



UTTARAKHAND OPEN UNIVERSITY, HALDWANI (NAINITAL)

BCA-II 2nd YEAR 3rd SEMESTER ASSIGNMENT

Last Date of Submission: 15 Jan., 2014

Course Title: Database Management System

Course Code: BCA-09

Year: 2013-14 Summer

Maximum Marks: 40 Marks

Section 'A'

Section 'A' contains 08 short answer type questions of 5 marks each. Learners are required to answer 4 questions only. Answers of short answer-type questions must be restricted to 250 words approximately.

1. Explain three level architecture of database system.
2. Explain the purpose of the database system.
3. Explain shadow paging.
4. What is Normalization? Write down advantages of normalization.
5. Explain and Draw the state diagram of a transaction?
6. How can you check schedule is conflict serializable or not?
7. How to prevent starvation in Deadlock?
8. Explain all the models of DBMS?

Section 'B'

Section 'B' contains 04 long answer-type questions of 10 marks each. Learners are required to answer 02 questions only.

1. Why concurrency control is needed? Explain two phase commit protocol
2. Explain Time –Stamp Ordering Protocol?
3. What is “Two-Phase Locking Protocol” and “Strict Two-Phase Locking Protocol”?
4. Explain evaluation of expression process in query optimization.