

JP CBSE
Class XI (Sub-Computer Science)
Periodic Test-2

Max Marks-50

Time-1:30 Hrs

General Instructions:

(i) All questions are compulsory

(ii) Database softwares: MySQL and mongoDB

- Q1. What do you mean by RDBMS? Give some examples. [2]
- Q2. Briefly Explain the following terms: [4]
(i) Tuple (ii) Relation (iii) Degree (iv) Foreign Key
- Q3. What is Primary key? Explain with the help of suitable example. [2]
- Q4. Assume a table Emp with 15 rows and 5 columns. Write its degree and cardinality. [2]
3 rows are deleted and one more column is added. What will be the new degree and cardinality?
- Q5. What do you mean by SQL? What are the different categories of commands available in SQL. [2]
- Q6. What is MySQL? Write some features of MySQL. [3]
- Q7. Write SQL Commands for (a) to (e) and write the outputs for (f) to (h) on the basis of the following table : [8]

Table : FURNITURE

NO	ITEM	TYPE	DATEOFSTOCK	PRICE	DISCOUNT
1	WhiteLotus	DoubleBed	2002-02-23	3000	25
2	Pinkfeathers	BabyCot	2002-01-29	7000	20
3	Dolphin	BabyCot	2002-02-19	9500	20
4	Decent	OfficeTable	2002-02-01	25000	30
5	Comfortzone	DoubleBed	2002-02-12	25000	30
6	Donald	Babycot	2002-02-24	6500	15

- (a) To list the details of furniture whose price is more than 10000
(b) To list the Item name and Price of furniture whose discount is between 10 to 20.
(c) To delete the record of all item where discount is 30.
(d) To display the price of 'Babycot'.
(e) To list item name, type and price all items whose names starts with 'D'.
(f) Select Distinct Type from Furniture;
(g) Select Max(Price) from Furniture where DateofStock>'2002-02-15';
(h) Select Count(*) from Furniture where Discount<25;
- Q8. Write the outputs of the following: [5]
(i) Select POWER(2,4);
(ii) Select ROUND(10.195,2);
(iii) Select TRUNCATE(10.195,2);
(iv) Select SUBSTR('COMPUTER SCIENCE',3,4);
(v) Select INSTR('Technical Teaching','ch');
- Q9. What is a constraint? Name some constraints that you apply to enhance database integrity? [3]

- Q10. Differentiate between (i) Char and Varchar (ii) Primary Key and FOREIGN KEY [4]
- Q11. What do you mean by 'JOIN'? [1]
- Q12. In a database 'SCHOOL' there are two tables 'MEMBER' and 'DIVISION' as shown below: [4]

MEMBER

EmpID	Name	Pay	DivNo
101	Rajesh	20000	10
102	Ajay	26000	50
103	Tina	22000	20

DIVISION

DivNo	DivName	Location
10	Media	Delhi
20	Dance	Kolkata
30	Song	Guwahati

- (a) Identify the Foreign key in the table MEMBER.
 (b) Identify the Primary Key in table MEMBER with justification.
 (c) What output you will get when an equi-join query is executed to get the name from **Member** table and corresponding **Division** table.
 (d) Write SQL query to get the output given in question (c).
- Q13. What is NoSQL database? Write main features of NoSQL databases? [3]
- Q14. What is JSON format? [1]
- Q15. What are terms used in mongoDB to refer the following relational database terms: [2]
 (i) row (ii) column (iii) table (iv) database
- Q16. (i) Write command to create a new database by the name '**newdb**' in mongoDB. [1]
 (ii) Create a collection with the name '**People**' and insert the following data in it: [2]
 ➤ "name": "JYOTI", "age": 31, salary: 15000
 ➤ "name": "supriya", "age": 28, salary: 50000
 (iii) Write query to list all documents in collection '**People**'. [1]