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?
- i) 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.
- O5) 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.

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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