



NS – 608

III Semester B.C.A. Degree Examination, November/December 2016  
(CBCS) (2015-16 and Onwards)

COMPUTER SCIENCE

BCA 303 : Object Oriented Programming using C++

Time : 3 Hours

Max. Marks : 70

**Instruction :** Answer *all* Sections.

SECTION – A



I. Answer **any ten** questions.

(10×2=20)

- 1) State any four differences between C and C++.
- 2) Why do we require const qualifier give example ?
- 3) What is scope resolution operator ?
- 4) What is default constructor ?
- 5) What is the role of EOF ?
- 6) What is class template ?
- 7) Explain Dynamic Binding.
- 8) Define pure virtual function.
- 9) Define stream.
- 10) What is the use of file pointer ?
- 11) Define Exception Handling.
- 12) What is destructor ? Explain.

SECTION – B

I. Answer **any five** questions :

(5×10=50)

- 13) a) Explain the characteristics of oops. 5
- b) Describe any three Manipulators. 5
- 14) a) Explain function overloading with example. 5
- b) Write a program to perform addition of two matrices using operator overloading. 5

P.T.O.



- 15) a) What are access specifiers used for ? Explain the concept of protected access specifier.  
b) Write a note on class templates.
  - 16) a) What are default arguments ? How they are passed to functions ?  
b) Write a program to show returning current object using "this" pointer ?
  - 17) a) Explain different types of polymorphism ?  
b) Write a program to swap two numbers using friend function.
  - 18) Explain different types of inheritances with example.
  - 19) a) Explain inline function and illustrate the same with an example ?  
b) Write a program to calculate area and circumference of circle using inline function.
  - 20) Write short note on :
    - a) Data Hiding
    - b) Storage classes
    - c) Seekg ( ) and seekp ( ) functions
    - d) Virtual Base class.
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## SECTION - B

(5x10=50)

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