

# DOON UNIVERSITY, DEHRADUN

# Department of Computer Science, School of Technology

#### Integrated MCA, Second Semester

Mid Semester Examination, 2018 STM-513: Object Oriented Programming (C++)

Time Allowed: 2 Hours

Maximum Marks: 30

**SECTION: A (Short Answer Type Questions)** 

(Total Marks: 3X2=6)

# Q.1 Attempt any three questions.

- a) What is class and object in C++?
- b) What is the concept of this operator?
- c) What is the use of scope resolution operator?
- d) What are constructor and destructor?
- e) Write a function for calculating factorial of a number.

#### SECTION: B (Long Answer Type Questions)

(Total Marks: 4X3=12)

## Q.2 Attempt any four questions.

- a) Explain OOPs and its features.
- b) Explain templates in C++ with a suitable example.
- c) What do you mean by friend function? Write a C++ program to add two numbers using friend function.
- d) Write a function for swapping two integer values by using call by reference.
- e) Write a C++ program for matrix multiplication.

#### SECTION: C (Very Long Answer Type Questions)

(Total Marks: 3X4=12)

# Q.3 Attempt any three questions.

- a) Explain polymorphism and function overloading with an example.
- b) What is exception handling? Discuss try, catch and throw with a suitable example.
- c) Write a C++ program to create a class for student to get and print details of N students.
- d) What is string? Write string functions.