Reg. No. :

Question Paper Code : 21387

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2015.

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)

(Common to PTCS 2304/10144 CS 505 – System Software for B.E. (Part time) Fourth Semester CSE – Regulations 2009/2010)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — $(10 \times 2 = 20 \text{ marks})$

- 1. Define system software.
- 2. What is the purpose of test device instruction of SIC?
- 3. What are the assembler directives? Give an example.
- 4. Define MASM Assembler.
- 5. What is a bootstrap loader?
- 6. What are the advantages of dynamic linking?
- 7. Differentiate between a macro and subroutine.
- 8. How the nested macro calls are executed?
- 9. What are the basic types of computing environments used in editors? Functions.
- 10. Identify the use of command language processor.

		PART B — (5 × 16 = 80 marks)	
11.	(a)	Explain in detail about SIC standard model.	(16)
		Or	
	(b)	Describe the SIC/XE machine Architecture.	(16)
12.	(a)	Explain in detail about machine dependent assembler features.	(16)
		Or	
	(b)	(i) Write the short notes on Literals, Expressions and Program of Machine Independent Assembler.	Blocks (8)
		(ii) Explain in detail about one-Pass and Multi- Pass Assembler.	(8)
13.	(a)	Explain the machine dependent loader features in detail	(16)
Or			
	(b)	(i) Describe the linkage editors.	(8)
••		(ii) Discuss briefly about the MS-DOS linker.	(8)
14.	(a)	Explain in detail about unique label generation, conditional expansion and keyword macro expansions of machine independent processor.	
		Or	
	(b)	Explain in brief about:	
		(i) MASM Macro Processor	
		(ii) ANSI C macro language.	(16)
15.	(a)	Explain the text editor in detail.	(16)
Or			

(b) Discuss in detail about an interactive debugging system. (16)