Roll No. ....

12048

MBA 2 Year 3rd Semester (CBCS)
Examination – December, 2018

OBJECT ORIENTED ANALYSIS AND DESIGN

Paper : 17IMG23CT1

Time : Three Hours]   **[Maximum Marks : 50**

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Section – A (Question No. 1) is **compulsory**. Attempt one question from each Unit in **Section – B**. All questions carry equal marks.

SECTION – A

1. (a) Why object orientation is needed ?

   (b) What is use case modelling ?

   (c) Why is object constraint language used?

   (d) What are the different degrees of coupling among objects ?

   (e) What is debugging ?

SECTION – B

UNIT – I

2. (a) What is data hiding ? What are the different mechanisms for protecting data from the external users of a class's objects ?

(b) Why object-oriented programming approach is the preferred form of programming over other approaches ?

3. What is polymorphism ? Write a program to overload the + operator for manipulating the Distance class.

UNIT – II

4. "An Object Modelling Language is a standardized set of symbols and ways of arranging them to model (part of) an object oriented software design or system design." Explain.

5. What is dynamic modelling ? Discuss the purpose of dynamic modelling.

UNIT – III

6. (a) What is the difference between member functions defined inside and outside the body of a class ? How are inline member functions defined outside the body of a class ?

(b) What are empty classes ? Can instances of empty classes be created ? Give reasons.

7. What do you mean by Constructors ? Explain various types of Constructors in C++ with examples.

UNIT – IV

8. (a) What are the different forms of inheritance supported by C++ ? Explain them with an example.

(b) What is a class hierarchy ? Explain how inheritance helps in building class hierarchies.

9. (a) Describe different methods of realizing polymorphism in C++.

(b) Justify the need for virtual functions in C++.

(c) Why C++ supports type compatibles pointers unlike C ?