

S.D.E.

B.C.A. (2004 COURSE SEM- III : WINTER - 2017
SUBJECT : OBJECT ORIENTED PROGRAMMING WITH C++

Day : **Thursday**
Date : **21/12/2017**

W-2017-4160

Time : **10.00 AM TO 1.00 PM**
Max. Marks: 80

N.B.:

- 1) Attempt **ANY FIVE** questions from Section – I and **ANY TWO** questions from section – II.
 - 2) Answers to both the sections should be written in the **SEPARATE** answer books.
 - 3) Figures to the right indicate **FULL** marks.
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SECTION – I

- Q.1** Explain any five features of object oriented programming. **[10]**
- Q.2** a) What is operator overloading? List the operators which cannot be overloaded. **[05]**
b) Define data hiding and encapsulation. **[05]**
- Q.3** Explain constructor and destructors in C++ with suitable example. **[10]**
- Q.4** a) Explain memory management operators in C++. **[05]**
b) What are the advantages and disadvantages of inline function? **[05]**
- Q.5** Explain the concept of inheritance in C++. Describe different forms of inheritance in brief. **[10]**
- Q.6** a) Which are different I/O manipulators in C++? **[05]**
b) What is meant by friend function? **[05]**
- Q.7** Write short notes on **ANY TWO** of the following: **[10]**
a) Polymorphism
b) Stream classes
c) Virtual function

SECTION – II

- Q.8** Write a C++ program to accept five bank account information such as account number, type and balance. Display all customers' information using array of objects. Use static keyword. **[15]**
- Q.9** a) Write a C++ Program to find factorial of a number. **[08]**
b) Write a C++ program to check the number is even or odd. **[07]**
- Q.10** Write a C++ program to calculate area of rectangle, triangle and circle. **[15]**

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