Printed Pages: 01 Sub Code:NBC402
Paper Id: 294208 Roll No.

MCA DUAL DEGREE (SEM IV) THEORY EXAMINATION 2018-19 OBJECT ORIENTED PROGRAMMING USING C++

Time: 3 Hours Total Marks: 100

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief.

 $2 \times 10 = 20$

- (a) Define template?
- (b) What do you meant by Private, Public, and Protected Access Modifier?
- (c) Give the difference virtual function and operator overloading?
- (d) Define CIN and COUT function?
- (e) What do you mean by constructer and its features?
- (f) Define Garbage Collection?
- (g) What do you meant by Abstract Class and Meta Class?
- (h) Define Encapsulation?
- (i) What do you meant by Dynamic Memory Allocation?
- (j) Define Namespace and Generic Class?

SECTION B

2. Attempt any *three* of the following:

 $10 \times 3 = 30$

- (a) Explain the Object Oriented approaches and various features of OOPs?
- (b) What do you meant Default Constructer with example?
- (c) Explain function overloading with example?
- (d) What do you meant by Multiple Inheritance with example?
- (e) Explain the Stream and files in C++?

SECTION C

3. Attempt any *one* part of the following:

 $10 \times 1 = 10$

- (a) What do you meant by Call by Value and Call by Reference with example?
- (b) Give the difference between Object and Class with example?

4. Attempt any *one* part of the following:

 $10 \times 1 = 10$

- (a) Explain the various types of destructors with example?
- (b) What do you meant by constructer overloading with example?

5. Attempt any *one* part of the following:

 $10 \times 1 = 10$

- (a) What do you mean by Function Overriding with example?
- (b) Write a program for Binary Operator Overloading?

6. Attempt any *one* part of the following:

 $10 \times 1 = 10$

- (a) Write a program for Multi-level Inheritance?
- (b) What do you meant by Polymorphism with example?

7. Attempt any *one* part of the following:

 $10 \times 1 = 10$

- (a) Write a program for Generic Function?
- (b) Define the concept of Try and Catch block in C++ with the help of proper example?