

C.U.SHAH UNIVERSITY

Summer Examination-2016

Subject Name: Fundamentals in Computer Programming

Subject Code: 4TE01FCP1

Branch: B.Tech(ALL)

Semester: 1

Date: 29/04/2016

Time: 10:30 To 01:30

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.
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Q-1 Define the following terms:

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- a) computer
- b) software
- c) algorithm
- d) flowchart
- e) operating system
- f) compiler and assembler
- g) program control structure
- h) operator
- i) gets() and puts()
- j) getchar() and putchar()
- k) isalpha() and islower()
- l) break and continue
- m) user defined function
- n) pointer

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

Q-2 Attempt all questions

- a) Explain basic structure of C program with suitable example. **5**
- b) Draw block diagram of computer system and explain each block in detail **5**
- c) Differentiate between Entry-Controlled Loop and Exit-Controlled Loop **4**

Q-3 Attempt all questions

- a) Explain C tokens in detail with suitable example. **5**
- b) Draw a flowchart and algorithm to find maximum of three different numbers. **5**
- c) Explain various types of program control structures with example. **4**



Q-4	Attempt all questions	
	a) Enlist various operators and explain any four operators used in C programming.	5
	b) Write a C program for simple calculator using switch statement.	5
	c) Write a C program to check whether given number is prime or not.	4
Q-5	Attempt all questions	
	a) Enlist types of type conversion and explain with suitable example.	5
	b) Write a C program for simple calculator using else...if ladder.	5
	c) Write a C Program to check whether given number is Armstrong or not.	4
Q-6	Attempt all questions	
	a) Explain one dimensional array with suitable example.	5
	b) Explain storage classes used in C programming	5
	c) Differentiate between structure and union.	4
Q-7	Attempt all questions	
	a) Explain categories of user defined function with suitable example.	5
	b) Explain bit fields with suitable example.	5
	c) Explain chain of pointer with suitable example.	4
Q-8	Attempt all questions	
	a) Explain Command line argument with suitable example.	5
	b) What do you mean by dynamic memory allocation? Explain malloc(), calloc(), realloc() and free() function with suitable example.	5
	c) Explain following functions: fopen(), fclose(), fprintf(), fscanf().	4

