53 (IT 501) JVPR

2019

JAVA PROGRAMMING

Paper : IT 501 (Back)

Full Marks : 100

Time : Three hours

The figures in the margin indicate full marks for the questions.

Answer **any five** questions.

1. (a) What is meant by Object Oriented Programming ? List the constants used in Java. $2+8=10$

   (b) If $x = 9$ and $y = -12$, find the value of the following :

   $x \& y, \ x|y, \ x \wedge y, \ \sim x, \sim y, \ x << 2,$

   $y << 2, x >> 2, y >> 2, \ x >>> 1$

   10

2. (a) Write a program which will read the string and rewrite a string in the alphabetic order. For example, the word STRING should be written as GINRST. 10

(b) Describe the uses of final and super keywords with respect to inheritance. 10

3. (a) What is a package ? How do you design a package ? 5

(b) Explain dynamic method dispatching with example. 5

(c) Write a servlet program to display the current time and date. 10

4. (a) Write a Java program to count the number of characters and number of lines in a file. 10

(b) Can try block be nested inside another try block ? Give a suitable example to illustrate your answer. 10

5. The annual examination results of 50 students in a class is tabulated as follows :

Roll No	Sub-A	Sub-B	Sub-C
....	....	....	....

Write a program to read the data, calculate and display the following :

(i) Average marks obtained by each student.

(ii) Print the roll no. and average marks of the students whose average mark is above 80.

(iii) Print the role no. and average marks of the students whose average mark is below 40. 20

6. (a) What is multitasking ? Is multhreading a form of multitasking ? 5

(b) What is the advantage of having anonymous classes while handling event in Java ? Explain with example. 8

(c) What are the various dialog boxes available in swing and how are they created ? 7

7. *(a)* What is the difference between update( ) and repaint( ) method ? **4**

(b) What do you mean by different parameters of APPLET tag ? **6**

(c) If you create two threads in your program, how many threads actually run ? Explain the complete flow of execution of threads inside a program. **10**