

Roll Number		
-------------	--	--

Code Number 65/1



INDIAN SCHOOL MUSCAT
FIRST TERM EXAMINATION
INFORMATICS PRACTICES

CLASS: XII
 30.04.2018

Sub. Code: 065

Time Allotted: 3 Hrs.
 Max. Marks: 70

Instructions:

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

- Q1. a) 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, Bus topology is easy to expand. 1 Mark
- b) 2
- Physical Address of Computer 1 mark it has 6 bytes each is separated by : 1Mark
- c) 2
- Why SWITCH is called intelligent HUB? Explain.
 Because it is used to filter the data and send the data to the respective nodes.
- d) 2
- Which of the following are valid IP addresses ? Give reason(s) if invalid.
- (i) 121.23.1.45 - Valid
 - (ii) 192.168.0.254 - Valid
 - (iii) 192.168.AS.1 - Invalid
 - (iv) 198.-1.1.1- Invalid
- e) 2
- Define Domain Name. Explain with an example.
 An unique name of any web site. 1 mark www.google.co.in
- f) 2
- Identify the odd one out of the following :
 Bluetooth- wireless medium all others are wired medium 1+1= 2
- g) 2
- Define Network. Write any two application of network.
 Interconnection of several computers. 1 mark resource sharing, cost – 1 mark
- h) 2
- How Cracker is different from Hacker in Computer Science?
 A hacker is a person intensely interested in the arcane and recondite workings of any computer

Answer Key

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

i) Write the full form of a) TCP/IP – Transmission Control Protocol/ Internet Protocol 2
b) MAC - Media Access Code

j) Explain the following term a) Firewall -Explanation 1 mark b) Eavesdropping-Explanation – 1Mark 2

Q2. a) ORDER BY clause -it is used to sort the records either in ascending or descending order of the field specified. Ex: select * from emp order by ename; -1 mark 2
GROUP BY Clause- it is used to keep all the similar records together. Ex: select deptno,count(*) from emp group by deptno; 1 Mark

b) IN – it is used to display the result based on the list of values 1 mark 2
Select * from emp where deptnoIN(10,20);

c) Find the out put of the following: 5*1=5

1. Select length(concat("ABCD","EFG")); 7
2. Select dayofmonth("2017-09-21"); 21
3. Select round(4567.78,1)+truncate(6758.91,1); 11326.7
4. Select pow(length("india"),3); 125
5. Select instr("Corporate","or",4); 5

d) Alter Command with proper syntax – 1mark empno 1 mark 2

e) Explanation of all the properties of Transaction = 0.5*4=2 2

f) Using Alter command with proper syntax 2

g) Both are used to specify the condition. 1 mark 3
Where : it is used to specify the general condition along with select, update and delete.
Ex: select * from emp where deptno=10; 1 mark
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; 1 mark

h) Given below is the 'Department' table : 3
Every correct answer – 1mark

DEPCODE	DEPNAME
101	SALES
102	FRONT OFFICE

103	PERSONNEL
104	HRD

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

2

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

Create Table command 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	Kirti	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 * from employee where name like “%sons%”;

(ii)

Select name from employee where grde=”C”;

(iii)

Select name from employee where dept=”Civil” and area=”South”;

(iv)

Answer Key

Select dept, count(*) from employee group by dept;

(v) Desc employee;

(vi)

Update employee set sal=sal+sal*5/100 where area="north";

(vii)

Select max(sal) from employee;

(viii)

Select names from employee order by name desc;

(ix) SELECT MID (ename,length("A")) FROM employee;

All the employees name

(x)

correct output 1 mark

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

2

CoachName
Amritha
Sumit
Karan
Rohit
Lucky

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

(a) SELECT CoachName FROM CLUB WHERE CoachName LIKE '%a%';

Amritha

Karan

(b) SELECT CoachName FROM CLUB WHERE CoachName LIKE 'a%';

Amritha

m) In a database there are two tables “ITEM”, and “Customer” as shown below:

5*2=10

ITEM

P_ID	ProductName	Manufacturer	Price
A1003	Bath Soap	COP	25
A1005	Leans Salution	COP	350
A1001	Moisturizer	XYZ	40
A1002	Sanitizer	LAC	35
A1004	Shampoo	TAP	95

CUSTOMER

C_ID	ClientName	City	P_ID
01	Samridh Ltd	New Delhi	A1002
05	Big Line	Mumbai	A1005
12	S & S	New Delhi	A1001
15	Tom n Jerry	Bangalore	A1003

Write the commands in SQL for the following:

- 1) Select clientname,city,productname,price from customer,product where
customer.p_id=product.p_id; 2 marks
- 2) To display all the client name, product name from both the tables those who are
from Mumbai city.selectproductname,clientname from product,customer where
product.p_id=customer.p_id and city="mumbai";
- 3) primary- c_ID1 mark foreign key -P_ID 1 mark.
- 4) Select productname,clientname,city from product ,customer where
customer.p_id=customer.p_id and city like"%i%"; 2 marks
- 5) Increase the unit price of all the items by 10%. Update command with proper
syntax- 2marks

Answer Key

n) Explain the following:

- 1) Natural Join - explanation 1 mark
- 2) DDL – explanation 1 mark
- 3) SAVE POINT - explanation 1 mark

3

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