Roll Number				SET	B

INDIAN SCHOOL MUSCAT
SECOND PRE - BOARD EXAMINATION
INFORMATICS PRACTICES(065)

CLASS: XII   TERM 2   Time Allotted: 2HRS.

09.04.2022   Max.Marks: 35

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 – 3, 8 and 12.
MARKING SCHEME

1.	Define the following: a) HTTP – hypertext transfer protocol 1/ 2mark explanation – ½ mark b) Web Page A **web page** (or **webpage**) is a hypertext document provided by a **website** and displayed to a user in a web browser. ... A **website** typically consists of many **web pages** .	2
2.	Write any two ADDVANTAGES AND DISADVANTAGES OF Network. Any two advantage and disadvantages 1+1=2 mark	2

3.	Find the output of the following:
	   a) Select SUBSTR("CARTESIAN PRODUCT",2,3) from dual; ART 1 mark
	   b) Select Truncate(5678.893,2); 5678.89 1 mark
	      (or)
	Explain a) SUBSTR( ) it is used to extract the number of characters from the specified location of the string 1 amrk b) Truncate() : it is used to cut the number of decimal point specified. 1 mark
		2

4.	Define VOIP and write any two common VOIP apps name,
	Voice over Internet Protocol (VoIP), is a technology that allows you to make voice calls using a broadband Internet connection instead of a regular (or analog) phone line.
	   1. Dialpad. With Dialpad, you can talk, message, and meet with clients, teammates, and more—all from the desktop or softphone / mobile app. ...
	   2. CloudTalk App. ...
	   3. Ooma Office. ...
	   4. Google Voice / Google Hangouts. ...
	   5. Freshcaller. ...
	   6. Grasshopper. ...
	   7. Line 2. ...
	   8. NetFortris.
	Any 2 apps name 1 mark
		2

5.	Predict the output of the following:	2

	a) Select mod(Year(2002-02-02),3) ; 0 1 mark b) Select round(23456.786,1); 23456.79 1 mark	
6.	What is the use of GROUP BY clause in MySQL? Explain with an example. It is used to keep all the similar records together. 1 mark select deptno,count(*) from emp group by deptno; 1 mark or any valid example 1 mark	2
7.	Ms. Saranya, a HR Manager in a multinational company "P&G" has created the following table to store the records of employees: **Table: Employee**	2

Emp_id	Empname	Deptno	Salary
J4567	Gouri	100	3000
D2314	Yash	200	7500
A2345	Karan	100	3400
C4567	Rhea	100	5000
F3456	Scott	200	7000
T5432	Martin	300	4600
C7654	Hari		2500

She has written following queries: (Predict the output)

i) select Empname,emp_id from employee where salary >3000;

proper outout   1 mark

ii) select ENAME from emp where Deptno =200 and empname like "%t";

proper output 1 mark

Section -B
Each question caries 3 marks

8.	Predict the out put of the following :	3
	i. Select length(concat(left("Welcome",3),right("Welcome",4))); 7	
	ii. Select substr("VISIO2022",length("123")); SIO2022	
	iii. Select dayname(now()); saturday	

<div align="center">OR</div>

Ms.Praisy is working on a MySQL table named 'MANAGEMENT' having following structure:

```
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| user_id     | varchar(20) | YES  |     | NULL    |       |
| name        | varchar(20) | YES  |     | NULL    |       |
| city        | varchar(20) | YES  |     | NULL    |       |
| mobile_no   | varchar(11) | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
```

    i.   Write a query to display first 4 characters in capital letter of the CITY column.

             Select upper(left(city,4) from Management;

    ii.   Write a query to count the number of characters of the NAME column.

             Select length(name) from management;

    iii.   To display 3 characters from 5th place from the column name
             Select mid(name,5,3) from management.
Suggest suitable SQL function for the same. Also write the query to achieve the desired task.

9.	How cross join is different from equi- join ? Explain with an example. Cross join explanation with proper example 1 ½ mark Equi join explanation with proper example - 1 ½ mark	3
10.	Explain any two single row functions and any two multirow function with an example. Sing row function it will work each and every row of a table and produce the result. 1 mark any valid example – ½ mark Multi row function: it will work more than one row of a table and produce a single result. 1 mark Any valid example ½ mark	3

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Section -C
Each question caries 4 marks
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11.	Carefully observe the following table named 'MASTERFILE':	4

Table: MASTERFILE

Id	Prod_name	country	Prod_category	Price
A89765	Mouse	Taiwan	Input	345
G34567	Monitor	India	Output	650
S23453	USB	USA	Storage	200
K92761	KeyBoard	India	Input	540
J1234	HDD	Taiwan	Storage	100

4	Switch	NW	5	5000
5	Monitor	O	10	4500
6	Printer	O	4	17000

Write SQL queries for the following:

    a. write a query to display how many products are there in each country.

    Select country, count(*) from masterfile group by country;

    b. To display product name, product category and price of all the products name ends with the character 'e'.

    Select prod_name,prod_category,price from Masterfile where prod_name like"%e';

    c. To display t h e Average product price of each category.

    Select prod-category,avg(price) from Masterfile group by prod_category;

    d. To display all the product names whose product id starts with the character "A" and the price is more than 200.

    Select prod_name from Masterfile where id like "A5" and price >200;

12. Manish, a database analyst has created the following table:

Table: Student

Rollno	Name	Clas_sec	Stream	AVGMark	Grade
1231	Umesh	12I	Commerce	345	C
2356	Chandini	12A	Science	NULL	B
6554	Bala	12G	Commerce	450	B
3451	Vishnu	12B	Science	399	C
4321	Girish	12K	Humanities	421	A
2134	Xavier	12G	Commerce	491	A

He has written following queries:

(a) select count(avgmark) from student where class like "12%" and STREAM= 'Commerce';
(b) select name, stream, avgmark from student where rollno <=2400;
(c) select count(avg),clas_sec from student group by clas_sec;
 (d) select mid(NAME,3,2) from student where Avgmark >430;
Writing correct output 1+1+1+1=4marks

Help him in predicting the output of the above given queries.

OR

Based on the above given table named 'Student', Manish has executed following queries:

Select 100 from dual;   with the use of thiscommand it will produce100 one time. Dual is the dummy table which is used for general calculatin(s)   2 marks
Select 100 from student; with the use of this command it will produce 100   six times. The result will be based on number of records available based on a table mentioned.   2 amrk

Predict the output of the above given queries.

| | | 4 |

	Also give proper justifications of the output generated through each query.	
13.	Explain the following terms: a)ARPANET ARPANET, in full **Advanced Research Projects Agency Network**, experimental computer network that was the forerunner of the Internet. ... Its initial purpose was to link computers at Pentagon-funded research institutions over telephone lines. b)MODEM (modulator demodulator) A modem is a **device that connects your home**, usually through a coax cable connection, to your Internet service provider (ISP), like Xfinity. The modem takes signals from your ISP and translates them into signals your local devices can use, and vice versa. c)GATEWAY A router is a device that is capable of sending and receiving data packets between computer networks, also creating an overlay network. A **Gateway**, on the other hand, joins dissimilar systems. d)HUB A hub is **a physical layer networking device which is used to connect multiple devices in a network**. They are generally used to connect computers in a LAN. A hub has many ports in it. A computer which intends to be connected to the network is plugged in to one of these ports. 1+1+1+1=4 marks	4
	End of the Question Paper	