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P.E.S. College of Engineering, Mandya - 571 401
 (An Autonomous Institution affiliated to VTU, Belagavi)
Sixth Semester, B.E. - Electronics and Communication Engineering
Semester End Examination; May/June - 2018
Programming in C++

Time: 3 hrs

Max. Marks: 100

Note: Answer FIVE full questions, selecting ONE full question from each unit.

UNIT - I

- 1 a. What are the sorts of operations that we expect from a string class? Write a program in C++ to find the length of the string without using standard library functions. 10
- b. What is the difference between pointers and reference? Give example for each. 10
- 2 a. What is enumeration data type? Give example. 6
- b. What is a conditional operator? Give example. 6
- c. With example describe bit-set operator. 8

UNIT - II

- 3 a. Describe different types of loop operation used in C++. Give example for each. 10
- b. Explain the following with example : 10
- i) if statement ii) switch statement iii) goto statement
- 4 a. What is function? With example explain the different types of argument passing mechanisms. 10
- b. What is recursive function? Write a program in C++ to find GCD of two number using recursive function. 10

UNIT - III

- 5 a. What is inline function? Give an example. 6
- b. Describe function overloading. Give example. 6
- c. What are class and object? Write a program in C++ to find the area and perimeter of a rectangle using class and object. 8
- 6 a. Explain how member functions can be declared in a class with example. 6
- b. What is the importance of class destructor function? Write the prototype of the same. 6
- c. Explain different types of constructors with example. 8

UNIT - IV

- 7 a. Describe public, private and protected inheritance? Give example. 10
- b. What is multiple inheritance? With an example explain the concept of multiple inheritances. 10
- 8 a. What is operator overloading? Write a program in C++ to overload operator ++ and operator --. 10
- b. What is multilevel inheritance? Give Example. 6
- c. List the operators which cannot be overloaded. 4

UNIT - V

- 9 a. What is exception handling? With example explain try, through and catch mechanism in C++. 10
- b. Write a program in C++ to force a catch statement to catch all exceptions. 6
- c. What is exception specification? Give example. 4
- 10 a. With example explain pure virtual function. 8
- b. What is friend class? Give example. 6
- c. Describe abstract class with example. 6

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