

- 4 a. What are the relocating loaders? Write an algorithm for SIC/XE relocating loader. (06 Marks)
 b. What are the different loader design options? Explain linkage editor in comparison with linking loader. (08 Marks)
 c. Explain MS-DOS linker with object module. (06 Marks)

PART – B

- 5 a. Define document. What are the tasks accomplished by document editing process? (04 Marks)
 b. With neat diagram explain structure of editor. (08 Marks)
 c. What are the debugging functions and capabilities? (08 Marks)
- 6 a. What are the data structures used in macroprocessor? Write an algorithm for DEFINE, EXPAND and GETLINE procedures. (10 Marks)
 b. Explain any two machine independent macro processor features. (06 Marks)
 c. Explain ANSIC C macro processor. (04 Marks)
- 7 a. What are the meta symbols? Write any five meta symbols and its use. (04 Marks)
 b. Write and explain specification of lex program. (05 Marks)
 c. Write a lex program to count number of keywords, relational operations, logical operator and special operators. (06 Marks)
 d. Write LEX program to remove single in line comments in C program using command line arguments. (05 Marks)
- 8 a. What is parser? What is the output expected from parser? Write following CFG in YACC equivalent form

$$A \rightarrow BC + | CD - | EF * | \epsilon$$
 (04 Marks)
 b. Write a YACC program to evaluate given expression using un-ambiguous grammar. (08 Marks)
 c. What is the need of priority and associativity? Show with program how they are implemented in YACC program. (08 Marks)

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