

Exam.Code:0028

Sub. Code: 0922

2071

Bachelor of Computer Application

Second Semester

BCA-16-204: Object Oriented Programming Using C++

Time allowed: 3 Hours

Max. Marks: 65

NOTE: Attempt five questions in all, including Question No. IX (Unit-V) which is compulsory and selecting one question each from Unit I - IV.

x-x-x

UNIT - I

- I. How are data and functions organized in an object oriented program? What are the unique advantages of object oriented programming over procedure oriented? (13)
- II. Discuss the following:-
 - a) Memory management operators
 - b) Type casting (8,5)

UNIT - II

- III.
 - a) Demonstrate a case where objects can be passed as function arguments.
 - b) How are static members accessed in C++? (7,6)
- IV.
 - a) Create a class 'myString' by taking suitable members/constructors. Implement a function to compare two strings (length) through operator overloading.
 - b) In what ways are constructors different from ordinary functions? Discuss copy constructor. (7,6)

UNIT - III

- V. What is the difference between inheritance and abstraction? How does the visibility of base class members undergo modification in derived class with respect to three types of derivation? (13)
- VI. When should one use late binding in OOPS? What is the role of virtual functions here? Demonstrate the implementation. (13)

P.T.O.

(2)

UNIT - IV

- VII. Why is exception handling mechanism introduced in C++? When do we use multiple catch handlers? Describe with an example. (13)
- VIII. Discuss the various stream classes available for file operations. What is the role of file pointer and how is it used for moving back and forth with in the file? (7,6)

UNIT - V

- IX. Write short note on following:-
- a) Manipulators (2)
 - b) Use of friend function (2)
 - c) Purpose of destructors (3)
 - d) Conversion from one class to another class type (3)
 - e) Random file processing (3)

x-x-x