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## SECOND SEMESTER M.Sc. DEGREE EXAMINATION AUGUST 2007

Computer Science

## CS 202 - DATABASE MANAGEMENT SYSTEMS

(2005 Admissions)

Time: Three Hours Maximum: 80 Marks

## Section A

Answer any **five** questions. Each question carries 8 marks.

- 1. What is DBMS? Explain its features.
- 2. Draw an ER diagram for Office Automation System. Explain each step in detail.
- 3. How will you use DBMS as a programming tool? Discuss.
- 4. Write a short note of SQL in the following features: (i) Query (ii) Reporting.
- 5. Name any four operators used in SQL expression and explain each giving examples.
- 6. Discuss Object modeling techniques.
- 7. Explain the advantages and disadvantages of distributed systems.

 $(5 \times 8 = 40 \text{ marks})$ 

## **Section B**

Answer any **four** questions. Each question carries **10** marks.

- 8. Compare the different data models. List their advantages and disadvantages.
- 9. Explain in detail the tuple relational calculus with suitable examples.
- 10. Describe the problems encountered in concurrency.
- 11. What is normalization? Explain 3NF with an example.
- 12. Explain Object Oriented Database Management Systems.
- 13. Explain recovery process in distributed systems.

 $(4 \times 10 = 40 \text{ marks})$