**CODE: 17CA05101**

B. Tech I Year I Semester (R17) Supplementary Examinations, February 2018

# COMPUTER PROGRAMMING

(Common to all branches)

Time: 3 hours Max Marks: 70

## PART – A

**1.** Answer any **ten** questions (10 x 2 = 20 Marks)

a) Differentiate Algorithm and Flowchart.
b) What are Pre Processor Directives?.
c) Is it possible to have more than on main() function in C Program?.
d) Differentiate entry and exit controlled loops.
e) Differentiate Syntax error and logical error.
f) What is an argument and a return value.
g) What does static variable mean?.
h) What is recursion?.
i) What the functions atoi() and itoa() will do?.
j) How a file is closed?.
k) Does string and arrayare the same?.
l) What is macro?.

## PART - B

Answer all five units (5 x 10 = 50 Marks)

### UNIT-I

**2.** What is the purpose of operators in C? Explain various operators in C with suitable examples.

OR

**3.** (a) Write an algorithm that reads temperature in Celsius and converts into Fahrenheit.
(b) Write a C Program that calculates perimeter of a circle (use macro for pie value).

### UNIT-II

**4**. (a) Write a C Program that Counts the numbers in between 10 and 69 which are divisible 3 or 7.
(b) write a C Program to find sum of all integers in between 150 and 325 that are divisible by 9.

OR

**5.** (a) Differentiate between break and continue statements with suitable example.
(b) Explain about various iterative statements in C.

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## UNIT-III

**6.** (a) List any five string manipulation functions in C with examples.
(b) Write a C Program to find sum of digits of a given number.

OR

**7.** (a) Write a C Program that reads a string in small letters and convert the vowels in it into capital letters and display the string.
(b) Write a C Program that reads a string and check it is a palindrome or not by using strrev().

## UNIT-IV

**8.** (a) Write a C Program to find factorial of a given positive number using Recursion.
(b) Write a function power(a,b) to calculate the value of a raised to b.

OR

**9.** (a) List various storage classes in C with examples.
(b) Define structure. Explain how it was differentiated form union and array.

## UNIT-V

**10.** Clearly explain various file opening modes with suitable examples.

OR

**11.** Write a C program to read a text file and display number of words and lines in it.

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