

Roll No

MCA - 101

M.C.A. I Semester

Examination, December 2014

Information Technology

Time : Three Hours

Maximum Marks : 70

- Note: i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.
 ii) All parts of each question are to be attempted at one place.
 iii) All questions carry equal marks, out of which part A and B (Max.50 words) carry 2 marks, part C (Max.100 words) carry 3 marks, part D (Max.400 words) carry 7 marks.
 iv) Except numericals, Derivation, Design and Drawing etc.

Unit - I

1. a) Differentiate data and information with example.
- b) Explain types of languages.
- c) Explain the computer system with block diagram and its component.
- d) What do you mean by disk pack? What factors determine the storage capacity of disk?

OR

How system software differ from application software? Explain any two system software briefly.

Unit - II

2. a) Explain the importance of assembler.
- b) Explain macro call with example.
- c) What are the elements of assembly language programming?
- d) How two pass assembler can be designed?

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OR

Explain the following terms.

- i) Nested macro calls
- ii) Advanced macro facilities.

Unit - III

3. a) What is compiler?
- b) What is code optimization?
- c) Explain the compilation of control structure.
- d) Explain all the phases of compiler.

OR

Explain the following terms.

- i) Interpreters
- ii) Debug monitors.

Unit - IV

4. a) Explain the importance of linker.
- b) Why loader is required?
- c) What is the concept of program relocation? Explain with example.
- d) Write and explain algorithm for program linking.

OR

Explain in detail two pairs loose scheme.

Unit - V

5. a) What do you mean by sequential file organization?
- b) What is indexing?
- c) Briefly explain multilist file organization.
- d) Explain the approach to perform insertion and deletion operation in optimum utilization of memory.

OR

Compare all type of file organization.
