STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086 (For candidates admitted during the academic year 2009–10 & thereafter)

SUBJECT CODE: CS/PC/DB14

M.Sc. DEGREE EXAMINATION, NOVEMBER 2010 INFORMATION TECHNOLOGY FIRST SEMESTER

COURSE : CORE

PAPER : DATABASE SYSTEMS

TIME : 1½ HOURS MAX. MARKS: 50

SECTION - A $(5 \times 2 = 10 \text{ MARKS})$

Answer ALL questions:

1. What is a weak entity set?

2. What is the purpose of indexing a database?

3. Give two examples of integrity constraints.

4. Write down the steps in query processing

5. What is a transaction?

SECTION - B $(4 \times 5 = 20 \text{ MARKS})$

Answer any FOUR questions:

- 6. Describe database system architecture.
- 7. Draw an ER Diagram for hospital management system.
- 8. Discuss any five Aggregate functions from SQL.
- 9. Explain the advantages and disadvantages of cursors
- 10. Give an example for Object Oriented data model.
- 11. Explain BCNF with an appropriate example.

SECTION - C $(2 \times 10 = 20 \text{ MARKS})$

Answer any TWO questions:

- 12. An online book store database has the attributes Title, Author, Author Biography, ISBN, Price, Subject, Number of Pages, Publisher, Publisher Address, Description, Review, Reviewer Name. Normalize the data.
- 13. Explain the usage of Triggers in database applications.
- 14. What is a Distributed Database? Explain the system.
