Roll No..

MCA-303

MCA. III Semester

Examination, November 2019

Object Oriented Methodology and C++

Time : Three Hours

Maximum Marks : 70

Note : i) Attempt any five questions.

ii) All questions carry equal marks.

1. a) What is Object Oriented Programming? How it differs from Structured programming? Discuss the characteristics of Object Oriented Languages.

   b) What is Constructor and Destructor Function? Explain the purpose of constructor and destructors in a program.

2. a) What is Function? Explain default arguments to the function with the help of program.

   b) Write a program to differentiate between call by value and call by reference of passing arguments to function.

3. a) Write a program to create a class distance containing data in feet and inches. Overload binary '+' operator. To add two objects of the class distance. Display the added objects.

   b) What is inheritance? Explain different forms of inheritance with example.

4. a) Briefly explain the following
      i) Abstract base class
      ii) Early and late binding

   b) What are Virtual Functions? Explain a condition in which virtual functions would be appropriate.

5. a) Discuss the following
      i) Friend function
      ii) Pure virtual function

   b) What is Polymorphism? How is polymorphism achieved at compile time and run time? Explain.

6. a) What is manipulators? Explain the use of any four manipulators with examples.

   b) Explain Exception handling. Write a program to demonstrate the functioning of exception handling.

7. a) What is File handling? Discuss the use of sukg( ), sukp( ), tallg( ) and tallp( ) functions.

   b) Specify various object oriented paradigm and visual modeling. http://www.rgpvonline.com

8. Write short notes on the following.
   a) UML Specifications
   b) Object diagrams
   c) Formatted and unformatted I/O
   d) Various I/O streams

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