



Seat No. : _____

XW-115

April-2013

B.C.A. (Sem.-IV)

CC-208 DATABASE MANAGEMENT SYSTEM - II

Time : 3 Hours]

[Max. Marks : 70

Instruction : Write new question from new page.

1. (A) (1) Explain the following commands giving example : **4**
(a) CREATE (b) ALTER
(c) DROP (d) DELETE
- (2) What is a virtual table ? State its purpose. Give an example of its syntax. **3**
- OR**
- (1) Explain the different SQL constraint's. **4**
(2) Discuss the SQL data types. **3**
- (B) (1) Discuss special operators giving example : **4**
(a) LIKE (b) BETWEEN
(c) IN (d) EXISTS
- (2) What are Aliases ? How are they used in SQL queries ? **3**
- OR**
- (1) Discuss the use of ORDER BY and GROUP BY. **4**
(2) Discuss the functions COUNT, MAX and SUM. **3**
2. (A) (1) Explain with diagram the BI framework. **4**
(2) What is Business Intelligence ? Discuss the general steps involved in BI. **3**
- OR**
- (1) Differentiate operational data and decision support data. **4**
(2) Discuss the basic BI architectural components. **3**
- (B) (1) What is Data warehouse and what are its main characteristics ? **4**
(2) Describe the decision support database requirements. **3**
- OR**
- (1) What is OLAP and what are its main characteristics ? **4**
(2) What is Data Mining ? Discuss the different phases in the data mining process. **3**

3. (A) (1) What is DDBMS ? State its advantages and disadvantages. **4**
 (2) Differentiate between Distributed database and Distributed processing. **3**

OR

- (1) Discuss : (a) Multiple-site processing and Single-site data (MPSD) **4**
 (b) Multiple-site processing and Multiple-site data (MPMD) **4**
 (2) Explain the components of DDBMS. **3**

- (B) (1) What is Distribution transparency ? Explain the different types of distribution transparency. **4**
 (2) Explain the Two-phase commit protocol. **3**

OR

- (1) Describe the different types of database requests and transactions. **4**
 (2) Discuss Query optimization. **3**

4. (A) (1) Explain DATE & TIME functions. **4**
 (2) What is Cross Join ? Give an example of its syntax. **3**

OR

- (1) Given the tables student-1 and student-2 perform the following relational operators and show the output : **4**

- (a) UNION (b) UNION ALL
 (c) MINUS (student1 – student2) (d) INTERSECT

Student-1

Stu_id	Stu_name	Stu_phone
1	Smith	1234
2	Riya	3456
3	Komal	8765
4	Ajay	4444

Student-2

Stu_id	Stu_name	Stu_phone
1	Smith	1234
5	Anu	3333
6	Smita	6666
4	Ajay	4444
7	Shreya	9999

- (2) What is an Oracle sequence ?Write its syntax. **3**

- (B) (1) Discuss Outer joins. **4**
 (2) Write the output for the following queries : **3**

- (a) SELECT SUBSTR ('EXPIRATION', 5, 3) FROM DUAL;
 (b) SELECT CEIL (10.34) FROM DUAL;
 (c) SELECT FLOOR (21.68) FROM DUAL;

OR

- (1) What is Subquery and list its basic characteristics ? Discuss IN subqueries. **4**
 (2) Explain the following functions with example : **3**

- (a) TO_NUMBER
 (b) LENGTH
 (c) ABS

5. (A) Fill in the blanks :

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- (1) SQL is a _____ language.
- (2) _____ is a group of database objects.
- (3) Join operations are classified as _____ and _____.
- (4) OLAP stands for _____.
- (5) In distributed database system, database is composed of several parts known as _____.
- (6) _____ is a small, single-subject data warehouse subset that provides decision support to small group of people.
- (7) Query optimization algorithms are classified as _____ and _____.

(B) State True/False :

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- (1) DDL stands for data definition language.
- (2) CHAR data type can have fixed length character data upto 250 characters.
- (3) The default order in ORDER BY clause is ascending.
- (4) TO_DATE function returns today's date.
- (5) Heterogeneity transparency allows integration of several different local DBMSs.
- (6) MDM stands for Multiple Database Management.
- (7) Distributed processing requires distributed database, but distributed database does not require distributed processing.
