# 78616

## M. Sc. Physics 4th Sem. (New)

## Examination – May, 2014

### COMPUTATIONAL METHODS AND PROGRAMMING - II

### (NEW)

#### Paper : XVII (Spl-II) Opt (ii)

*Time : Three hours ]*        *[ Maximum Marks : 80*

*Before answering the question, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.*

**Note :** Attempt *five* questions in all, selecting *one* question from each Unit. Question No. **1** is *compulsory.*

1. (a) Illustrate the use of :      4

     (i) Conditional operator

     (ii) Go To statement

  (b) Explain the term Inline function.      3

  (c) Differentiate between machine level language and high level language.      4

(d) Differentiate between abstract class and extending class. 4

(e) Write full form of HTML. 1

## UNIT – I

2. (a) Explain various operators and their hierarchy used in C++. 9

(b) Write a C++ program to solve a quadratic equation using switch statement. 7

3. (a) Discuss main features of Unix. 9

(b) Write a C++ program to print the largest of three numbers using if - else statement. 7

## UNIT – II

4. (a) Discuss various methods of parameter passing used in user defined functions. 8

(b) Write short notes on following: 8

   (i) Pointer

   (ii) String

5. (a) Write a note on "Function - subprograms" in C++. 10

(b) Discuss various input and output statements used in C. 6

## UNIT – III

6. (a) Explain the features of object oriented programming. 9

(b) What do you mean by friend function. Write a program to illustrate. 7

7. (a) Differentiate between inheritance and polymorphism. 10

(b) What do you mean virtual class ? Explain. 6

## UNIT – IV

8. (a) Give brief introduction to JAVA. 8

(b) Discuss Tables and Frames used in HTML. 8

9. (a) How would you differentiate between JAVA and C++ ? 8

(b) Describe various HTML Tags. 8