Roll No_____

System Programming   **Total no of pages :02**

Subject Code : CS 210

max-marks-60

Time : 03 hours

Instructions to candidates:

1) **Section A is compulsory**
2) **Attempt any 4 questions from section B**
3) **Attempt any Two questions from section C**

Section A

Q1)

a) What is dynamic binding?

b) What are assemblers?

c) What is difference between pseudo-op and machine-op?

d) Name various databases used in the design of compilers.

e) What is intermediate code generation?

f) Differentiate LEXX and YACC.

g) What is shell scripts?

h) What is a micro-kernel?

i) Differentiate between a phase and a pass?

j) What do you understand by a parse tree?

[2x10 =20 marks]

Section B

Q2) What are relocating loaders ? Explain with an example how the subroutine linkages are performed?

Q3) What is debugging? Discuss various schemes of debugging.

Q4) Describe the actions taken by the thread to context switch between kernel level threads.

Q5) What is requirement of optimization . Discuss machine independent optimization techniques.

Q6) What is the purpose of code generation phase ? Explain with the help of example.

[4X5=20 marks]

Section C

Q7) Write short notes on the following:

   a) Dynamic linking
   b) Lexical analysis
   c) Multi pass assembler
   d) Binder and overlays

Q8) Discuss in detail the design of one pass macro assembler.

Q9) a) Describe the working of shift reduce parser with an example.

b) What do you understand by Memory management Techniques in operating system. Explain.

[2x10=20 marks]

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