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

 $(10 \times 1 = 10)$

Instruction: Answer all Sections.

SECTION - A



- I. Answer any ten of the following: 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.

 $(5 \times 3 = 15)$

- 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.	i i
22) a) Describe the different data types used in C++.	3
b) Write the difference between call by value and call by reference.	1
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++.	1
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.