

Total No. of Questions : 4]

SEAT No. :

**P8557**

[Total No. of Pages : 1

**Oct-22/TE/Insem - 527**

**T.E. (Computer Engineering)**

**SYSTEMS PROGRAMMING AND OPERATING SYSTEM**

**(2019 Pattern) (Semester - I) (310243)**

*Time : 1 Hour]*

*[Max. Marks : 30*

*Instructions to the candidates:*

- 1) *Neat diagrams must be drawn wherever necessary.*
- 2) *Figures to the right indicate full marks.*
- 3) *Assume suitable data, if necessary.*

- Q1)** a) Draw and explain flowchart of Pass-I of two pass assembler with suitable example. [8]
- b) Differentiate between literal and immediate operand. [7]

OR

- Q2)** a) Explain in detail with a suitable example, the formats and contents of databases used in assembler design. [8]
- b) Explain algorithm of pass 1 of two pass assembler. [7]
- Q3)** a) Define Macro. What are the advantages of macro facility? How they are different from functions? [8]
- b) Write Short note on
- i) Compiler
  - ii) Interpreter
- [7]

OR

- Q4)** a) What are different data structures required for Two Pass Macro Processor? Justify which data structures are implemented at that time of processing Macro definition, Macro call and Macro Expansion. [8]
- b) Explain argument passing mechanism in Macros with suitable examples? [7]

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