

Roll No. ....

Total No. of Pages 02

Total No. of Questions : 09

B.Tech. (Sem. – 4<sup>th</sup>)  
SYSTEM PROGRAMMING  
SUBJECT CODE : CS - 210  
Paper ID : [A0462]

[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) 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\*5 = 20 Marks )**

- 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\*10 = 20 Marks )**

- Q7. What are the various phases of a compiler? Explain each of them.
- Q8. What is the role of kernel in an OS? Explain the design procedure of it.
- Q9. Discuss the various code optimization techniques.