Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER– III(OLD) EXAMINATION – SUMMER 2019

Subject Code: 130704 Date: 18/06/2019

Subject Name: Computer Organization And Architecture

Time: 02:30 PM TO 05:00 PM Total Marks: 70

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Explain the Common Bus System with its diagram.	**07**
	(b)	Explain the register transfer language with example.	**07**
Q.2	**(a)**	List and explain different types of shift micro operation.	**07**
	(b)	Explain Instruction cycle.	**07**
		OR	
	(b)	Explain register stack and memory stack with block diagram.	**07**
Q.3	**(a)**	Explain the different addressing modes with suitable examples.	**07**
	(b)	Explain different types of Interrupts.	**07**
		OR	
Q.3	**(a)**	Explain the design of Accumulator logic.	**07**
	(b)	Draw and explain the organization of micro programmed control unit.	**07**
Q.4	**(a)**	Explain address sequencing with block diagram.	**07**
	(b)	Give the detailed comparison between RISC and CISC.	**07**
		OR	
Q.4	**(a)**	Explain an Address Symbol Table with a suitable example.	**07**
	(b)	What is an array processor? Explain the different types of array Processor.	**07**
Q.5	**(a)**	Explain the Instruction Pipelining with example.	**07**
	(b)	Explain the Booth Multiplication Algorithm in detail.	**07**
		OR	
Q.5	**(a)**	Explain the first pass of an assembler with a flowchart.	**07**
	(b)	Explain the BCD adder and its working with block diagram.	**07**

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