III Semester B.C.A. Degree Examination, Nov./Dec. 2015
(Y2K14 Scheme) (CBCS)
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) Define polymorphism. How is it accomplished in C++ ?

2) What are keywords ? Mention any two.

3) Why do we require const Qualifier ?

4) What is the use of scope resolution operator in C++ ?

5) List the operators which cannot be overloaded.

6) Define constructor.

7) What are the advantages of operator overloading ?

8) Define base and derived class.

9) What are templates ?

10) Define pure virtual functions.

11) What is the use of this pointer ?

12) Define stream.

SECTION – B

II. Answer **any five** questions :　　　　　　　　　　　　(5×10=50)

13) a) What are inline functions ? List its advantages and disadvantages.　4

　　b) Explain any five basic concepts of oop.　6

14) a) Define Manipulators. Explain with examples any three manipulators.　6

　　b) What is a friend function ? Explain with a suitable example.　4

P.T.O.

15) a) What are access specifiers used for ? Explain the concept of protected access specifier.   6

b) Explain the concept of static members of a class with examples.   4

16) a) List the characteristics of a constructor.   4

b) Write a C++ program to illustrate the concept of constructor overloading.   6

17) a) What are the rules followed to overload an operator in C++ ?   4

b) Write a C++ program to explain the concept of unary operator overloading.   6

18) a) Explain different types of inheritance with examples.   4

b) Explain in detail the types of polymorphism in C++.   6

19) a) Write a C++ program to sort elements using templates.   4

b) What is exception handling ? Exception how does it differ from error ? Explain the different blocks in exception handling mechanism.   6

20) a) Explain seekg() and tellg() functions.   4

b) Write a program to show returning current object accessing member data of current object and returning values of object using this pointer   6

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