

PGIIS 1030 A - 16
M.Sc. IInd Semester Degree Examination
Computer Science
(DataBase Management System)
Paper : HCT 2.2

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates:

Section A is Compulsory. Answer any Five questions from Section B

SECTION - A

1. Answer the following questions. (10×2=20)
- a) Define Database Management system
 - b) What are the disadvantages of file processing system.
 - c) Write any four advantages of database systems.
 - d) Give the levels of data abstraction
 - e) Define instance and schema
 - f) Describe data model
 - g) What is data dictionary?
 - h) What are attributes?
 - i) Define the terms DDL and DML?
 - j) What is Normalisation?

SECTION - B

2. a) Discuss the responsibilities of database administrator. (6)
- b) What is weak entity? How can it be represented in ER model? Give an example. (6)
3. a) Define the following terms i) Super key ii) Candidate key (6)
- b) Describe primary and Foreign key with an example (6)

4. a) Explain insert, delete and update statements in SQL with example (6)
b) How view is created and dropped? What problems are associated with updating views. (6)
5. a) Write the difference between BCNF and 3NF (6)
b) Briefly discuss relational Model (6)
6. a) Briefly explain database recovery techniques (6)
b) Explain concurrency control based on timestamp (6)
7. a) Explain database system architecture (6)
b) Briefly explain query processing and optimization. (6)
8. Write short notes on any Two (2×6=12)
i) Database security
ii) Relational Calculus
iii) Object database standards
iv) Mapping Cardinalities