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Total No. of Printed Pages: [01]

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B. Tech. (EE) (Semester – 5th/7th)
OBJECT ORIENTED PROGRAMMING
Subject Code: BCSEO1-014
Paper ID: [18OE111520]

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) Why header files are used in C++?
- b) Define Abstract class.
- c) What is the use of 'this' pointer?
- d) What is a destructor? How it is defined.
- e) Define Parameterized constructors.
- f) What is the use of Friend Function?
- g) What is the of 'new' and 'delete' operators in C++?
- h) Why do we need Virtual functions?
- i) What is the difference between text stream and binary stream?
- j) Differentiate between Sequential and Random Access files.

Section – B

(5 marks each)

- Q2. Define Class and Object. Write down a C++ program to demonstrate the concept of Class and Object.
- Q3. What are Copy Constructors? Write a program in C++ to demonstrate the concept of Copy Constructors.
- Q4. Define Polymorphism. Differentiate between Compile time and Run time polymorphism.
- Q5. Discuss the various Access specifiers used in C++ with the help of suitable program.
- Q6. What is Operator Overloading? Write a program in C++ to perform Unary Operator Overloading.

Section – C

(10 marks each)

- Q7. Define Object Oriented Programming. Discuss the different characteristics of Object Oriented Programming language in detail.
- Q8. What is Inheritance? Discuss the different types of Inheritance. Also write a program in C++ to implement Hybrid Inheritance.
- Q9. How the file handling is performed in C++? Write a program in C++ to perform reading and writing from a file.