

S.D.E.
B.C.A. (2004 Course Sem- III : WINTER - 2018
SUBJECT: DATABASE DESIGN

Day: Friday
Date: 07/12/2018

W-2018-4514

Time : 02.00 PM TO 05.00 PM
Max. Marks : 80

N.B.:

- 1) Attempt any **FIVE** Questions from section – I and any **TWO** Questions from Section – II
- 2) Figures to the right indicate **FULL** Marks
- 3) Answers to both the sections should be written **SEPARATE** answer books.

SECTION-I

- Q.1** What is DBMS? Explain the characteristics of DBMS. (10)
- Q.2** Explain the different types of database users in detail. (10)
- Q.3** Explain Hierarchical data model with its relative advantages and disadvantages. (10)
- Q.4** Explain CODD's rules in detail. (10)
- Q.5** What is Distributed Database? Explain its techniques in detail. (10)
- Q.6** Explain the need for concurrency control mechanism in database environment. (10)
- Q.7** Write short notes any **TWO** of the following : (10)
- a) Database Language
 - b) Primary Key
 - c) States of transaction

SECTION-II

- Q.8** Draw an E-R Diagram for Railway Reservation System. (15)
- Q.9** Explain the process of normalizing data upto 3NF with suitable example. (15)
- Q.10** What is Recovery? Explain various recovery techniques in detail. (15)

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