

ANNA UNIVERSITY COIMBATORE
B.E. / B.TECH. DEGREE EXAMINATIONS – JUNE 2009
REGULATIONS - 2007

FOURTH SEMESTER – COMPUTER SCIENCE AND ENGINEERING
070230044 – SYSTEM SOFTWARE

TIME : 3 Hours

Max.Marks : 100

PART – A

(20 x 2 = 40 MARKS)

ANSWER ALL QUESTIONS

1. What is meant by SIC?
2. Mention the use of addressing mode.
3. What is Mnemonic table? Specify its format.
4. Differentiate between macros and subroutines.
5. Differentiate between loaders and linkers.
6. Give an example for conditional macro expansion.
7. Specify the use of MASM macroprocessor.
8. Give any four text editors.
9. What are the different components of system software?
10. Define Literal.
11. What are Declarative statements in Assembly Language?
12. How are arguments specified to a macro call?
13. Specify the design issues of user interface.
14. Define debugging.
15. Mention the 'C' support for macro.
16. Distinguish between system software and application software.
17. Define Assemblers.
18. What is meant by DS and DC statements in Assembly language.
19. What are the data structures used in synthesis phase of assembler?
20. What is link and go (schemes) loader?

PART – B

(5 x 12 = 60 MARKS)

ANSWER ANY FIVE QUESTIONS

21. a) Explain the general machine structure with a neat diagram. (5)
b) Give an algorithm or flow chart of the first pass of a two pass assembler. (7)
22. a) Explain the data structures of the assembler. (6)
b) Explain (a) ORIGIN (b) EQU (c) LTORG (6)
23. a) Explain Macro Call within Macros. (6)
b) Explain Advanced Macro facilities. (6)
24. a) Explain the Relocatable loader and Non Relocatable loader. (6)
b) Explain the functioning of absolute loading scheme in detail. (6)
25. Explain in detail about editing process and structure of an editor. (12)
26. Write short notes on : (12)
 - (i) Interactive Debugging Programs
 - (ii) Bootstrap loader
 - (iii) MASM macroprocessor
27. a) Discuss the concept of generation of unique label. (7)
b) Give a brief account on MSDOS linker. (5)
28. Summarize the salient features of machine independent loader, assembler and macroprocessor. (12)

*****THE END*****