

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 ?

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**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. <http://haryanapapers.com>
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 ?
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