

D 11624

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Name.....

Reg. No.....

**THIRD SEMESTER M.Sc. DEGREE (REGULAR/SUPPLEMENTARY)  
EXAMINATION, NOVEMBER 2021**

(CBCSS)

Computer Science

CSS 3C 11—ADVANCED DATABASE MANAGEMENT SYSTEMS

(2019 Admission onwards)

Time : Three Hours

Maximum : 30 Weightage

**General Instructions**

1. In cases where choices are provided, students can attend **all** questions in each section.
2. The minimum number of questions to be attended from the Section / Part shall remain the same.
3. The instruction if any, to attend a minimum number of questions from each sub section / sub part / sub division may be ignored.
4. There will be an overall ceiling for each Section / Part that is equivalent to the maximum weightage of the Section / Part.

**Section A***Answer any **four** questions.**Each question carries 2 weightage.*

1. What do you mean by hierarchical data models in DBMS ?
2. Define multivalued dependency.
3. Write the syntax of SQL statement for creating a table with fields name and district.
4. What is deadlock in transaction management ?
5. Write the need for Object Oriented Database Management Systems ?
6. What do you mean tuple relational calculus ?
7. What is the necessary condition to apply join operation between two tables ?

(4 × 2 = 8 weightage)

**Turn over**

**Section B**

Answer any **four** questions.

Each question carries 3 weightage.

8. List the significance of DBMS over ordinary file system ?
9. Write the importance of Boyce Codd normal form **with** an example.
10. Explain how the grouping of data from a Table can be done with the help of select command.
11. What do you mean by concurrency control in transaction management ? Explain how the deadlock is handled in it.
12. Write the properties of Object Oriented Database Management Systems over traditional DBMS.
13. Write the necessity of distributed database systems.
14. What is the importance creating a view in DBMS ?

(4 × 3 = 12 weightage)

**Section C**

Answer any **two** questions.

Each question carries 5 weightage.

15. Consider the tables customer, item and transaction. Draw the ER diagram for these tables with proper relationships.
16. What do you mean by stored procedure and triggers ? Explain how these two are related with a suitable example.
17. What are the threats in transaction management in DBMS ? How is it handled ?
18. Explain the importance of object oriented database management systems in advanced database management.

(2 × 5 = 10 weightage)