[07 - 3116]

III/IV B.Tech. DEGREE EXAMINATION.

First Semester

Computer Science Engineering

Elective I - SYSTEMS PROGRAMMING (Grading)

(Effective from the admitted batch of 2006-2007)

Time: Three hours

Maximum: 70 marks

Question No. 1 is compulsory.

Answer any FOUR questions from the remaining.

All questions carry equal marks.

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- Answer ALL parts of any questions at One place.
- 1. (a) What is the difference between open subroutine and closed subroutine?
 - (b) What is the interrupt structure of the machine?
 - (c) What is the use of Base register?
 - (d) Define location counter.
 - (e) Define Macro Name Table.
 - (f) Define Binders.
 - (g) What are the uses of editors?

- 2. (a) Draw micro flow chart for ADD instructions and explain each step.
 - (b) Describe basic 360 instruction formats.
- (a) Explain Pass 1 and Pass 2 data bases used in assembler design.
 - (b) Draw a flow chart for single pass assembler. Explain each step in the flow chart.
- Explain features of a macro facility with suitable examples.
- 5. Describe a two-pass algorithm of macro processor.
- 6. Discuss the design issues of direct linking loaders.
- 7. (a) Explain types of loaders.
 - (b) Describe the features of Text editors.
- 8. (a) Explain the procedure to develop program generators.
 - (b) What features should be considered to generate Debug Monitors? Explain.