

## SUMMER-2018

### UNIT 1

**Q.1 a)** Justify each of the following statements above java:

**i.** Java is operating system independent

**ii.** Java is safe and secure.

**iii.** Java is small and simple. (6)

**b)** Write a Java program to print the square of first 20 odd numbers. (7)

**Q.2 a)** Describe various data types supported in java with example. (7)

**b)** Write 'for', 'do-while' and 'while' statements to compute the following product  $1 * 2 * 3 * \dots * 25$  (6)

### UNIT 2

**Q.3 a)** What is method overloading? Explain with the help of program. (6)

**b)** What is array? Explain types of array. How to declare two dimensional array and how to initialize it? (7)

**Q.4 a)** Explain the difference between class data value and instance data value with an example. (6)

**b)** What is constructor? Write Java application which demonstrate constructor overloading. (7)

### UNIT 3

**Q.5 a)** What is inheritance? Explain multilevel inheritances with example. (7)

**b)** What are packages? How are they created? Illustrate with an example. (7)

**Q.6 a)** What is an interface? Explain with an example. Differentiate it with an abstract class. (7)

**b)** Explain abstract classes with an example. (7)

## UNIT 4

**Q.7 a)** Write a Java program that handles multiple exception. (7)

**b)** List out various methods associated with file object and explain with an example. (6)

**Q.8 a)** Write a Java program to read character stream using file Reader. (6)

**b)** What is exception handling mechanism? Write an application which handles arithmetic and array Index out of Bound Exception. (7)

## UNIT 5

**Q.9 a)** Explain difference between applet and application program. (7)

**b)** Write an applet to draw rectangle, rounded rectangles and fill rectangles inside applet visible area. (6)

**Q.10 a)** Explain graphic class and color class in detail and also with its constructor and methods. (7)

**b)** Write an applet to demonstrate use of getparameter ( ) method to pass parameters to your applet from applet tag in HTML. (6)

## UNIT 6

**Q.11 a)** Explain Delegation model with example. (7)

**b)** Write a simple applet using label, textfield and Button GUI objects, when the user click on button the applet will display the area of triangle. (7)

**Q.12 a)** Explain: (7)

**i.** Event Sources

**ii.** Event Listener