Seat No.:	Enrolment No.
Deat 110	Lindinent 110.

## GUJARAT TECHNOLOGICAL UNIVERSITY

MCA Integrated - SEMESTER- I - EXAMINATION - SUMMER 2016

Subject Code: 4410603 **Subject Name: Fundamentals of Programming – I** Date: 30-05-2016 Time: 10.30 a.m. To 01.00 p. m. **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) Fill in the Blanks 07 1) is the process of arranging the elements of an array in order. 2) The escape sequence character\_\_\_\_\_ causes the cursor to move to the next line on the screen. 3) Decimal number 10 can be represented in unary as \_\_\_\_\_ 4) The \_\_\_\_\_ operator returns the number of bytes the operand occupies. 5) For using character function, we must include the header file \_\_\_\_\_ in the program. 6) \_\_\_\_\_\_ is graphical and symbolic representation of process. 7) Return type of function that does not have any return type is declared as\_\_\_\_\_. Q.1 (b) State true or false 07 1) main () is where the program begins its execution. 2) A comment can be inserted in the middle of a statement. 3) ANSI C treat the variables Odd and odd to be same. 4) The modulus operator % can be used only with integers. 5) The switch expression can be float. 6) An exit controlled loop is executed at least one time. 7) The declaration int  $a[2] = \{0,1,2\}$ ; is illegal. Q.2 (a) List out types of operators in C and explain any two in detail. 07 Q.2 (b) Explain any two of the following. 07 (i) If...else if...else (ii) Switch case (iii) Continue & Break statement. Q.2 (b) What is Function, Function prototype and Function Call? Explain it by 07 suitable example. **Q.3** (a) Explain any two of the following. 07 (ii) ?: Conditional Operator (i) typedef (iii) GOTO statement. Q.3 (b) Explain Type Conversation in Expression using example. 07 **Q.3** (a) Explain Storage Classes available in C. 07 Q.3 (b) Describe scanf() function. How does it used to read input? 07 **Q.4** (a) What is Array? Explain types of Array using example. 07 Q.4 (b) Explain Nesting of Function with suitable example. 07 Q.4 (a) What is Function Recursion? Write a program of Fibonacci Series using 07 function recursion.

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(v) strlen()

**Q.4** (b) Explain the following.

(ii) strcat()

Q.5 (a) Explain getch(), getche() and gets() function in C.

(iii) strstr()

Q.5 (b) Write a program to read a matrix of size m x n and print its transpose.

(iv) strcmp()

(i) strcpy()

## OR

		OK	
Q.5 (a) Compare For ,While and DoWhile loop structure.			07
<b>Q.5</b> (b) Write a program that display the following.		07	
	1		
2	3 2		
3 4	5 4	3	

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