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Total No. of Pages : 02

Total No. of Questions : 09

**B.Tech.(Electronics Engineering/Electrical & Electronics)**  
**(E-1 2012 Onwards)**  
**(Sem.-6)**

**OBJECT ORIENTED PROGRAMMING**

Subject Code : BTEEE-603C

Paper ID : [72844]

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTION TO CANDIDATES :**

1. **SECTION-A** is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

**SECTION-A****Q1. Answer briefly :**

- (i) What is a destructor? How it is defined?
- (ii) How you can declare constants? Give examples.
- (iii) What is a pure virtual function? What is its use?
- (iv) How memory is allocated to objects?
- (v) What do you mean by a generic class? What is its use?
- (vi) Discuss with examples how we can open and close a file.
- (vii) What are default arguments? Give example.
- (viii) What is Data hiding? How it is achieved in C++? Give example.
- (ix) Differentiate between Call by value and call by reference.
- (x) What is a virtual base class? Why it is used?

### SECTION-B

- Q 2. Explain various looping statements of C++.
- Q 3. What are static data members? How these are declared and used? Discuss with example.
- Q 4. What is a friend function? Explain its role with an example.
- Q 5. Compare functional and object oriented programming paradigms.
- Q 6. What is an inline function? How it is different from normal function? In which situations inline function should not be used? Give examples.

### SECTION-C

- Q7. a) What is Operator overloading? Write a program in C++ to overload binary operator \*.
- b) What is a virtual function? Why it is used? Explain with suitable example.
- Q8. Define constructor. Write main features of a constructor. Explain various types of constructors with examples.
- Q9. What do you mean by Inheritance? Explain various types of inheritance with the help of suitable examples.