

Subject : Data Base Management Theory

Day : Monday
Date : 06/06/2016



Time : 02.00 P.M. TO 05.00 P.M.
Max Marks : 80 Total Pages : 1

N.B.:

- 1) Attempt **ANY FIVE** questions from Section – I and attempt **ANY TWO** from Section – II.
- 2) Answers to both the sections should be written in the **SAME** answer book.
- 3) Figures to the right indicate **FULL** marks.

SECTION – I

- Q.1** Discuss the main characteristics of the database approach and how it differs from traditional file systems. [10]
- Q.2** Discuss how the recovery from catastrophic failure is handled. [10]
- Q.3** Explain the Two-Phase Locking Mechanism for concurrency control. [10]
- Q.4** What is meant by the Concurrent execution of database transactions in a multiuser system? Discuss why concurrency control is needed. [10]
- Q.5** What is Distributed Database? Explain its techniques in detail. [10]
- Q.6** Discuss the deferred update technique of recovery. What are the advantages and disadvantages of this technique? Why is it called the NO-UNDO/ONLY REDO method? [10]
- Q.7** What is a transaction? Explain ACID properties. [10]

SECTION – II

- Q.8** Draw an E-R diagram for Library Management system. [15]
- Q.9** Explain the following SQL commands with examples: [15]
- | | |
|-----------|-----------|
| a) Update | c) Delete |
| b) Alter | d) Drop |
- Q.10** What is Normalization? Explain 1NF, 2NF, and 3NF with the help of suitable example. [15]

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