



K-641

Seat No. 1036

B. C. A. (Sem. III) Examination

October / November - 2017

**BCA-301 : Object Oriented Programming
Using C++**

Time : 3 Hours]

[Total Marks : 70

- 1 (a) Explain following terms. 5**
- (i) Class (ii) Object
 - (iii) Data Encapsulation (iv) Inheritance
 - (v) Constant
- (b) Answer the following questions: (any two) 12**
- (i) Write a difference between Procedure oriented programming and Object oriented programming.
 - (ii) Explain Data types of C++ language.
 - (iii) List out different Operators of C++. Explain logical operators in detail.
- 2 (a) Answer the following Questions : 6**
- (i) In which situations inline function will not work.
 - (ii) Write a syntax of do while statement.
 - (iii) What is Destructor?
- (b) Answer the following questions : (any two) 12**
- (i) Explain Static variable and Static Function with suitable example.
 - (ii) What do you mean by Constructor? Explain Constructor with suitable example.
 - (iii) Explain function overloading with suitable example.

3 (a) Do as directed :

6

- (i) Define unary and binary operators.
- (ii) Which are the various types of Conversions?
- (iii) List out the Operators that cannot be Overloaded by friend function.

(b) Answer the following Questions : (any two) 12

- (i) Write a program for overloading of Unary minus(-) operator using friend function in C++.
- (ii) How can you overload Binary plus(+) operator ?
- (iii) Explain manipulation of string using operator overloading.

4 (a) Explain the following terms.

5

- (i) Pure virtual function
- (ii) this pointer
- (iii) multiple inheritance
- (iv) abstract class
- (v) multilevel inheritance

(b) Answer the following questions : (any two) 12

- (i) Explain Single inheritance with example.
- (ii) What is the use of Virtual Base Class? Explain it with example.
- (iii) Write a short note Virtual function.