KLS Gogte Institute of Technology, Belagavi

Academic Year: 2019-20 (EVEN SEM)

Program: B.E Semester: II

**Internal Assessment - II**

Course Title: Object Oriented Programming using C++ Course Code: 18ACS/IS28

Max. Marks: 30 Duration: 1 Hr 15 min Date: 30/5/2020

***NOTE: All questions in Part A are compulsory and answer any 5 questions from Part B***

**PART A: Quiz**

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| --- | --- | --- | --- | --- | --- |
| **Q.No** | **Question** | **[L]** | **[CO]** | **[PO]** | **[M]** |
| 1 | Constructors do not have return types, not even void and they cannot return values. **True/False** | **1** | **1,3** | **1** | **5** |
| 2 | It is possible to overload all the C++ operators except the following.   1. Class member access operators 2. Scope resolution operator and sizeof() operator 3. Conditional operator 4. All of the above |
| 3 | What is the output of the following code?  #include<iostream>  using namespace std;  class Point {  Point() { cout << "Constructor called"; }  };  int main()  {  Point t1;  return 0;  }   1. Compiler error b) Runtime error c) Constructor called d) None |
| 4 | void fun(int, char);  float fun(int, char);  The above two functions are overloaded. **True / False** |
| 5 | The new and delete operators are also called as \_\_\_\_\_\_\_\_\_\_\_ operators. |

**PART B:**

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| --- | --- | --- | --- | --- | --- |
| **Q. No.** | **Question** | **[L ]** | **[CO]** | **[PO]** | **[M]** |
| 1 | Explain the concept of copy constructor with an example. | **2** | **3** | **1** | **5** |
| 2 | Describe the importance of destructor. Explain its use with the help of a suitable example. | **2** | **3** | **1** | **5** |

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| 3 | Develop a class called Distance with data members feet and inches to represent distance. Write member functions to input distance, to output distance and overloaded operator functions to add two Distance objects and subtract one Distance object from another. Write the associated main() function that exercises the Distance class. | **3** | **3** | **3** | **5** |
| 4 | Perform addition operation on complex data using class and object. The program should ask for real and imaginary parts of two complex numbers, and display the real and imaginary parts of their sum. | **3** | **3** | **3** | **5** |
| 5 | Design a class string along with necessary data members. Use overloaded == operator to compare two strings. | **3** | **3** | **3** | **5** |
| 6 | What is function overloading? Discuss the steps involved in function selection. | **2** | **1** | **1** | **5** |
| 7 | Develop a C++ program consisting of a class Student with data members: Name, USN, m1, m2 and m3 and member functions to read and display student details. Include a friend function to search for a student with a specific USN; if found, display all the details along with the score being average of best two marks; else an error message. The main program must create an array of students and use the member and friend functions appropriately. | **3** | **3** | **3** | **5** |

**Signature of the Faculty Signature of the Module Coordinator IQAC**