**EMBIT-205**

**Second Semester Executive MBA (IT Management),**

**Examination Aug/Sep-2015**

**Database Management System**

**Time:-3Hours Max. Marks: - 80**

**SECTION-A**

**Answer any five questions: (6\*5)**

1. Briefly define relational calculus.
2. Comment on object- relational database.
3. What is a fundamental operation of relational algebra?
4. Mention the concept & features of OODBs.
5. What do you understand by entity set?
6. Write in nutshell about computational completeness.
7. Clarify system failure modes.
8. What do you mean by biased protocol?

**SECTION-B**

**Answer any two questions: (10\*2)**

1. Diagrammatically explain the weak and strong entity sets.
2. Elucidate the concept of the Gemstone architecture with proper sketch.
3. Elaborate the theory of data replication with its advantages and disadvantages.

**SECTION-C**

**Answer any two questions: (15\*2)**

1. Describe the characteristics of object –oriented database (OODBs).
2. Diagrammatically explain the transaction server process structures.
3. What is data fragmentation? What are its advantages?