

1127

B.Sc. (Hons.) Bio-Informatics

Third Semester

BIN-3005: Object Oriented Programming in C++

Time allowed: 3 Hours

Max. Marks: 60

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

I. a) To print a single character in output, which function is used?

- i) getchar ()
- ii) gets()
- iii) putchar()
- iv) puts ()

b) Which can be replaced by a switch block?

- i) do..while
- ii) for
- iii) while
- iv) else if

c) Write an example of exception handling.

d) Define inline function.

e) Write the significance of friend function.

f) What are access specifiers?

g) What is the significance of this pointer?

h) Define pure virtual function.

(8x1½)

UNIT – I

II. Discuss characteristics of object oriented programming methodology taking suitable examples of each feature. (12)

III. Discuss features of C++ programming language. Explain the concept and significance of friend class with suitable program. (12)

IV. Write a note on:-

- a) Virtual Function
- b) Problems with Multiple inheritance

(12)

UNIT – II

V. Compare various types of polymorphism with example program. Also discuss the concept of pure virtual function. (12)

VI. Discuss any two searching algorithms with suitable examples. (12)

VII. What are Template classes and functions? Write a program to add two various types of numbers using Templates. (12)

x-x-x