

Sample Paper

Half Yearly Examination 2018-19

Class : Scholars 1 (XI)

Subject : Computer Science

M.M. : 70

Time: 3.15 Hours

- Please check that this question paper contains 3 printed pages.
- Please check that this question paper contains 10 questions.
- Please write down the Serial Number of the question before attempting it.
- 15 minutes time has been allotted to read this question paper and will not write any answer on the answer script during this period.

1. Explain following logic gates with diagram and truth table : [5x2=10]
 - a) AND
 - b) OR
 - c) XOR
 - d) NAND
 - e) NOR
2. Ms. Shalini has just created a table named "Employee" containing columns Ename, Department, Salary. After creating the table, she realized that she has forgotten to add a primary key column in the table. Help her in writing SQL command to add a primary key column empid. Also state the importance of Primary key in a table. [2]
3. What is field in a database? Give an example. [2]
4. Abhay wants to delete the records where the "FirstName" is "Akshat" in the "Emp" Table. Write MySQL statement. [2]
5. Preksha wants to add another column 'Hobbies' with datatype and size as VARCHAR(50) in the already existing table 'Student'. She has written the following statement. However it has errors. Rewrite the correct statement. [2]
MODIFY TABLE Student Hobbies VARCHAR;

6. Write the following statement using 'OR' logical operator : [2]

```
SELECT first_name, last_name, subject
FROM studentdetails
WHERE subject IN ('Maths', 'Science');
```

7. "XYZ" Company has organized their Annual Conference. Participants are coming from different parts of the country to attend. Write SQL query to create a table 'Participant' with the following structure : [4]

Field	Type	Constraint
ParticipantID	Integer	Primary key
Name	Varchar(50)	
ArrivalDate	Date	
DepartureDate	Date	
Phone	Integer	
EmailID	Varchar(30)	

8. Consider the table 'Teacher' given below.

TeacherId	Department	Periods
T101	SCIENCE	32
T102	COMPUTER SCIENCE	30
T103	MATHEMATICS	34

What will be the output of the following queries on the basis of the above table:

(i) Select count(Department) from Teacher; [1]

(ii) Select count(*) from Teacher; [1]

9. Table "Emp" is shown below. Write commands in SQL for (i) to (iv) and output for (v) and (vi)

ID	NAME	AGE	ADDRESS	SALARY	PHONE
1	Yash	25	A-4, Ashok Vihar, Delhi	62000	98110766656
2	Diksha	23	B-21, Model Town, Mumbai	71000	99113423989
3	Khushi	26	KC-24, North Avenue, Bhopal	62000	98105393578
4	Mridul	22	A-152, Gomti Nagar, Lucknow	89000	99101393576
5	Ramit	27	B-5/45, Uday Park, Delhi	80000	97653455654

- a) To display list of all employees below 25 years old. [2]
- b) To list names and respective salaries in descending order of salary. [2]
- c) To count the number of employees with names starting with 'K'. [2]
- d) To list names and addresses of those persons who have 'Delhi' in their address. [2]
- e) SELECT Name, Salary FROM Emp where salary between 50000 and 70000; [2]
- f) SELECT Name, phone from Emp where phone like '99%'; [2]
- g) Select distinct ID from Emp; [2]
- h) Select max(SALARY) from Emp; [2]
- i) Select count(SALARY) from Emp; [2]
- j) Select * from Emp order by NAME desc; [2]

10. Convert the following numbers into corresponding number : [12x2=24]

- 1) $(1001101)_2 = (?)_{10}$
- 2) $(1001101)_2 = (?)_{16}$
- 3) $(1001101)_2 = (?)_8$
- 4) $(198)_{10} = (?)_{16}$
- 5) $(198)_{10} = (?)_8$
- 6) $(198)_{10} = (?)_2$
- 7) $(721)_8 = (?)_{10}$
- 8) $(721)_8 = (?)_{16}$
- 9) $(721)_8 = (?)_2$
- 10) $(2FF)_{16} = (?)_{10}$
- 11) $(2FF)_{16} = (?)_2$
- 12) $(2FF)_{16} = (?)_8$