

Roll No. ....20010203007

Total Pages : 03

**J-FB-22-00244**

**B. Tech. EXAMINATION, 2022**

Semester III (CBCS)

**OBJECT ORIENTED PROGRAMMING USING C++  
(CSE, IT)**

**CS-302**

*Time : 3 Hours*

*Maximum Marks : 60*

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*The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.*

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**Note :** Attempt Five questions in all, selecting one question from each Sections A, B, C and D. Q. No. 9 is compulsory.

**Section A**

1. (a) Define access specifier. 5
- (b) Define object with an example. 5

2. (a) What is container class ? 5  
(b) Define hierarchy of console stream classes. 5

### Section B

3. (a) What is Constructor ? Why do we need constructor ? 5  
(b) Define operator overloading with a suitable example. 5
4. (a) Define overriding method. 5  
(b) Define overloading of new and delete method. 5

### Section C

5. (a) Write a program to print the value of variable X on the screen using pointer. 5  
(b) What is the difference between virtual function and pure virtual function ? 5
6. (a) Define polymorphism with a suitable example. 5  
(b) Explain self-referential class with an example. 5

### Section D

7. Describe the major tasks of input and output stream classes. 10
8. Which stream must always be used to process external files ? Why ? 10

### (Compulsory Question)

9. Attempt all the following : 8×2.5=20
- (a) What is protected specifier ?
  - (b) Define Inheritance.
  - (c) What is early binding ?
  - (d) What is catch ( ) block ?
  - (e) What is control statement ?
  - (f) What is multi-level inheritance
  - (g) Define Dynamic Memory Management.
  - (h) Define Paradigm.