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Total No. of Printed Pages: 1

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BCA-MCA Dual Degree (Semester – 2nd)
OBJECT ORIENTED PROGRAMMING LANGUAGE IN C++
Subject Code: BMCAS1204
Paper ID: [19340109]

Time: 03 Hours

Maximum Marks: 60

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A

(2 marks each)

Q1. Attempt the following:

- a) Define abstraction.
- b) Give an example of identifier and constant each in C++.
- c) List two properties of destructors.
- d) Differentiate between class and an object.
- e) Define dynamic constructor
- f) Give an example of inheritance.
- g) Define pure virtual function
- h) Write rules for operator overloading.
- i) Differentiate between base class and derived class
- j) What do you mean by dynamic memory allocation?

Section – B

(5 marks each)

Q2. Describe the concept of Operator precedence and associativity in C++.

Q3. Explain and distinguish between class declaration and class definition.

Q4. Write a program in C++ using friend function.

Q5. Define the following terms:

(2.5 x 2 = 5)

- a) Early binding
- b) File handling

Q6. Explain and distinguish between multilevel and multiple inheritance.

Section – C

(10 marks each)

Q7. Define Object-Oriented Programming. Discuss the important characteristics of Object-Oriented Programming by giving suitable examples.

Q8. a) Define constructor. Explain different types of constructors.

(5)

b) Explain the concept of Nested and container classes in brief.

(5)

Q9. What do you mean by polymorphism? Explain the following with reference to polymorphism:

(5 x 2 = 10)

- a) Methods of achieving polymorphic behavior
- b) Polymorphism with pointers