NEW

Part-III 3-Tier

2015

COMPUTER SCIENCE

PAPER—VIIA (SET — 1)

(Honours)

(PRACTICAL)

Full Marks : 50

Time : 3 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Group—A

(C++)

(Marks : 20)

Answer any *one* question. 1×20

1. Write a C++ program to find fibonacci series upto N numbers using recursive function.

2. Write a C++ program to demonstrate constructor overloading.

3. Write and run a C++ program to create class complex number :

   (a) This class will create objects of Computer no.

   (b) Define appropriate constructor for this class.

   (c) Define method to display complex number.

   (d) Overload '+' operator for adding two complex no.

4. Write a C++ to program to swap the data items of two classes using a common friend function.

5. Write a C++ program to print the following design of lines :

```
        A
      A B C
    A B C D E
  A B C D E F G
```

6. Write a C++ program to remove the duplicate elements from an array.

7. Write a C++ program to find out a number from 10 numbers using binary search technique.

8. Write a C++ program to print your name in reverse order.

9. Write a C++ program to store information about five students and arrange them according to their average marks.

10. Write a C++ program to implement complex number addition and multiplication using constructors & member functions.

Group—B

(UNIX)

(Marks : 15)

Answer any *one* question. 1×15

1. Write a shell program to verify whether the current year is leap year or not.

2. Write a program to find all the prime numbers within a given range.

3. Write a shell program to sum the following series :

$$1 - \frac{1}{2} + \frac{1}{3} - \ldots + \frac{1}{n}$$

4. Write a shell program to check whether a number is perfect square or not.

5. Write a shell program to print the non Fibonacci series from 1 to 100.

6. Write a shell program to print the pal prime (palindrom) & prime) nos from 1 to 999.

7. Write a shell program to take N numbers from keyboard and find sum of them.

8. Write a shell program to find the second appearance (position) of a character from a string.

Practical Note Book	:	05
Viva	:	10