Seat No.: Enrolm
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## GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER-III • EXAMINATION – SUMMER • 2015

Su	bject	t Code: 2630005	Date: 19-05-2015	
Tir	ne: (	t Name: System Software 02:30 pm to 05:00 pm ons: . Attempt all questions.	Total Marks: 70	
	2.	Make suitable assumptions wherever necessary.  Figures to the right indicate full marks.		
Q.1	(a)	Explain the following terms in brief:  1. Language Processor.  2. Binding.  3. AST.  4. Derivation.  5. IR.  6. Structure Editor.  7. LEX.		07
	<b>(b)</b>	Explain the Fundamental of Language Process Activity.		07
Q.2	(a) (b)	Explain Classification of Grammars and Discuss Ambig What is parsing? What are the basic problems faced by t Explain in brief.	•	07 07
	<b>(b)</b>	OR		07
	<b>(b)</b>	Write a short note on: 1. Debug Monitor. 2. YACC.		07
Q.3	(a) (b)	Discuss the pass structure of assembly. What is hash table organization? Discuss different hashi OR	ing method.	07 07
Q.3	(a) (b)	Discuss different allocation data structure. Explain different assembly language statement.		07 07
Q.4	(a) (b)	List and explain Pass – I algorithm of Macro pre-proces Write a short note on code optimization.  OR	sor.	07 07
Q.4	(a) (b)	Explain design of two pass assembler.  Discuss finite state automata in detail.		07 07
Q.5	(a) (b)	Explain Memory Allocation Techniques. What are overlays? Explain Variant – I and Variant – II	for IC generation.	07 07
		OR		_
Q.5	(a) (b)	Explain data structure of macro pre-processor.  What is linking. Explain different types of loader.  ***********************************		07 07