AC-3097
Second Year B. Sc. (Computer Science) (Sem. IV)
Examination
April / May – 2015
Relational Database Management System - II

Time : 2 Hours] [Total Marks : 50

Instruction :

Fill up strictly the details of signs on your answer book.

Name of the Examination:
S. Y. B. SC. (COMPUTER SCIENCE) (SEM. IV)
Name of the Subject:
RELAT. DATABASE MANAGEMENT SYSTEM - 2
Subject Code No.: 3 0 9 7
Section No. (1, 2, ....): Nill

1 Answer in brief : 14
a) Describe Transaction Consistency in brief.
b) Define the term: “Concurrent Transactions”. Also explain it giving example.
c) Describe Lock compatibility matrix in brief.
d) In which situation(s), schedule of any concurrent transactions is said legal?
e) Describe deadlock prevention in brief.
f) Describe rigorous two phase locking protocol along with its benefit(s).
g) List down various built-in exceptions of oracle.

2 Answer in detail : (any two) 12
a) Define the term: “Transaction” in RDBMS. Also give an example. Explain ACID properties of transaction giving example.
b) Define the term: Execution Schedule and explain it giving example. Also explain serial schedules in brief.
c) Define the term: Recoverability? Also explain Recoverable Schedules and cascade-less Schedules in brief.

[Contd....]
3 Answer in detail: (any two)
   a) Explain simple Two-Phase Locking Protocol. Also explain various versions/types of Two-Phase Locking Protocol.
   b) Compare various locking protocols based upon their strengths and weaknesses.
   c) Explain various deadlock prevention mechanisms/schemes in brief. Also give merits and demits of each of them.

4 Answer in detail: (any two)
   a) Explain various commands/statements provided in Oracle for transaction management.
   b) Write a PL/SQL code to implement and throw user defined exception.
   c) Explain SELECT....INTO....CURSOR statement of Oracle giving example.