Roll No. Total Pages: 3

11766/NJ

D-2/2111

DATABASE MANAGEMENT SYSTEM

Paper-237

Semester-III

Time Allowed: 3 Hours [Maximum Marks: 30

Note: The candidates are required to attempt two questions each from Sections A and B carrying 4 marks each and the entire Section C consisting of 7 short answer type questions carrying 2 marks each.

SECTION—A

Explain the three level of architecture of DBMS diagrammatically.

- What is Data Model? Discuss Hierarchical Data model in detail.
- 3. What is an Attribute? Discuss any three attributes with the help of example.
- 4. Discuss any two DDL statements with the help of example.

SECTION—B

5. Define the term Normalization. Discuss the functional dependency with the help of example.

4

6. Draw a state diagram and discuss the various states that a transaction goes through during execution.

4

7. Define the Data Integrity Constraints. Discuss any two Data integrity constraints with the help of example.

8. List some problems associated with Database Concurrency. 4

SECTION—C

- 9. Write short notes on the following : $2 \times 7 = 14$
 - (i) What is a Weak Entity Set?
 - (ii) List any two responsibilities of DBA.
 - (iii) What is Recovery?
 - (iv) What do you mean by Data Inconsistency?
 - (v) Discuss the advantages of DBMS.
 - (vi) What is Database Schema?
 - (vii) Define the Entity.