

Roll No. ....

**97675**

**B.C.A. 4th Semester**

**Examination–May, 2015**

**Object Oriented Design & Programming**

**Paper-BCA-208**

**Time : 3 hours**

**Max. Marks : 80**

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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 the examination.

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**Note :** Attempt **five** questions in all. Question No. 1 will be **compulsory**. Students will have to attempt **four** more questions, selecting **one** question from each unit.

1. Explain the following : 16

- (i) Flow control
- (ii) Static members

(iii) Static functions

(iv) Name space

### **Unit-I**

2. What do you mean by object oriented approach? How is it different from procedural language. Also explain the characteristics of OOPS. 16

3. Explain the following in C++ Language. 16

(i) Recursion

(ii) Operator

(iii) Array and pointer

### **Unit-II**

4. What do you mean by Constructor ? Explain in detail about its types. 16

5. What is memory management ? How is it implemented in C++. 16

### **Unit-III**

6. What is Inheritance ? Explain the different types of Inheritance. 16
7. Describe the following : 16
- (i) Virtual function
  - (ii) Friend function

### **Unit-IV**

8. What is exception ? How is it handled in C++. Explain in detail. 16
9. (i) What do you mean by Iterator ? Explain its types. 8
- (ii) What are Template classes ? Explain in detail. 8