Bachelor of Computer Applications
Annual Examinations – 2006

Paper BCAD – 302
Object Oriented programming in C++

Time allowed: Three hours

Maximum Marks: 100

SECTION – I

Marks

Q1. Attempt all the questions given below: 1X20=20

i) OOP stands for _____.
ii) An _____ exhibits the properties and behaviour defined by its class.
iii) SDLC stands for _____.
iv) COBOL, FORTRAN and C is commonly known as procedure oriented while C++ is _____oriented programming.
v) Statics members can be accessed by both the object of the class and _____.
vi) Polymorphism means _____.
vii) In C++ a header file has a standard _____ extension.
viii) Constructor is _____ that is called automatically when the object of a particular class is created.
ix) The mechanism of deriving a new class from an old one is called _____.
x) A pointer stores _____.
xi) _____ is a pointer that points to the object on which this function was called.
xii) Late binding means selecting function during the _____.
xiii) OOA stands for _____.
xiv) OOD stands for _____.
xv) Generally a class specification has two parts, class declaration and _____.
xvi) Static data members are data objects that are _____ to all objects of a class.
xvii) Virtual functions really exist.
xviii) Just as data members can be static member functions can also be static.
xix) It is necessary for each class to have a main() function.
xx) C++ doesn't permit programme to create their own data type.

SECTION – II

Attempt any 5 questions. All questions carry equal marks 5X6=30

i) What is difference between as Instance member and static member? Explain with an example.
ii) What is data encapsulation? Explain with an example.

iii) What is polymorphism? Write a small C++ program to explain it.

iv) What do you mean by OOP? Write five advantages of OOP.

v) What does the following function prototype mean, and what purpose does it serve for the compiler?

Ther afunction (int x, float&y);

vi) What may be different for all objects in a class and what remains the same. Explain with an example.

vii) For each of the following Quantities state the C++ data type you will assign.

a) Telephone number
b) Pincode
c) Salary of an employee
d) Name of an Employee
e) Date of birth of an employee
f) Sex of an employee

SECTION –III

Attempt any 5 questions. All questions carry equal marks 10X5=50

i) What are the basic concepts of object oriented programming? Explain in detail.

ii) Differentiate between structure type and class type using a suitable example.

iii) What is function prototyping?

iv) Write a program in C++ that uses over loaded member function for connecting temperature from Celcius to Kelvin scale.

v) What is function prototyping?

vi) What do you mean by Constructors? What are different types of constructors? What are destructors?

vii) What is inheritance? Explain how a subclass may inherit from multiple classes.

viii) What are difference between overloading a Uniary Operator and that of a binary operator? Give a suitable example.

ix) What is the purpose of pure virtual function? Illustrate with a suitable example.