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Reg. No. : | | | | | | | | | | | | |

Question Paper Code : 73385

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2017.

Fifth Semester

Computer Science and Engineering

CS 2304/CS 54/CS 1304 A/10144 CS 505 — SYSTEM SOFTWARE

(Common to Information Technology)

(Regulations 2008/2010)

(Also common to PTCS 2304- System Software for B.E. (Part-Time) Fourth Semester – CSE – Regulations 2009)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — ($10 \times 2 = 20$ marks)

1. Define System Software.

2. State the function of the Test Device instruction of SIC.

3. What are the assembler directives? Give an example.

4. Define MASM Assembler.

5. What do you mean by linking?

6. Define absolute loader.

7. Differentiate between a macro and a subroutine.

8. How to design the pass structure of a macro assembler?

9. Compare line editor and screen editor.

10. List drawback of menu oriented system.

PART B — (5 × 16 = 80 marks)

11. (a) Explain the architecture of SIC/XE machine in detail. (16)

Or

(b) (i) Describe different types of instructions available for a general computer. (8)

(ii) What are the addressing modes available in SIC/XE machine? Explain in detail. (8)

12. (a) Explain the features of machine independent assembler. (16)

Or

(b) (i) Explain briefly the principles of program relocation. (6)

(ii) Discuss the functions of two pass assemblers. (10)

13. (a) Explain the different machine independent loader features in detail. (16)

Or

(b) (i) Describe the working of linkage editors with a neat flow diagram. (8)

(ii) Explain about the dynamic linking. (8)

14. (a) Explain in detail about unique label generation, conditional macro expansion and keyword macro expansions of machine independent macro processor. (16)

Or

(b) Explain in brief about :

(i) MASM Macro Processor

(ii) ANSI C macro language. (16)

15. (a) Discuss the interactive debugging systems. (16)

Or

(b) Explain the structure of a typical editor with a neat diagram. (16)

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