

Roll No.

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Total No. of Pages : 02

Total No. of Questions : 18

**MCA (E-I) (2015 to 2018) (Sem.-3)****SYSTEM PROGRAMMING**

Subject Code : MCA-305A

M.Code : 74077

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTIONS TO CANDIDATES :**

1. SECTIONS-A, B, C & D contains TWO questions each carrying TEN 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 is assembler? Explain working of single and two pass assembler.
- 2) What are Macro-processors? Give its features and data structure used in it.

**SECTION-B**

- 3) Explain absolute and bootstrap loader. Explain features of word processor.
- 4) Explain in detail the structure of text editor?

**SECTION-C**

- 5) What is the need of code optimization? What are the different techniques of code optimization? Explain with suitable example.
- 6) Discuss top-down parsing scheme with help of example. What is the role of lexical and syntax analysis?

**SECTION-D**

- 7) What are distributed Operating Systems? Explain its characteristics. How they are different from network and mobile OS?
- 8) What is Process Management? Explain all types of schedulers.

### SECTION-E

**Write briefly :**

- 9) JIT Compilers.
- 10) Define RISC.
- 11) Language processor.
- 12) Bootstrap Loader.
- 13) Relocation.
- 14) Overlays.
- 15) Define NDFA.
- 16) Platform Independent.
- 17) Define YACC.
- 18) Define USB.

**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.**