

B.C.A. SEM-IV (2014 COURSE) CBCS : WINTER - 2017

SUBJECT: JAVA PROGRAMMING

Day: **Wednesday**

Date: **15/11/2017**

Time: **10.00 AM TO 01.00 PM**

Max. Marks: 100

W-2017-1616

N.B.:

- 1) Attempt any **FOUR** questions from Section –I and any **TWO** questions from Section –II.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer book.

SECTION-I

- Q.1** a) State and describe features of Java. (08)
b) Explain relational and logical operators in Java. (07)
- Q.2** What is use of control structures? Illustrate control structures in Java. (15)
- Q.3** What do you know about garbage collection? Explain how it is done in Java. (15)
- Q.4** What do you know about Abstract class and Interface? Describe when to use which (15)
- Q.5** Explain Exception handling in Java with example. (15)
- Q.6** What is applet? Illustrate applet life cycle with example. (15)
- Q.7** Write short notes on any **TWO** of the following: (15)
- a) Command line arguments
 - b) Access specifiers in Java
 - c) Package

SECTION-II

- Q.8** a) Write a program to read 10 numbers and print sum of numbers divisible by both 2 and 7. (10)
b) Write a Java program to read two numbers (m, n) using command line arguments where m, n and all prime numbers among between them. (10)

- Q.9** a) Write a Java program to print following pattern (10)

```
 *   *   *   *   *
  *   *   *   *
   *   *   *
    *   *
     *
```

- b) Write a Java program to print following pattern (10)

```
      1
     2 3
    4 5 6
   7 8 9 10
 11 12 13 14 14
```

- Q.10** Write a class to represent Bank Account with account details. Such as account holder name, balance, with account number and methods to deposit, withdraw amount and get balance. Also write main method to test it. (20)