

Exam.Code:0923
Sub. Code: 6358

1078
B.E. (Information Technology)
Fifth Semester
IT-534: 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) Linkage editor
- b) DEFTAB
- c) Terminal Symbol
- d) Bit mask
- e) EXTREF
- f) EQU
- g) Thrashing
- h) Object program format
- i) Macro invocation
- j) Modification Record

(10x1)

UNIT - I

- II. a) SIC machine comes in two versions. Describe the additional features that are included in SIC/XE.
b) Explain how address translation is done in various variants of RISC machine? (5,5)
- III. a) What are the various ways of combining macro processing functions with language translator?
b) How could a non recursive macro processor allow the invocation of macros within macros? (5,5)
- IV. a) What are the various functions of assemblers that are required to translate source programs into object programs?
b) How program blocks are handled by assemblers? (5,5)

P.T.O.

(2)

UNIT – II

- V. How loading of an absolute program can be done? Explain any one example of absolute loader in detail. (10)
- VI. How operating system manages working of virtual memory and real memory. Explain in detail. (10)
- VII. a) What kind of source program errors can be detected during lexical and syntactic analysis?
b) Explain shift reduce parsing technique with the help of an example. (5,5)

x-x-x