

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL  
UNIVERSITY, LONERE - RAIGAD -402 103  
Winter Semester Examination - Dec. - 2019**

**Branch: B. Computer Engineering**  
**Subject:- Computer Programming in C [CP1204]**  
**Date:- 23/12/2019**

**Sem.:-I**  
**Marks: 60**  
**Time:- 3 Hr.**

**Instructions to the Students**

1. Each question carries 12 marks.
2. Attempt **any five** questions of the following.
3. Illustrate your answers with neat sketches, diagram etc., wherever necessary.
4. If some part or parameter is noticed to be missing, you may appropriately assume it and should mention it clearly

**(Marks)**

Q.1. Attempt any two (12)

- a) What is algorithm? Write down its characteristics.
- b) What are the different symbols, its purpose and give its description with which is used for different states in flow chart?
- c) Explain language translators in details. Differentiate between compiler and interpreter.

Q.2. Solve the following (12)

- a) Define variable. With suitable example explain variable declaration. Explain the rules for constructing variable names.
- b) The length & breadth of a rectangle and radius of a circle are input through the keyboard. Write a program to calculate the area & perimeter of the rectangle, and the area & circumference of the circle.

Q.3. Attempt any two of following (12)

- a) Write a program to print Fibonacci series up to the term entered by the user.
- b) What is switch statement? Explain its syntax. What is the use of break statement?

c) What is function prototype? Write a program to find sum of 4 digits by using function.

Q.4 Solve the following (12)

a) What is array? Write syntax of one-dimensional array. Write a program to read and print a matrix of 3X3.

b) What are the types of string manipulation functions in C? Write a program by using any three string manipulation functions.

Q.5. Solve the following (12)

a) Write a program in C by using structure to store information of student i.e. name, roll number and marks. And also display it.

b) Define structure. How to create structure? How to initialize structure? How to declare structure variable?

Q.6. Solve any **three** of the following (3x4=12)

- Explain programming process in detail.
- Explain relational and logical operators
- Define function. How to pass values into function?
- Write a short note on multidimensional array.
- Explain array of structure

Paper End