

Total No. of Questions : 09

MCA (Elective-I) (2013 and 2014 Batch) (Sem.-3)

SYSTEM PROGRAMMING

Subject Code : MCA-305A

M.Code : 70776

Time : 3 Hrs.

Max. Marks : 100

INSTRUCTIONS TO CANDIDATES :

1. **SECTIONS-A, B, C & D contains TWO questions each carrying TWENTY marks each and students has to attempt any ONE question from each SECTION.**
2. **SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.**

SECTION-A

1. What do you mean by a language processor? Discuss in detail the various language processing activities.
2. Explain the following machine independent features of a macro processor giving suitable examples :

- (a) Unique label generation
- (b) Conditional macro expansion

SECTION-B

3. Define Loaders. What are the functions provided by a loader? Discuss various types of loaders in detail.
4. Discuss in detail the design and implementation of text editor.

SECTION-C

5. Explain the various phases of compilation process in brief.
6. What do you mean by code optimization? Discuss various code optimization techniques in detail giving suitable examples.

SECTION-D

7. Define Operating System. What are the functions of an operating system? Explain in detail.
8. What is a Device Driver? What are the functions of a device driver? Explain the different device drivers in detail.

SECTION-E

9. Answer the following :

- (a) What is a closed subroutine?
- (b) What is the difference between machine language and assembly language?
- (c) What is Intermediate code?
- (d) What is top-down parsing? Give an example.
- (e) What is the purpose of the uniform symbol?
- (f) What are macro assemblers?
- (g) Differentiate between compiler and interpreter.
- (h) What are the functions of a word processor?
- (i) What is YACC?
- (j) What are APIs?

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.