

This question paper contains 2 printed pages]

**SF—05—2022**

**FACULTY OF COMPUTER STUDIES**

**B.Sc. (Second Year) (Third Semester) EXAMINATION**

**MAY/JUNE, 2022**

**(CBCS/Revised Pattern)**

**COMPUTER SCIENCE**

**(Object Oriented Programming)**

**(Wednesday, 29-06-2022)**

**Time : 02.00 p.m. to 05.45 p.m.**

*Time— 3.45 Hours*

*Maximum Marks—75*

*N.B. :— (i) All questions are compulsory.*

*(ii) Figures to the right indicate full marks.*

*(iii) Assume suitable data, if required.*

1. Attempt any *five* of the following (3 marks each) : 15

- (a) Explain rules for overloading.
- (b) Explain pointer to member.
- (c) WAP to demonstrate destructor.
- (d) Explain call by reference.
- (e) Explain benefits of OOPs.
- (f) Explain application area of OOPs.
- (g) Explain formatted I/O operations.

2. Attempt any *three* of the following (5 marks each) : 15

- (a) Explain basic concepts of OOPs.
- (b) Explain scope resolution operators in detail.
- (c) Explain inline function with example.
- (d) WAP to demonstrate function overloading.
- (e) Explain visibility modes in C++.

P.T.O.

3. Attempt any *three* of the following (5 marks each) : 15
- (a) Explain parameterized constructors.
  - (b) Explain friend function with example.
  - (c) Explain unary operator overloading.
  - (d) WAP to demonstrate operator overloading.
  - (e) Explain binary operator overloading.
4. Attempt any *three* of the following (5 marks each) : 15
- (a) WAP to demonstrate pure virtual function.
  - (b) Explain virtual base class with example.
  - (c) Explain multiple inheritance with example.
  - (d) WAP to demonstrate file handling.
  - (e) Explain formatted function in C++.
5. Attempt any *three* of the following (5 marks each) : 15
- (a) Explain virtual function with example.
  - (b) Describe stream class in detail.
  - (c) Explain how to convert class to basic.
  - (d) Explain manipulators with example.
  - (e) Explain opening and closing file.