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Total No. of Questions : 09

B.Tech. (Sem. – 4th)
SYSTEM PROGRAMMING
SUBJECT CODE : CS - 210
Paper ID : [CS210]
[Note : Please fill subject code and paper ID on OMR]

Time : 03 Hrs. **Max. Marks : 60**

Instruction to Candidates:

1. Section -A is **Compulsory**.
2. Attempt any **Four** questions from Section - B.
3. Attempt any **Two** questions from Section - C.

SECTION – A **(10 *2 = 20 Marks)**

Q1.

a) What are the salient features of DOS editor?

b) Differentiate between full screen editor and multi window editor.

c) What is the need of assemblers?

d) What do you understand by parse tree? How is it different than syntax tree?

e) Define Finite automata.

f) List the various software tools used for debugging.

g) What is dynamic binding?

h) What are real operating systems?

i) List the functions of loaders.
j) What is the purpose of shells in operating system?

SECTION – B **(4*5 = 20 Marks)**

Q2. Discuss with the help of examples different types of tools used to design compilers.

Q3. Explain the working of to pass assembler with an example. Draw the flow chart of two pass assemble also.

Q4. Describe the working of shift reduce parser with an example.

Q5. What do you understand by memory management techniques in operating system? Explain them.

Q6. Design a deterministic finite automata (DFA) that accepts the language (a/b)* abb.

SECTION – C **(2*10 = 20 Marks)**

Q7. Differentiate between the followings:
(a) LEX and YACC
(b) Syntax and Semantics.

Q8. What are assembler directives? Explain the function of EQU, START.

Q9. What are the three major areas in which the operating system divides its services? Give examples and explain.