DATABASE MANAGEMENT SYSTEM-BAP-203

(Semester-IV)

Time Allowed : Three Hours **Maximum Marks : 60**

Note : Attempt two questions each from Section A and B carrying 12 marks each and the entire Section C consisting of 6 short answer type questions carrying 2 marks each.

SECTION-A

I. Explain three level DBMS architecture.

II. Explain the concept of data independence taking suitable example.

III. What are the various relational algebra operators ? Explain with the help of examples.

IV. Explain the following :
- (a) Write DDL command for creating new table from existing table.
- (b) Self Join.
- (c) Write DML command for inserting multiple rows from existing relation.

SECTION-B

V. Define Data anomalies. Explain all the data anomalies. How these anomalies are removed through normalization taking suitable example.

VI. Discuss time stamping ordering protocol for concurrency control. How does strict timestamp ordering different from basic timestamp ordering ?

VII. Define Database security. Explain types and essentials of Database security.

VIII. Write a note on Creating reports using Macros.

SECTION–C

IX.
- (a) Define Database schema.
- (b) Give an example of table which is always in BCNF.
- (c) Explain the difference between Partial functional dependency and Full functional dependency ?
- (d) Explain Outer Join.
- (e) Discuss the difference between a Composite key and a Composite attribute.
- (f) Data can be shared and integrated in DBMS. Comment.