



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – COMPUTER SCIENCE

SECOND SEMESTER – NOVEMBER 2016

CS 2828 - ADVANCED DATA BASE SYSTEMS

Date: 11-11-2016
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

Part - A

Answer All the Questions:

(10 x 2 = 20)

1. Define redundancy in databases.
2. Write down the components of an E-R diagram.
3. What is self-referential integrity?
4. Write down the syntax of altering a table.
5. Write down the syntax of having clause in SQL.
6. Write down the syntax and usage of null value function in SQL.
7. What is log based recovery?
8. What are the phases of two-phase commit protocol?
9. What are the data types used in spatial databases?
10. What is OML?

Part - B

Answer all the Questions:

(5 x 8 = 40)

- 11 a) Compare database management system with file management system
(OR)
b) Explain different storage schemes in databases.
- 12 a) Explain relational calculus with example.
(OR)
b) Explain the types of integrity constraints with example.
- 13 a) Explain aggregate operators in SQL.
(OR)
b) Explain functional dependencies with example.
- 14 a) Explain the steps involved in query processing.
(OR)
b) Write down ACID properties in transaction. Explain each.
- 15 a) Explain the mobile computing architecture with block diagram.
(OR)
b) Explain the security issues involved in databases.

Part – C

Answer any Two:

(2 x 20 = 40)

16. a) Explain the database management system architecture with a diagram. **(10)**
b) Explain DDL commands with example. **(10)**
- 17 a) What are active databases? How active data bases are designed? **(10)**
b) Explain deadlock in transaction and the prevention schemes. **(10)**
18. a) Explain the basic schemes of temporal databases **(10)**
b) Explain 1NF,2NF,3NF and BCNF with examples. **(10)**
