Reg No.:_____   Name:_____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FIFTH SEMESTER B.TECH DEGREE EXAMINATION(R&S), DECEMBER 2019

Course Code: CH307
Course Name: COMPUTER PROGRAMMING IN C++

Max. Marks: 100   Duration: 3 Hours

PART A
Answer any two full questions, each carries 15 marks.

Marks

1 a) "All variables must be declared before they are used". Justify your answer with an example. (5)

   b) With suitable examples, state the various features of Object Oriented Programming. (10)

2 a) Explain the rules of operator precedence. (5)

   b) Write a program to find the minimum and maximum among three given integers. (10)

3 a) Calculate the factorial of a number using 'for' loop. [eg. 4! = 4*3*2*1=24] (8)

   b) Discuss the different types of arithmetic operators in C++? (7)

PART B
Answer any two full questions, each carries 15 marks.

4 a) Write the syntax of an Inline function. List out their advantages. (5)

   b) Write a program to count the number of words in a string. (10)

5 a) Give the use of scope resolution operator. Illustrate with example the use of public inheritance. (5)

   b) Differentiate between Constructor and Destructor functions giving suitable example using a class in C++. (10)

6 a) Differentiate between members, which are present within the private visibility mode with those which are present within the public visibility modes. (5)

   b) Write a program to overload binary operator == (equality) to compare two string objects. (10)

PART C
Answer any two full questions, each carries 20 marks.

7 a) Write a program to concatenate two given strings into one string using pointers. (10)

   b) Explain with an example how pointers are pointed to the objects of a derived class. (10)

8 a) Describe virtual functions? Describe a circumstance in which the use of virtual functions would be appropriate. (10)

b)   With example illustrate working of pointers to pointers.   (10)

9   a)   Write a C++ program to write a string input from the user into a newly created   (12) file and read the contents of the file.

b)   Explain command line arguments with an example.   (8)

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