Total No. of Questions : 5] *[Total No. of Printed Pages : 2*

Roll No .....

IT - 303

B.E. III Semester

Examination, June 2016

OOPs Methodology

Time : Three Hours

Maximum Marks : 70

Note: i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.

ii) All parts of each question are to be attempted at one place.

iii) All questions carry equal marks, out of which part A and B (Max.50 words) carry 2 marks, part C (Max.100 words) carry 3 marks, part D (Max.400 words) carry 7 marks.

iv) Except numericals, Derivation, Design and Drawing etc.

1. a) How data and functions are organized in OOP?
   b) What are the quality issues that must be considered for critical evaluation of software?
   c) Discuss the process of method look up.
   d) Discuss principal advantages of OOP.

   Or

   Write short notes on:
   i) Data Abstraction and Encapsulation
   ii) Polymorphism
   iii) Dynamic Binding

2. a) Give the definition of member function when it is defined outside the class.
   b) What do you understand by Private member functions?
   c) Define class and write code for class declaration.
   d) What are the different forms of association between objects?

   Or

   Describe dynamic allocation in C++.

3. a) What is the purpose of message passing?
   b) What do you understand by default argument?
   c) How can you access the member function of a class? Write code for it.
   d) Enlist the main features of object oriented programming.

   Or

   What are the various types of associations? Explain with the help of suitable example.

4. a) What do you mean by base class and derived class?
   b) What do you understand by Disinheritance?
   c) Differentiate private and protected data members.
   d) Write the difference between inherited method and redefined method.

   Or

   Write a C++ program for multiple inheritance.

5. a) What do you understand by constructors?
   b) What is the main advantage of dynamic initialization of objects?
   c) Discuss the situations where inline expansion may not work.
   d) How do we achieve polymorphism through virtual functions, illustrate this through program.

   Or

   Discuss the characteristics that a friend function possesses. Illustrate the use of friend function through program.

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