Roll No. | | | | | | | | | | | | **Total No. of Pages : 02**

Total No. of Questions : 09

B.Tech. (Electrical & Electronics Engg.) (2012 Onwards E-I) (Sem.–6)

OBJECT ORIENTED PROGRAMMING

Subject Code : BTEEE-603C

M.Code : 72844

Time : 3 Hrs. **Max. Marks : 60**

INSTRUCTIONS 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

1. Answer briefly :

a) Differentiate between data hiding and encapsulation.

b) What are parameterized constructors?

c) What are virtual destructors?

d) What are pure virtual functions?

e) Differentiate between new operator and malloc function.

f) What are operators << and >> used for?

g) Which operator is used to access public members of an object?

h) What function can be used to open a file in C++?

i) What is explicit constructors?

j) What is the use of command line arguments?

SECTION-B

2. Write a program to sort a list of strings into alphabetical order using an array of pointers.

3. Explain how new and delete operators manage memory allocation/deallocation dynamically.

4. How are structures in C different from a class? What is meant by dynamic initialization of a variable? Explain how memory is allocated to classes and objects.

5. Explain the difference between C and C++.

6. Write a program in C++ to count the numbers of digits in given string.

SECTION-C

7. Discuss in detail features of object oriented programming.

8. What are the various types of inheritance in C++? Give an example of each. What are virtual functions and pure virtual functions?

9. Explain the concept of constructors, destructor and friend functions with the help of a program.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.