



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

MCA 2<sup>ND</sup> YEAR 4<sup>TH</sup> SEMESTER ASSIGNMENT

*Last Date of Submission: 31May 2016*

**Course Title:** System Software

**Course Code:** MCA-15

**Year:** 2015-16

**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. Differentiate between a Compiler and an Interpreter.
2. What do you understand by Static and Dynamic linking.
3. Discuss the role of Parser.
4. What are tokens? Discuss significance of tokens.
5. Discuss Lexical analyzer generator (LEX).
6. How system software is different from Application software.
7. Explain runtime storage management.
8. Discuss code optimizations techniques.

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

1. What is System Software? Classify System Software.
2. Explain the following:
  - a. Data Structure
  - b. Assembly language
  - c. Macros
  - d. Shared libraries
3. Write the different phases of a compiler in detail.
4. What is Syntax directed definition. Explain top-down and bottom-up translation in detail.

