

Roll No.

Total No. of Questions : 13]

[Total No. of Pages : 02

Paper ID [A0222]

(Please fill this Paper ID in OMR Sheet)

BCA (502) (Old / S05) (Sem. - 5th)

SYSTEM SOFTWARE

Time : 03 Hours

Maximum Marks : 75

Instruction to Candidates:

- 1) Section - A is **Compulsory**.
- 2) Attempt any **Nine** questions from Section - B.

Section - A

(15 x 2 = 30)

Q1)

- a) How the various components of database management system are related to each other?
- b) What are different types of network operating systems you know?
- c) How you will differentiate between formal parameters and actual parameters with reference to macros?
- d) What is the use of text editors?
- e) What do you mean by lexical analysis?
- f) Explain the advantages and disadvantages of using global optimization techniques.
- g) Why do we need file systems?
- h) Why we need linkage editors?
- i) Why we need intermediate code generation?
- j) Explain the role of macro expansion.
- k) What is the difference between single pass and two pass assemblers?

- l) Differentiate between assembly and machine language.
- m) What is the meaning of the term formal systems?
- n) List the important steps in general design procedure of an assembler.
- o) What does MOT indicates for each instruction?

Section - B

(9 x 5 = 45)

- Q2)** Write a detailed note on structure of text editors.
- Q3)** Give the flowchart for pass 2 of the assembler.
- Q4)** Explain the working of Absolute loaders with suitable example.
- Q5)** Discuss the process of code generation in compilers.
- Q6)** Write a detailed note on syntax analysis phase of a Compiler.
- Q7)** Discuss the important features of a macro facility.
- Q8)** Explain the advantages of using database systems.
- Q9)** Give the flow chart for Simple one-pass macro processor.
- Q10)** Differentiate between linking and relocation.
- Q11)** Write a short note on evolution of Operating systems.
- Q12)** Explain the use of symbol table and base table in assemblers.
- Q13)** Discuss the process of Address Modification Using Instruction as Data.

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