

Roll No.

67075

M.C.A. 2nd Sem.(New)

Examination-May, 2013

(with new notes w.e.f. May, 2013)

**Principles of Systems Programming &
Compiler Design**

Paper-MCA-205

Time : 3 hours

Max. Marks : 80

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

Note : There shall be 9 questions and Students shall be required to attempt five questions in all. Question No. 1 will be compulsory. Select remaining 4 questions, selecting at least one from each unit.

1. Explain :

(a) Macro

8×2=16

(b) Interpreters

(c) Shift reduce

(d) Post fix form

(e) Syntax tree

(f) Binder

(g) Static allocation

(h) Garbage collection

Unit-I

2. What is an assembler ? What are types of assembler ? Explain linker with example. 16

3. Write note on the following : 5+5+6

(a) Compile and go loader

(b) Text editor <http://www.HaryanaPapers.com>

(c) Overlays

(d) Debug monitor

Unit-II

4. What is compiler ? Explain the phases of compiler with taking an example. 16

5. Discuss the following : 5+5+6

(a) Context free grammar

(b) NFA

(c) LR parser

Unit-III

6. What do you understand by intermediate code generation ? Explain three address code with example $x+y*z$ and make DAG. 16
7. What is symbol table ? Discuss runtime storage administration and contents of symbol table with an example. 16

Unit-IV

8. What is code generation ? What are problems in code generation ? Explain issues in the design of a code generator. 16
9. Explain the following : 8+8
 - (a) Loop optimization
 - (b) Peephole optimization

<http://www.HaryanaPapers.com>

Whatsapp @ 9300930012

Your old paper & get 10/-

पुराने पेपर्स भेजे और 10 रुपये पायें,

Paytm or Google Pay से