



SG – 636

II Semester B.C.A. Degree Examination, Sept./Oct. 2021
(Y2K8)

COMPUTER SCIENCE

BCA 204 : Object Oriented Programming using C++

Time : 3 Hours

Max. Marks : 70

Instruction : Answer **all** Sections.

SECTION – A

I. Answer **any ten** of the following : **(10×1=10)**

- 1) What is Data abstraction ?
- 2) What are keywords ? Mention any 2 keywords.
- 3) Explain const qualifier.
- 4) What is the use of scope resolution operator in C++ ?
- 5) Mention the operators that can not be overloaded.
- 6) Explain default constructor.
- 7) Mention any 2 advantages of inheritance.
- 8) Explain data conversion.
- 9) What are templates ?
- 10) What is a pure virtual function ?
- 11) What is exception handling ?
- 12) What is the use of eof() function ?

SECTION – B

II. Answer **any five** questions. **(5×3=15)**

- 13) List the various features of oops. Write any two limitations of oops.
- 14) What is constant qualifier ? Explain with example.
- 15) How do function defined in C++ ?
- 16) What is inline function ? Name two advantages of it.

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- 17) Explain any three built in string functions with example.
- 18) What is the difference between actual parameter and formal parameters ?
- 19) What is function overloading ? Explain with an example.
- 20) What is a function template ? Explain.

SECTION - C

III. Answer **any five** questions.

(5×7=35)

- 21) a) Write the application of object oriented programming. **3**
b) Explain class definition with an example. **4**
- 22) a) Describe the different data types used in C++. **3**
b) Write the difference between call by value and call by reference. **4**
- 23) What is constructor ? Write the different rules in naming constructor in oops.
- 24) Write a C++ program to overload '+' operator to perform addition of two machines.
- 25) What is inheritance ? Explain the different types of inheritance and also write the advantages of it.
- 26) Explain overriding function with an example.
- 27) a) Describe the different modes of opening a file in C++. **4**
b) Explain the file pointers seekp(), tellp() and seekg(). **3**
- 28) Write a C++ program to search an element using templates.

SECTION - D

IV. Answer **any one** question.

(1×10=10)

- 29) Write a C++ program to find the largest of three numbers using template.
- 30) Explain the mechanism of exception handling in C++ with various blocks associated with exception handling.