SET - B

Roll Number		

Code Number   **065/2**

INDIAN SCHOOL MUSCAT

FIRST TERM EXAMINATION

SUBJECT : INFORMATICS PRACTICES

CLASS: XII   Sub.Code: 065   Time   Allotted: 3 Hrs.

30.04.2018   Max.Marks: 70

Instructions:
1. **All the questions are compulsory**
2. **Read the Question carefully and write the Answer**

Q1.   a) How SWITCH is different from HUB? Explain   2
A **switch** is used to connect various network segments. A network **switch** is a small hardware device that joins multiple computers together within one local area network (LAN). A **Hub** connects multiple Ethernet devices together, making them act as a single segment.   1+1 Mark

b) What is the purpose of IP address of computer ?   2
An Internet Protocol address (IP address) is a **numerical** label assigned to each device connected to a computer network that uses the Internet Protocol for communication. An IP address serves two principal functions: host or network interface identification and location addressing.

c) How BUS topology is different from STAR topology?   2
A bus topology is a networking architecture that is linear, usually by using one or more pieces of cable to form a single line, or bus. The signals sent by one station extend the length of this cable to be heard by other stations.   1 mark

A star topology is an architecture that includes a central device or hub to connect all stations together. Signals sent by a station must pass through (and are usually regenerated) by these central hubs. Since the hub sits in the center and all other stations are linked through the hub, the architecture resembles a star.   1 mark

d) Which of the following are valid IP addresses ? Give reason(s) if invalid.   2
i& ii are valid – 1 mark   iii and iv not valid reason no alphabets and – sign allowed- 1 mark

e) How Cracker is different from Hacker in Computer Science?   2
A hacker is a person intensely interested in the arcane and recondite workings of any computer operating system. Hackers are most often programmers.   1 mark

- A cracker is one who breaks into or otherwise violates the system integrity of remote machines with malicious intent. Having gained unauthorized access, crackers destroy vital data, deny legitimate

users service, or cause problems for their targets. Crackers can easily be identified because their actions are malicious.   1 mark

f) Identify the odd one out of the following :
Optical Fiber/Coaxial Cable/Bluetooth/Twisted Pair Cable Give reason for your answer
Blue tooth – wireless medium   1+1 =2 mark   2

g) Define Network. Write any two application of network.   2
Network explanation – 1 mark
Any two application – 1mark

h) Define Domain Name Resolution.   2
Identifying IP address of any web site – 2 mark

i) Write the full form of   a) CDMA - Code-division multiple access   2
b)GSM- Global System for Mobile communication

j) Explain the following term   a) Firewall - explanation 1 markb) Snooping –   2
explanation 1 Mark

Q2.   a) How WHERE clause is different from HAVINGClause ?Explain with an example.   2
Where : it is used to specify the general condition along with select, update and delete.
Ex: select * from emp where deptno=10;
Having: it is used to specify the condition along with the Group by clause.
Ex: select deptno,count(*) from emp group by deptno having count(*)>1;

b) What is the use of BETWEEN   AND operator in mysql? Explain with an example.   2
It is used to specify the range of values. Select * from emp where sal between 2000
and 5000; 1+1=2 mark

c) Find the out put of the following: 5*1=5
   1. Select left(concat("ABCD","EFG"),2);
      AB
   2. Select dayofyear("2017-02-04");
      35
   3. Select round(5567.78,1)+truncate(3758.91,1);
      5567.7+3758.9=9326.6
   4. Select pow(length("Chennai"),4);
      625
   5. Select instr("FLOOR","OR");
      4

d) Ms.Rhea created the table EMPLOYEE with the following fields: 2
ENO,ENAME,ESALand DEPTNO. While creating a table he forgot to add the
primary key. Help him to add the primary key to the above table and identify the
primary key field.
Using ALTER – 1 mark correct syntax- 1 mark

e) Define Transaction and write all the commands under TCL.   2
   Explanation : 1 mark   and commit ,rollback and svae point – 1mark

f)   2

Using ALTER Command -2 mark

g) Single Row functions – 1mark Aggregate Functions- 1 mark   3
   Example- 1 mark

h) Given below is the 'Department' table :   3
   Every correct out put 1 mark

DEPCODE	DEPNAME
101	ADMIN
102	Front office
103	It
104	sales

i) "A & B" Company conducts workshops for employees of organizations.   2
The company requires data of workshops that are organized. Write
SQL query to create a table 'Workshop' with the following structure :

Field	Type	Constraint
WShopId	Integer	Primary key
Title	Varchar(50)	
DateWorkshop	Date	
NumSpeakers	Integer	

Create table with proper syntax : 2 marks

j) Consider the Table " Employee" shown below :

Table: Employee 10

No.	Name	Salary	Area	Age	Grade	Dept
1	Keshar	40000	West	45	C	Civil
2	Manish	35000	South	38	A	Elec
3	Kripple	60000	North	52	B	Civil
4	Aryan	38000	North	29	B	Civil
5	Samsons	42000	East	35	A	Comp
6	Biswal	29000	South	34	A	Mech

Write the commands in SQL for (i) to (viii) and output for (ix) and (x).

(i)

Select name from employee where name like "%i%";

(ii)

Select name,salary from employee where grade='C' or grade="B";

(iii)   To list the names who are all in South and their department is Comp.select name, area from employee where area="South" and dept="comp";

(iv)   Select grade, count(*0 from employee group by grade;

(v)   Desc Employee;

(vi)

 Update employee set salary=salary+salary*10/100 where area="South";

(vii)   Select min(salary) from employee;

(viii)

 Select name from employee order by grade desc;

(ix) correct output 1 mark

(x)   Correct output 1 mark

k) The CoachName column of a table "Club" is given below: 2

CoachName
Raghav
Sumit
Anurag
Rohit
Lucky

Based on this information, find the output of the following queries:

(a) Raghav

   Anurag

(b) Anurag

l) 2
5 then 5

m) In a database there are two tables "ITEM", and "Customer" as shown below: 5*2=10

ITEM

P_ID	ProductName	Manufacturer	Price
1001	Moisturizer	XYZ	40
1002	Sanitizer	LAC	35
1003	Bath Soap	COP	25
1004	Shampoo	TAP	95
1005`	Leans Salution	COP	350

CUSTOMER

C_ID	ClientName	City	P_ID
01	Samridh Ltd	New Delhi	1002

05	Big Line	Mumbai	1005
12	S & S	New Delhi	1001
15	Tom n Jerry	Bangalore	1003

Write the commands in SQL for the following:

1) Using join condition with correct field   2 marks

2) using join condition with correct common field and using and operator 2 marks

3) Identify the primary :c_IDand foreign key:P_ID from CUSTOMER table.

4) Using the correct join condition with like operator 2 marks

5) Using correct syntax of update 2 mark

n) Explain the following: 3
1) USING clause– explanation 1 mark2) DML – explanation 1mark3)ROLLBACK TO – explanation 1 mark

*******End of the Question Paper*******