

## III Semester B.C.A. Examination, March/April 2024 (CBCS) (Repeaters) COMPUTER SCIENCE Object Oriented Programming Using C++

Time: 3 Hours

Max. Marks: 70

Instruction: Answer all Sections.

12) Write the usage of seekg() function.

- SECTION A

  I. Answer any ten questions. Each question carries 2 marks: (10×2=20)

  1) Define object.

  2) What is data encapsulation?

  3) What is function prototyping?

  4) What are formal and actual parameters?

  5) What are access specifiers?

  6) Define default constructor.

  7) What is method overriding?

  8) What is inheritance?

  9) What is a friend function?

  10) What is an exception?
  - SECTION B
- II. Answer any five questions. Each question carries 10 marks: (5×10=50)
  13) a) Explain function overloading and illustrate with a C++ program.
  b) What are manipulators? Explain setw() and fill() functions.
  5

P.T.O.



14)	•	How do you define a member function outside the class? Explain. Explain the data types in C++.	5
15)		Explain nesting of member functions. Illustrate with an example. Explain copy constructor. Illustrate with an example.	5
16)		Write a C++ program to overload + operator to concatenate two strings.  Explain constructor overloading. Illustrate with an example.	5
17)		Explain the three types of data conversions. Give example.  Explain multiple inheritance with an example.	5
18)		Explain pure virtual function with an example.  Write a C++ program to swap 2 numbers using friend function.	5
19)		Explain memory allocations function with an example.  Explain file pointers with an example.	5
20)		Describe the different modes of opening file in C++.  Explain the different I/O streams in C++. Illustrate with example.	5