C.U.SHAH UNIVERSITY
Summer Examination-2018

Subject Name : Fundamentals in Computer Programming

Subject Code : 4TE01FCP1   **Branch: B.Tech (All)**

Semester : 1   **Date : 31/03/2018**   **Time : 02:30 To 05:30**   **Marks : 70**

Instructions:
  (1) Use of Programmable calculator & any other electronic instrument is prohibited.
  (2) Instructions written on main answer book are strictly to be obeyed.
  (3) Draw neat diagrams and figures (if necessary) at right places.
  (4) Assume suitable data if needed.

Q-1   **Attempt the following questions:**

a)	What is debugging?	**(1)**
b)	What is the working of a compiler?	**(1)**
c)	What is the difference between ++a and a++?	**(1)**
d)	Is that possible to store 32768 in an int data type variable?	**(1)**
e)	What are the valid places to have keyword "break"?	**(1)**
f)	Describe the difference between = and = = symbols in C programming?	**(1)**
g)	What is the behavioral difference when include header file in double quotes (" ") and angular braces (< >)?	**(1)**
h)	What do you mean by prototype function in C?	**(1)**
i)	What is a nested loop?	**(1)**
j)	What do you mean by chain of pointer?	**(1)**
k)	What is the use of toupper( ) function?	**(1)**
l)	What do you mean by wild pointers in C?	**(1)**
m)	What do you mean by dangling pointer?	**(1)**
n)	What is dynamic memory allocation?	**(1)**

Attempt any four questions from Q-2 to Q-8

Q-2   **Attempt all questions**
  (A) Explain basic structure of C program in details.   **(7)**

  (B) Explain switch…case statement with suitable example.   **(7)**

Q-3   **Attempt all questions**
  (A) What is operator? Explain any six operators used in C Programming.   **(7)**

	(B)	Explain process of execution of C program in details.	**(7)**
Q-4		**Attempt all questions**	
	(A)	What is type conversion? Explain implicit type conversion and explicit type conversion.	**(7)**
	(B)	Write a C program to find whether a given number is palindrome or not.	**(7)**
Q-5		**Attempt all questions**	
	(A)	Explain two dimensional arrays with suitable example.	**(7)**
	(B)	Write a C program that will demonstrate the use of strcat( ), strcmp( ), strcpy( ), strlen( ) functions.	**(7)**
Q-6		**Attempt all questions**	
	(A)	Explain array of structure with suitable example	**(7)**
	(B)	Write a C program to find GCD of two numbers using recursion.	**(7)**
Q-7		**Attempt all questions**	
	(A)	What is function? Write a short note on categories of function in details.	**(7)**
	(B)	Write a C program to check given number is armstrong or not.	**(7)**
Q-8		**Attempt all questions**	
	(A)	Explain call by value and call by reference with suitable example.	**(7)**
	(B)	Write a C program to read data from the keyboard, write it to a file called INPUT, again read the same data from the INPUT file, and display it on the screen.	**(7)**