Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

PDDC - SEMESTER-I • EXAMINATION - SUMMER 2013

Subj	ect C	ode: X10002 Date: 05-06-2013	3
Subj	ect N	ame: Computer Programming and Utilization	
	e: 02.3 actions:	30 pm - 05.00 pm Total Marks: 70)
HISTFU		attempt all questions.	
	2. N	Take suitable assumptions wherever necessary.	
	3. F	igures to the right indicate full marks.	
Q.1	(a)	What is pointer? Write a program to do swapping of two elements using pointers.	07
	(b)	•	07
		1	
		1 2	
		1 2 3	
		1 2 3 4	
		1 2 3 4 5	
Q.2	(a)	Draw the Block Diagram of Computer Architecture and explain each block with its functions.	07
	(b)	How to define and declare Single dimensional array. Write a C program	07
	()	to arrange single dimensional array of 5 elements in Ascending order. OR	
	(b)	Explain Nesting of IFELSE statement and the ELSEIF ladder with example.	07
		1	
Q.3	(a)	Write a Program to demonstrate the "call by value" and "call by reference" concept in C	07
	(b)	Write a "C" program to swap even position number with odd position and	07
		vice versa.	
		OR	
Q.3	(a)	List out the categories of functions. Explain any one category with example. Also Explain difference between unions and structures.	07
	(b)	What is the difference between 'while' loop and 'do while' loop. Write a	07
	(8)	program using 'while' loop to reverse the digits of the number. For	0,
		example the number is 12345 should be printed as 54321.	
0.4	(a)	Evaluin the usage of constructor and destructor in City Write a City	07
Q.4	(a)	Explain the usage of constructor and destructor in C++. Write a C++ program to demonstrate the use of Constructor and Destructor.	07
	(b)	What is Friend function? Write a C++ Program to show usage of Friend	07
		Function	
		OR	
Q.4	(a)	Write a C++ Program to demonstrate the operators' hierarchy	07
Q.4	(b)	Create a class named student having data member name, rollno, and three	07
		marks. Write a member function to:	
		(i) input name, rollno and marks	
		(ii) calculate percentage (iii) display all the information	
		(iii) display all the information	

Q.5	(a)	Explain features of object oriented programming language.	
	(b)	Describe various types of Inheritance	07
		OR	
Q.5	(a)	Write short note on Polymorphism	07
	(b)	Give comparison of Static Memory Allocation and Dynamic Memory Allocation with a code snippet.	07