



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

BCA 3<sup>RD</sup> YEAR 5<sup>TH</sup> SEMESTER ASSIGNMENT

*Last Date of Submission: 15-Jan-2015*

**Course Title:** Software Engineering

**Course Code:** BCA-15

**Year:** 2014-15

**Maximum Marks:** 40 Marks

Section 'A' contains 08 short answer type questions of 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. What is the role of SRS?
2. Define the term software. Describe its various characteristics.
3. What is the importance of data dictionary?
4. What is the difference between coupling and cohesion?
5. What are the various disadvantages of the conventional waterfall model?
6. Explain White Box Testing and Black Box Testing in detail.
7. What is DFD? State the notations used for creating a DFD.
8. What are the objectives of software design?

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

1. What do you mean by the terms cohesion and coupling in the context of software design? How are these concepts useful in arriving at a good design of a system?
2. Discuss about various types of testing during software during software development.
3. What is spiral model? Explain with the help of a neat diagram
4. Explain the following terms:
  - i. Entity-Relationship Diagrams
  - ii. Prototyping Model