



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 :

<p>नीचे दर्शायेव निशानीवाणी विगतो उत्तरवडी पर अवश्य लपवी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : S. Y. B. SC. (COMPUTER SCIENCE) (SEM. IV)</p> <p>Name of the Subject : RELAT. DATABASE MANAGEMENT SYSTEM - 2</p> <p>Subject Code No. : 3 0 9 7 Section No. (1, 2,.....): Nil</p>	<p>Seat No. : [][][][][][][]</p> <p>Student's Signature</p>
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- 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.

- 3 Answer in detail : (any two) 12
- 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 demerits of each of them.
- 4 Answer in detail : (any two) 12
- 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.
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