

**R09****Code: 9A05401**

B.Tech IV Year I Semester (R09) Regular &amp; Supplementary Examinations December 2015

**DATABASE MANAGEMENT SYSTEMS**

(Electronics &amp; Computer Engineering)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions

All questions carry equal marks

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- 1 (a) Explain relational database entities with example.  
(b) Describe object database management system.
- 2 (a) What is redundancy? What are the problems caused by the redundancy?  
(b) Explain about the derived attributes and write its advantages and disadvantages.
- 3 (a) What is the difference between super key and candidate key? Explain with example.  
(b) What is an Index? Why we need to create indices? Explain with an example.
- 4 What are the date and time functions that are available in advanced SQL?
- 5 (a) What are the anomalies in 3NF?  
(b) What is Boyce – Codd normal form?  
(c) Compare 3NF with BCNF.
- 6 (a) What is database recovery management? Explain.  
(b) Explain about:  
I. Uncommitted data.  
II. Inconsistent retrieval.
- 7 (a) Describe the terms log record buffering and database buffering.  
(b) Explain detail about advanced recovery techniques for remote system.
- 8 Discuss the concept of multi-key file organization.

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