

## UTTARAKHAND OPEN UNIVERSITY, HALDWANI (NAINITAL) उत्तराखंड मुक्त विश्वविद्यालय, हल्द्वानी (नैनीताल)

## BCA-16/BCA-11 $2^{ND}$ YEAR $3^{RD}$ SEMESTER ASSIGNMENT

Last Date of Submission: 30/04/2017

Course Title: Database Management System

**Course Code: BCA-09** 

Year: 2016-17 Maximum Marks: 30/40

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

- 1. Differentiate between physical and logical data independence.
- 2. Differentiate between Weak and Strong Entity Set.
- 3. What do you mean by mapping cardinality?
- 4. What is Referential Integrity? Explain with example.
- 5. Differentiate between prime attribute and Nor-prime attribute with example.
- 6. Discuss the locking techniques for concurrency control.
- 7. What do you mean by integrity constraint?
- 8. What is inner join? Discuss with example.

Section 'B' contains 04 long answer-type questions of 7/10 marks each. Learners are required to answers 02 questions only.

- 1. Describe the important features of ER data model in detail.
- 2. Describe ER Data Model in detail.
- 3. What is the need of normalization? Describe 2NF, 3NF and BCNF with examples.
- 4. Write short note on any two of the following:
  - a. Data Independence
  - b. Functional Dependency
  - c. Foreign Key
  - d. Database Recovery