align="center">

OR

</div>

8	Consider the table "Book" which has the following fields:	**3**

    1. Bookno

    2. Bname

    3. Price

    4. Author_name

Write the queries for the following:

i. Display name of all the books in upper case.

ii. Display last digit of price column of all the books.

iii. Display third, forth and fifth character from all the author name.

9 Explain the following SQL functions with example: **3**

i. NOW()

ii. LEFT()

iii. SUM()

10 Name and explain all the functions which are used in the following query with example: **3**

SELECT RIGHT((TRIM(' COMMON QUERIES "),6));

Also write the output of the above query.

Section – C

Each question carries 4 marks

11 Consider the following table "CHIPS" and write queries given below: **4**

TABLE: CHIPS			
BRAND_NAME	FLAVOUR	PRICE	QUNATITY
LAYS	ONION	10	5
LAYS	TOMATO	20	12
UNCLE CHIPS	SPICY	12	10
UNCLE CHIPS	PUDINA	10	12
HALDIRAM	SALTY	10	20
HALDIRAM	TOMATO	25	30

i. To display detail of all chips in decreasing order of quantity.

ii. To display brand name and it's total quantity available.

iii. To display brand name and it's average price.

iv. To display detail of lowest price chips in each brand.

12 Write the queries for the following task. **4**

i. Add a new column "Name" of data type Varchar(30) in table "Hotel".

ii. Delete a record from table "emp" whose empid is 101.

iii. Delete all the records of table "stock" along with structure.

iv. Display the total of column "Salary" from table "emp".

Based on the table: "EMP" given below: 4

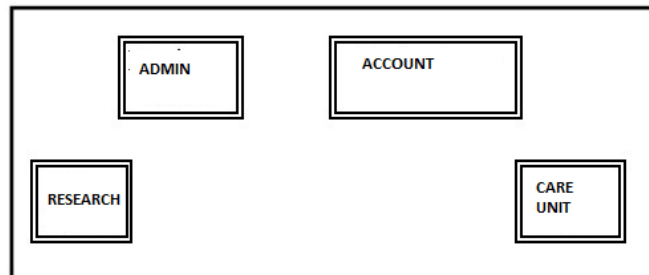| EMPID	SALARY
1	45000
2	50000
3	55000
4	40000
5	NULL

Write the output of the following:

i.   SELECT MOD(SALARY, 100) FROM EMP;

ii.   SELECT AVERAGE(SALARY) FROM EMP;

iii.   SELECT SUM(SALARY) FROM EMP WHERE EMPID > 3;

iv.   SELECT MAX(SALARY) FROM EMP;

13   Admin, Account, Research, and Care-unit are four buildings of an IT company   4
as shown in the diagram below. Ms. Shalini want to connect all the four
buildings

The distance between various buildings are as follows:

Admin to Account	200m
Admin to Research	150m
Admin to Care Unit	50m
Account to Research	250m
Account to Care Unit	350m
Research to Care Unit	350m

Number of computers in each of the building are as follows:

Admin	120
Account	100
Research	50
Care unit	50

i. Suggest the most suitable place (i.e., Building) to install the server of this IT Company with a suitable reason.

ii. Suggest an ideal layout for connecting these building for a wired connectivity.

iii. Suggest the placement of the following device with justification
   a. Repeater
   b. Hub/Switch

iv. The IT company is planning to connect one centre at hilly location which is more than 1250km from its HQ. Which type of network out of LAN, MAN, or WAN will be formed and which type of Communication medium is used to connect the above.
Justify your answer.