

S.D.E.
B.C.A. (2004 Course Sem- III : WINTER - 2018
SUBJECT: OBJECT ORIENTED PROGRAMMING WITH C++

Day: Thursday
Date: 06/12/2018

W-2018-4513

Time: 02.00 PM TO 05.00 PM
Max Marks. 80

N.B.

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

- Q.1** Briefly describe characteristics of Object Oriented Programming (OOP) and comment on how it is different from Structured Programming. **(10)**
- Q.2** List and describe various methods of parameter passing in C++. **(10)**
- Q.3** What do you know about operator overloading? Describe it with example. **(10)**
- Q.4** What are the types of constructors? Explain each with example. **(10)**
- Q.5** What is the need of Inheritance? Explain various types of inheritance supported by C++. **(10)**
- Q.6** What is Virtual Function? Describe in which situation virtual function can be used. **(10)**
- Q.7** Write short notes on any **TWO** of the following: **(10)**
- a) Input stream
 - b) new and delete operators
 - c) Inline function

SECTION – II

- Q.8** Design a Class BankAccount with minimum requirement like account number, account holder name and balance. Also provide methods to be used for operations on it. Also create and use instances of BankAccount Class. **(15)**
- Q.9** Write a Class Box which holds data member of type double. Write necessary constructors and methods for the same. Also Use this Class to overload + and - operators. **(15)**
- Q.10** a) Write a C++ program to check whether given number is prime. **(08)**
- b) Write a C++ program to calculate simple interest. **(07)**