

**B. C. A. DEGREE END SEMESTER EXAMINATION – MARCH/APRIL 2018**  
**SEMESTER – 2: BACHELOR OF COMPUTER APPLICATION (BCA) (CORE COURSE)**  
**COURSE: 16U2CRBCA5 –: OBJECT ORIENTED PROGRAMMING WITH C++**  
*(Common for Regular 2017 / Supplementary - Improvement 2016 Admission)*

Time: Three Hours

Max. Marks: 75

**PART A**

Answer **all** questions

1. What is size of () operator?
2. What is inline function?
3. What is pure virtual function?
4. What is call by reference?
5. What are static members?
6. What is recursion?
7. What are the different storage classes in c++?
8. Explain conditional operator.
9. Explain tellg () function.
10. What is stream? (1 x 10 = 10)

**PART B**

Answer **any eight** questions

11. What is containership? How it is different from the inheritance
12. How a common friend function can be declared to two different classes?
13. Reusability of classes is one of the major properties of OOP? How is it implemented in c++ ?
14. Differentiate between call by value and call by reference.
15. What is nested class? What is their use?
16. What is the relationship between classes and objects? How memory is allocated to classes and objects.
17. What is static binding and dynamic binding?
18. What are enumerated data types? Explain their declaration and use in programming.
19. List out the different reasons that cause exceptions?
20. Explain break and continue (2 x 8 = 16)

**PART C**

Answer **any five** questions

21. What are the control structures in c++?
22. What is a constructor? How it is different from other member functions?
23. Write a program to implement assignment operator can be overloaded?
24. What are manipulators? How a user defined manipulator can be created?
25. How a common friend function to two different classes can be declared? Explain with example

26. Multiple inheritance is different from multiple levels of inheritance? Explain.
27. How constructors can be used in derived objects explain with examples? (5 x 5 = 25)

#### PART D

Answer **any two** questions

28. Explain about the Object Oriented Programming? Differentiate between public and private visibility modes in context of Object Oriented Programming using a suitable example illustrating each?
29. How exception handling mechanism implemented in c++? Explain with all cases.
30. Explain Inheritance? Differentiate between different levels of Inheritance with an example program?
31. Discuss on polymorphism and virtual function with examples. (12 x 2 = 24)

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