



Reg. No. :

Name :

II Semester B.Sc. Degree (CCSS – Supple./Improv.)**Examination, May 2015****(Core Course in Physics)****2B02 PHY : INFORMATICS****(2012/13 Admn.)**

Time : 3 Hours

Max. Weightage : 30

SECTION – A(Answer **all**, **each** question carries $\frac{1}{4}$ w.)

1. I) Which of the following waves are used for unguided communication ?

a) Radio wave	b) Micro wave
c) Grand wave	d) Both (a) and (b)
- II) $W_1 - F_1$ is an internet communication without using a

a) modem	b) computer
c) cable	d) all of the above
- III) Which of the following is not a software ?

a) UNIX	b) MS OFFICE
c) WINDOWS	d) None of the above
- IV) _____ object of a class indicates that the real object of the class does not exist.

a) wide	b) mutable
c) null	d) none of the above
2. I) Which of the following return value of the main function signifies successful termination of a C++ program ?

a) -1	b) 0
c) 1	d) None of the above
- II) Which of the following is not a correct C++ comment ?

a) /*comment*/	b) /**comment*/
c) /*xx*\	d) None of the above



- III) The wrapping of data and function into a single unit is called
- abstraction
 - encapsulation
 - polymorphism
 - None of the above
- IV) An over loaded unary operator defined as a member function requires how many values to be passed as function arguments.
- 0
 - 1
 - 2
 - None of the above
- (2×1=2)

SECTION – B

(Six to be answered, **each** question carries 1 w.)

- Briefly explain the future of internet.
 - What are the basics of internet ?
 - How are data and functions organized in an object oriented program ?
 - Explain memory management operators in C++.
 - Why does C++ have type modifiers ?
 - What are objects ?
 - What is a friend function ?
 - What is NICNET ?
- (6×1=6)

SECTION – C

(9 to be answered, **each** question carries 2 w.)

- Discuss the advantage of introducing IT in teaching and learning.
- What do you mean by dynamic binding ? How is it useful in OOP ?
- Write a program to display the following output using a single statement.
Maths = 90, Physics = 70, Chemistry = 69
- With suitable example explain the dynamic initialization of a variable.



- What do you mean by a function prototype ?
 - Illustrate with an example how 'stew' manipulator works.
 - Write a program in C++ to evaluate velocity and acceleration of an SHM.
 - Discuss the benefits of OOP.
 - Write down the general form of a class declaration.
 - Write a program to find the prime numbers from the first 100 integers.
 - Mention the difference in declaring the character array in C and C++.
 - Write a program to evaluate orbital velocity of the planet.
- (9×2= 18)

SECTION – D

(Answer **any one**, **each** question carry 4 w.)

- Compare the execution of the 'while' loop and do while loop in C++.
 - Write a C++ program using while loop to find the sum of integers from 1 to N.
 - What are one dimensional and two dimensional arrays ? Explain the format of declaring array in C++ with suitable example.
- (1×4= 4)