

Roll No. ....

**97641**

**BCA 4th Semester (New) 2011-12**

**Examination – May, 2013**

**OBJECT ORIENTED DESIGN & PROGRAMMING**

**Paper : BCA-208**

*Time : Three hours ]*

*[ Maximum Marks : 80*

*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 : Attempt any five questions. All questions carry equal marks.*

1. (a) What is OMT ? How it is useful and used ?  
Discuss with an example. 8
- (b) Discuss differences, uses and advantages of  
Union and Structure with suitable examples. 8
2. Explain the following briefly with suitable C++  
examples : 16
  - (i) Polymorphism, its types, and advantages with  
C++ codes,
  - (ii) User defined data types and their advantages.

97641-4,750-(P-2)(Q-8)(13)

P. T. O.

3. (a) What is JSD ? How it is useful and used ? Explain with suitable examples. 8
- (b) Discuss inheritance, its types and advantages with suitable C++ examples. 8
4. Describe the following with suitable C++ examples : 8 each
- (i) Static members and Abstract data types,
- (ii) Constructors, destructors and their advantages.
5. (a) What is exception handling ? How is it used and useful in C++ ? Explain with examples. 8
- (b) Write a C++ code segment to overload binary minus (-) and unary plus (+) operators. 8
6. Explain the following with C++ examples : 16
- (i) Friend and Inline functions and their advantages,
- (ii) New, Delete and object copying in C++.
7. (a) What are template functions ? How these are useful and used ? Discuss with suitable examples with C++ codes. 8
- (b) Discuss advantages of object-oriented modelling with examples. 8
8. Explain the following with C++ examples : 16
- (i) Role and advantages of classes in design of business software development,
- (ii) JSD and its advantages.