Exam.Code:0003 Sub. Code: 0292

2031

B.A./B.Sc. (General) Third Semester Computer Science

CS-06: Object Oriented Programming (Using C++)

Time allowed: 3 Hours

Max. Marks: 30

NOTE: Attempt <u>five</u> 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. a) Explain in brief features of Object Oriented Programming.
 - b) Write structure of a C++ program?

(2x3)

- II. a) Explain differences between public and private members.
 - b) How a class is defined in C++. Explain.

(2x3)

UNIT - II

- III. How member function can be defined inside and outside the class definition. (6)
- IV. a) Discuss various ways of passing objects as function arguments.
 - b) What do you know about scope resolution operator?

(4,2)

UNIT - III

- V. Explain in detail the various types of Inheritance techniques used in C++. (6)
- VI. What are constructors and destructors in C++? Explain in brief different types of constructors. (6)

UNIT - IV

- VII. What is polymorphism? Differentiate between run time polymorphism and compile time polymorphism. (6)
- VIII. a) What is a pure virtual function in C++?
 - b) What is operator overloading? Write a program to overload a binary operator.

(2,4)

$\underline{UNIT - V}$

IX. Attempt the following:-

- a) What is the use of iostream.h header file?
- b) Name the different access specifiers available in C++.
- c) Nesting of member function.
- d) friend function
- e) Write use of new and delete operator.
- f) Static data member.

(6x1)

x-x-x