Enrollment No: _____ Exam Seat No:_____

C.U.SHAH UNIVERSITY

Winter Examination-2018

Subject Name : Fundamental of Computer Programming

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

Semester : 1 **Date : 05/12/2018** **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:** **(14)**

a) Define : Token
b) Give definition of algorithm.
c) What is Trigraph sequence?
d) Define: Variable
e) What is string?
f) What do you mean by malloc() and calloc()?
g) What is bit field?
h) Which operator has highest Priority?
i) Define Hardware.
j) What is the use of malloc( ) and calloc( )?
k) Write the syntax for conditional operator.
l) Define compiler.
m) Give the name of types of storage classes.
n) List various file modes.

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

Q-2 **Attempt all questions** **(14)**

(a) Explain block diagram of Computer system. **(07)**
(b) Define flowchart. Draw flowchart for finding area of circle. **(07)**

Q-3 **Attempt all questions** **(14)**

(a) Write a note on basic structure of C program with proper diagram. **(07)**
(b) Differentiate between entry control loop and exit control loop. **(04)**
(c) List various C tokens. Explain any 2. **(03)**

Q-4 **Attempt all questions** **(14)**

(a) Explain switch case with proper example. **(07)**

(b) What do you mean by Array? List types of array. Write a C program to get 10 integer numbers from user and sum all numbers using array. **(07)**

Q-5 **Attempt all questions** **(14)**

(a) Explain the following string functions with example. **(07)**

1) strcat()
2) strcpy()
3) strlen()

(b) Write a C Program to print the following pattern. **(07)**

```
*
* *
* * *
* * * *
```

Q-6 **Attempt all questions** **(14)**

(a) Explain call by value and call by reference with example. **(07)**

(b) What is pointer? List advantages of pointer. **(04)**

(c) Explain I/O operations on file. **(03)**

Q-7 **Attempt all questions** **(14)**

(a) Explain user defined function with return type and passing arguments. **(07)**

(b) Write a C Program to find maximum numbers from 3 numbers using else..if ladder. **(07)**

Q-8 **Attempt all questions** **(14)**

(a) Give difference between structure and union. **(04)**

(b) Write a note on recursion. **(03)**

(c) Explain implicit and explicit type conversion with example. **(07)**