



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – COMPUTER SCIENCE

SECOND SEMESTER – APRIL 2015

CS 2828 - ADVANCED DATA BASE SYSTEMS

Date : 23/04/2015
Time : 01:00-04:00

Dept. No.

Max. : 100 Marks

SECTION – A

Answer **All** the Questions:

(10 X 2 = 20)

1. Define tuple and attribute.
2. Differentiate file system and Database Management System.
3. What are VIEWS?
4. Give the statements for Destroying and Altering tables
5. What is the basic form of a SQL query?
6. Define functional dependency.
7. What is concurrency control?
8. What is the purpose of locking?
9. What is GIS?
10. Enumerate the steps for knowledge discovery.

SECTION B

Answer **All** the Questions:

(5 X 8 = 40)

11. a) Give E-R diagram for student personal and academic data.
(OR)
b) Give the structure of database management system.
12. a) Explain the DML commands with examples.
(OR)
b) Explain the following with example: selection, projection, cross product, set difference, union.
13. a) Demonstrate nested queries with an example.
(OR)
b) Explain the conversion of a table from first to second normal form with an example.
14. a) Explain concurrency control with an example.
(OR)
b) Explain the locking schemes used to avoid deadlocks.
15. a) Explain the architecture of distributed databases.
(OR)
b) Write notes on Spatial, Temporal and Mobile database.

SECTION C

Answer any **TWO** questions:

(2 X 20 = 40)

16. a) Explain two tier and three-tier architecture.
b) What are the advantages of relational model?
17. a) Define normalization. Explain the fifth normal form.
b) Discuss about deadlock detection and prevention methods.
18. a) Write a note on object databases.
b) Explain relational databases and show how you link the tables with an example.
