

Exam Code: 0924
Sub. Code: 6856

1058
B.E. (Information Technology) Sixth Semester
Departmental Elective Course – I
ITE-645: System Software

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

I. Explain the following terms:-

- a) Macro prototype
- b) Bootstrap loader
- c) RESW
- d) Interrupt
- e) Frames
- f) OPTAB
- g) Linkage editor
- h) literal pool
- i) Finite automaton
- j) Time sharing systems

(10x1)

UNIT – I

- II. a) Define macro and explain one aspect of algorithm that handles macro definitions within macro.
b) What are the various ways of combining macro processing functions with language translator? (5,5)
- III. What are the various variants of RISC machines? Explain any one in detail. (10)
- IV. Differentiate between program blocks and control sections. Explain how program blocks are handled by assembler? (10)

UNIT – II

- V. Explain with the help of diagram various loader design options. (10)
- VI. What are the various methods for implementing virtual memory? Explain any one method in detail. (10)

P.T.O.

(2)

VII. a) Generate quadruples for the following statements:

MEAN = SUM DIV 100;

VARIANCE = SUMSQ DIV 100 - MEAN * MEAN;

b) Explain top down parsing technique in detail.

(5,5)

x-x-x