UN – 313

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
