Roll No…….. **Total No. of Printed Pages: 1**
Total No. of Questions: [11]

MSc (IT) (Semester- 2nd)
RELATIONAL DATABASE MANAGEMENT SYSTEM
Subject Code: MITE1207
Paper ID: [220414]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It carries 16 marks. It consists of 4 questions of 4 marks each.
2. Section B consist of 4 questions of 8 marks each. The student has to attempt any 3 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(4 marks each)**

Q1. Explain any two concurrency control techniques.

Q2. Brief up Object Relational systems.

Q3. Brief up the types of database failures.

Q4. Explain various features of Microsoft SQL Server.

Section – B **(8 marks each)**

Q5. Why is Normalization important for any database system? Explain and exemplify various normal forms.

Q6. How are object oriented data models designed and queries are answered through them? Exemplify.

Q7. In what conditions database recovery is required? Explain any three recovery techniques of your choice.

Q8. What is data warehousing? Draw difference between OLAP and OLTP.

Section – C **(10 marks each)**

Q9. What is the importance of Database Systems? Explain its architecture and various associated data models.

Q10. Why are distributed databases preferred over the traditional database systems? Explain its various types along with its advantages and limitations.

Q11. What is data mining? Explain its process for any enterprise database products. Also explain the role of Data Marts for data mining.