

(CSE/IT 311)

III/IV B.Tech. DEGREE EXAMINATION,  
OCTOBER 2005.

First Semester

SYSTEMS SOFTWARE

Time : Three hours

Maximum : 70 marks

All questions carry equal marks.

Answer Question No. 1 compulsorily.

(1 × 14 = 14)

Answer ONE question from each Unit.

(4 × 14 = 56)

1. (a) Define system software.
- (b) Expand CISC.
- (c) What are different assembler directives?
- (d) What are different predefined section names in a SPARC assembler language program?
- (e) Define a linker.
- (f) What are the functions of macro processor?
- (g) What is a conditional macro?
- (h) What is a symbol table?

- (i) What is pseudo operation?
- (j) What is Bootstrap loader?
- (k) Define a loader.
- (l) What is program relocation?
- (m) Give an example for macro definition.
- (n) What are different addressing modes used for Pentium proarchitecture?

UNIT I

2. (a) Discuss about the architecture of SIC/XE machine. (14)

Or

- (b) Explain power PC architecture. (14)

UNIT II

3. (a) Discuss the features of machine Independent Assembler. (14)

Or

- (b) Explain the design of one-pass assembler. (8)  
(c) Explain the features of SPARC assembler. (6)

**UNIT III**

4. (a) Explain about the features of machine-dependent loader. (14)

Or

(b) Discuss about Dynamic Linking. (6)

(c) Explain the design of an absolute loader. (8)

**UNIT IV**

5. (a) Write the features of machine-independent macroprocessor. (8)

(b) Write short notes on MASM macro processor. (6)

Or

(c) Explain in detail about text editors. (14)