

MCA/M07
System Programming
Paper MCA -404/405
Option (ii)

Time : 3 Hours

MM:50

Note:- Attempt any Five questions.

UNIT-I

- 1 What is assembler and explain the algorithm of Pass-I and pass-II assembler.
- 2 Write short notes on following:
 - (a) Assemble language statements
 - (b) Fundamental of language processing.
- 3 What is Grammar? Explain various types of grammar.

UNIT-II

- 4 Define Macros. Explain macros expansion using suitable example.
- 5 Differentiate between top down parsing and bottom up parsing; explain the operator preceding using suitable example.
- 6 What do you understand by Code Optimization? Explain the following Optimizing Transformations using suitable example:
 - (a) Dead Lock Elimination
 - (b) Frequency Reduction
 - (c) Common Sub Expression Elimination
- 7 Write short notes on following:
 - (a) Symbol Table
 - (b) Intermediate Code
 - (c) Memory Allocation
 - (d) Ambiguous Grammar

UNIT-III

- 8 What is Editors and explain its different forms with examples.
- 9 Explain various types of Loader and also differentiate between loader and linker.
- 10 What are Software tools? Explain the various house-keeping task performed by software tools in program developments and application usages.