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Total No. of Questions: 09

# B.Tech.(Automation & Robotics) (2012 & Onwards) (Sem.-4) OBJECT ORIENTED PROGRAMMING USING C++

Subject Code: BTCS-305 M.Code: 63015

Time: 3 Hrs. Max. Marks: 60

## **INSTRUCTION TO CANDIDATES:**

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

#### **SECTION-A**

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## Q1. Answer briefly:

- a) Compare C++ with C.
- b) What is Size of operator?
- c) Define this pointer.
- d) List types of operators.
- e) What is dynamic memory location?
- f) Discuss copy constructor.
- g) What are static members?
- h) Differentiate structure and union.
- i) Discuss function overriding.
- j) What are streams in C++?



#### **SECTION-B**

- Q2. What is object oriented programming? Explain any five characteristics of object oriented programming languages.
- Q3. What are the differences between public, private and protected variables?
- Q4. What is the significance of constructor? Discuss the rules of defining constructors.
- Q5. Differentiate between Call by Value and Call by Reference with the help of examples.
- Q6. Define Virtual Function? Explain the mechanism of Virtual Function.

## **SECTION-C**

- Q7. Demonstrate unary and binary operator overloading.
- Q8. Write a program to generate Fibonacci series using the Inheritance concept.
- Q9. Discuss the concept of searching in C++. Illustrate any one method of Searching.

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.

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