

11. With an example, explain the order of invocation of constructors and destructors in multiple inheritance.

12. Define the following :

- (i) Data Hiding
- (ii) Protected and Private access specifiers

13. Explain the following :

- (i) Abstract class
- (ii) Final Class

## **BCA-10**

**December – Examination 2022**  
**BCA (Part II) Examination**  
**Object Oriented Programming in C++**  
**Paper : BCA-10**

*Time : 3 Hours ]*

*[ Maximum Marks : 70*

*Note :-* The question paper is divided into three Sections A, B and C. Write answers as per the given instructions.

### **Section–A**

**7×2=14**

#### **(Very Short Answer Type Questions)**

*Note :-* Answer all questions. As per the nature of the question delimit your answer in one word, one sentence or maximum up to **30** words. Each question carries 2 marks.

1. (i) Define Reference Variable.

- (ii) What is Inline Function ?
- (iii) What is Friend Class ?
- (iv) Define Output Stream.
- (v) What is role of :: Operator ?
- (vi) What is the role of 'Default' Label in switch case ?
- (vii) What is 'this' Pointer ?

**Section-B** **4×7=28**

**(Short Answer Type Questions)**

*Note* :- Answer any *four* questions. Each answer should not exceed **200** words. Each question carries 7 marks.

- 2. Define Exceptional Handling. Explain the use of try, catch and throw.
- 3. Explain the use of ifstream and ofstream classes for file input and output.

- 4. What is Runtime Polymorphism ? Explain with writing a C++ program.
- 5. Write C++ program illustrating the use of New and Delete Operators.
- 6. What is operator overloading ? Define insertion operator.
- 7. Define Constructor and Copy Constructor.
- 8. Define Virtual Function.
- 9. Explain Message Passing.

**Section-C** **2×14=28**

**(Long Answer Type Questions)**

*Note* :- Answer any *two* questions. You have to delimit your each answer maximum up to **500** words. Each question carries 14 marks.

- 10. Differentiate between Function Overloading and Function Templates. Can we overload a function template illustrate with example.