



## System Programming (1050)

P. Pages : 2

Time : Three Hours

Max. Marks :100

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answer sheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Attempt **any two** questions from each unit.
5. Draw suitable diagram wherever necessary.

### UNIT - I

1. a) What is system programming also explain various types of system programs. **10**
- b) What is necessity of two pass assembler ? Explain Pass - 1 of two pass assembler. **10**
- c) Explain machine dependent and machine independent features of assembler. **10**

### UNIT - II

2. a) What is loader ? Explain any two type of loading scheme with advantages and disadvantages. **10**
- b) What is MACRO ? Explain feature of MACRO in detail. **10**
- c) Draw and explain flowchart of Pass - 1 of macroprocessor. **10**

### UNIT - III

3. a) Draw and explain phase structure of compiler in detail. **10**

- b) Explain with example following terms. 10
- i) Derivation.
  - ii) Reduction.
  - iii) Ambiguity.
- c) Explain in detailed machine dependent and machine independent feature of compiler. 10

#### UNIT - IV

4. a) Explain LEX and YACC in detail. 10
- b) Explain following term, 10
- i) Handle Pruning
  - ii) Operator precedence.
- c) What is parsing ? Explain top down parsing along with it's limitation. 10

#### UNIT - V

5. a) What is symbol table also discuss various elementary symbol table organization. 10
- b) What is memory allocation ? Explain static and dynamic memory allocation. 10
- c) Explain Dynamic Data Exchange in detail. 10

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