Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(Automation & Robotics) (2011 & Onwards)   (Sem.–4)
OBJECT ORIENTED PROGRAMMING USING C++
Subject Code : BTCS-305
M.Code : 63015

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

1. **Answer briefly :**

   a. Give the comparison of C and C++ with examples.

   b. Discuss function prototyping, with an example.

   c. What are advantages of function overriding?

   d. Define *'this'* pointer.

   e. What is meant by type conversion?

   f. What is a scope resolution operator?

   g. Discuss derived class pointers.

   h. List some of the rules for operator overloading.

   i. What is the use of *strrev()* function?

   j. What is pure virtual function?

SECTION-B

Q2   Write a C++ program to count the number of objects of a certain class.

Q3   Explain the steps of *any one* searching technique.

Q4   What is function of overloading? Write an example using C++ to illustrate the concept of function overloading.

Q5   What is a friend class? Why is it required? Explain with an example.

Q6   What are constructors? How are they different from member functions?

SECTION-C

Q7   Explain public, private and protected access specifier and show their visibility when they are declared in Inheritance?

Q8   What is the use of operator overloading? Write a program to overload post and pre increment operators.

Q9   What are static data members? Explain with an example the use of static data members.

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.