Roll No. ....

B. Tech. (Sem. - 4th)
SYSTEMS PROGRAMMING
SUBJECT CODE : CS - 210
Paper ID : [A0462]

[Note : Please fill subject code and paper ID on OMR]

Time : 03 Hours   **Maximum 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

1)   *(10 × 2 = 20)*

a) Explain the difference between compiler and Interpreter. Also mention their particular usages.

b) Explain the role of translator.

c) What is absolute loader?

d) What is the role of a shell?

e) What do you know about multi window editor?

f) Define Lexical Analysis.

g) What is a subroutine and what are its characteristics?

h) What is device management in O.S?

i) What is the role of a linker?

j) What do you understand by intermediate code generation?

Section - B

$(4 \times 5 = 20)$

Q2) What is the role of first pass and second pass of an Assembler? Explain first pass of assembler.

Q3) Explain the role of LEXX and YAAC.

Q4) (a) What is the difference between linking and loading?

(b) What do you mean by booting and what are the various booting techniques?

Q5) Explain:

(a) The use of editor.

(b) Bootstrapping for compilers.

(c) The use of debugger.

Q6) Mention the various management for an operating system. Explain one of them.

Section - C

$(2 \times 10 = 20)$

Q7) What are the various phases of a compiler? Explain each of them.

Q8) What is the role of kernel in an O.S? Explain the design procedure of it.

Q9) Discuss the various code optimization techniques.

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