Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

PDDC– SEMESTER I– • EXAMINATION –WINTER- 2016

Subject Code: X10002 Date:11/01/2017

Subject Name: Computer Programming & Utilization

Time: 10:30 AM to 1:00 PM Total Marks: 70

Instructions:

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

Q.1	**(a)**	Draw and explain the block diagram of digital computer.	**07**
	(b)	Write a note on: Generations of programming languages.	**07**
Q.2	**(a)**	What is assembler? Explain working of it. State functions of it.	**07**
	(b)	Give algorithm and draw flow chart for solving the following problems: (any two). 1. Find the largest of given 12 numbers 2. Multiply two given numbers. 3. Find the sum of given 15 numbers.	**07**
Q.3	**(a)**	Explain operator precedence and associativity	**07**
	(b)	Explain logical operator and cast operator in C.	**07**
Q.4	**(a)**	Write a C program to find out Armstrong Numbers between 0 and 888. Armstrong number as; $153 = 1^3 + 5^3 + 3^3$.	**07**
	(b)	Explain the basic functions provided by C for string operations.	**07**
Q.5	**(a)**	What do you mean by modular programming? What are the advantages?	**07**
	(b)	Write a program to demonstrate the “call by value” and “call by reference” concept in C.	**07**
Q.6	**(a)**	Write a note on Pointer Conversion.	**07**
	(b)	Write a program in C to compute the devision of two matrices.	**07**
Q.7	**(a)**	List commonly used input/output functions in C. Explain two in detail.	**07**
	(b)	Write a program in C for generating sum of first N integer numbers.	**07**

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