(i) Printed Pages : 2 Roll No. .....

(ii) Questions : 9 Sub. Code : 0 9 2 2

Exam. Code : 0 0 2 8

Bachelor of Computer Applications 2nd Semester

(2053)

OBJECT ORIENTED PROGRAMMING USING C++

Paper : BCA-16-204

Time Allowed : Three Hours] **[Maximum Marks : 65**

Note :— Attempt **ONE** question from each unit and compulsory Question No. 9.

UNIT—I

1. (a) Draw difference between OOPS and traditional Programming language. 7

   (b) Exemplify the structure of C++ Program. 6

2. (a) Explain any three main concepts of OOPS like Abstraction, Polymorphism, etc. 7

   (b) What are members ? Explain Private and Public through examples. 6

UNIT—II

3. (a) What is function ? When a function is accessed as "friend" function and inline function ? Explain. 7

   (b) Which are basic data-types and user defined data-types ? How are they converted vice-versa ? Explain. 6

4. (a) What is array ? How are arrays of objects created ? 7

(b) How are constructors and destructors created and used ? Explain. 6

UNIT—III

5. (a) Explain and exemplify various Privately and Publically derived members in case of Single Inheritance. 7

(b) What are virtual functions ? Exemplify. When are they called pure ? Explain. 6

6. (a) Explain various types of Inheritance. 7

(b) How do you carry out "Early" and "Late" binding to execute polymorphism ? Explain. 6

UNIT—IV

7. (a) What is Exception ? How are they handled ? Explain. 7

(b) How are various file operations executed for classes ? Explain. 6

8. (a) Explain "Throwing" and "Catching" Mechanism for exceptions. 7

(b) Write a program to demonstrate Random file processing. 6

UNIT—V

9. Explain :

(a) Memory Management Operators. 3

(b) Manipulators. 2

(c) Static Members. 2

(d) Type Conversion. 2

(e) Nesting of classes. 2

(f) Binding. 2