

**UTTARAKHAND OPEN UNIVERSITY, HALDWANI (NAINITAL)****MCA-II 3rd YEAR 5th SEMESTER ASSIGNMENT**

Last Date of Submission: 15 Jan., 2015

Course Title: Software Engineering

Course Code: MCA-17

Year: 2014-15 Summer

Maximum Marks: 40

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. How are the software testing results related to the reliability of a software?
2. Define spiral model.
3. What is a DFD? Discuss various components of a DFD.
4. What is Software Requirement Specification (SRS)? What are the characteristics of a good SRS document?
5. What is software maintenance cost?.
6. What is White-Box Testing? What is its purpose?
7. What are the different types of software?
8. What is data dictionary. What is its role in the context of a DFD.

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 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. Differentiate between Software Verification & Software Validation.
3. Explain the Waterfall Model. State four problems associated with it.
4. Using a schematic diagram and suitable example show the order in which the following are estimated in COCOMO estimation technique: cost, effort, duration, size.