GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI (OLD) - EXAMINATION – SUMMER 2017 Subject Code: 160706 Date: 03/05/201			2017	
Su	Subject Code: 160766 Subject Name: System Programming Time: 10:30 AM to 01:00 PM Total Marks: 7			
Ins	2.	ons: Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.		
Q.1	(a) (b)	(i) Differentiate System and Application software.(ii) Define: Language Processor, Language Migrator, Backpatching, SSM What does "1" indicate in LL(1) Parsing? Explain LL(1) Parsing with example.	07 07	
Q-2	(a) (b)	Explain Analysis & Synthesis Phases of Language Processor with Example. Implement Operator Precedence Parsing for the string: "id + id * (id - id) / id"	07 07	
	(b)	OR Implement DFA from: $a^*(b^* c^*)^*b^* d^*\#$	07	
Q.3	(a)	Given the following source program START 300 A DS 5 L1 MOVER AREG, B ADD AREG, C MOVEM AREG, D D EQU A+1 L2 PRINT D ORIGIN A-2 C DC '52' ORIGIN L2+3 STOP B DC '46' END L1	07	
0.2	(b)	Show the Intermediate code generated for the program Explain Assembly Scheme. OR Explain OPTAR SYMTAR LITTAR POOL TAR with example	07	
Q.3	(a) (b)	Explain OPTAB, SYMTAB, LITTAB, POOLTAB with example. Differentiate Single Pass and Two Pass Translation Scheme for Assembler.	07 07	
Q.4	(a) (b)	Explain Nested Macro call with example. Explain Advanced Macro Facilities with example. OR	07 07	
Q.4	(a)	Explain Design of a Macro Pre Processor in brief.	07	

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