

Java Programing

P. Pages : 2

KNT/KW/16/7358

Time : Three Hours



Max. Marks : 80

- Notes :
1. All questions carry marks as indicated.
 2. Solve Question 1 OR Questions No. 2.
 3. Solve Question 3 OR Questions No. 4.
 4. Solve Question 5 OR Questions No. 6.
 5. Solve Question 7 OR Questions No. 8.
 6. Solve Question 9 OR Questions No. 10.
 7. Solve Question 11 OR Questions No. 12.
 8. Due credit will be given to neatness.
 9. Assume suitable data whenever necessary.

1. a) Explain the following operators used in java with suitable example. **8**
i) Logical operators ii) Bitwise operators.
iii) Relational operators iv) Arithmetic operators.
- b) Explain the following keywords using suitable java code : **6**
i) static ii) final iii) this
- OR**
2. a) Explain the wrapper classes and its significance in java programming. **6**
- b) Explain the following concept with suitable java code **any two.** **8**
i) Command line arguments. ii) Garbage collection. iii) Inner classes.
3. a) Explain the types of constructors used by the vector class. **5**
- b) Write a program, to read the elements of one-dimensional array and sort them using bubble sort. **8**
- OR**
4. a) What is the difference between string and StringBuffer class. And explain the methods valueof() and toString(). **7**
- b) Explain the following methods with suitable java code and discuss the output obtained by them **any two.** **6**
i) toUpper() ii) equalsIgnoreCase() iii) compareTo()
5. a) Define package. Write about the access protection mechanisms used by packages in java. **10**
Create a package, collegeExam which contains a class Student. The student class consists of the methods readMarks(), percentageCal() and displayRank(). Assume suitable data members to make an appropriate use of package collegeExam. And import this package in another java program.
- b) Explain the difference between throw and throws keyword used in exception handling in java. **4**

OR

6. a) Explain the following concepts used in java **any three.** 9
 i) interfaces ii) checked exception
 iii) abstract classes iv) built-in exception
- b) Write a program to create user-defined exception. 5
7. a) What do you mean by multitasking and multithreading ? Draw neatly the life cycle of a thread, explain with suitable java program. 6
- b) Write the two ways of creating threads in java programming. Explain the methods is Alive() and join () and trace the output, when we use these methods in java program. 7
- OR**
8. a) What do you mean by synchronization among the threads. Write a java program using synchronized keyword. 6
- b) Explain the method used for - 7
 i) suspending threads ii) resuming and stoping threads
9. a) Write a java program which creates a directory named as prog123 in current working directory and in this directory create a file named as poem.txt. 6
- b) What do you mean by stream ? Write the hierarchy of stream classes in java and explain the PrintWriter class and any three constructors of PrintWriter class. 7
- OR**
10. a) Explain with suitable java code, following keywords used in java language : 6
 i) transient keyword ii) strictfp keyword iii) native keyword
- b) Explain any two from the given below : 7
 i) customized serialization
 ii) serialization and deserialization process in java.
 iii) instance of operator
 iv) volatile keyword significance in multithreading
11. a) Create a GUI using swing, where perform the addition, division, modulus, subtraction and multiplication of two positive integers & display the result in textfield control. Select the appropriate components to design this GUI. 8
- b) Explain the event handling concept used by swing. Explain the AWT event handling, Foreground events and Background events. 5
- OR**
12. Explain the following java swing components with suitable java segments / code : 13
 i) JButton ii) JTextField
 iii) JCheckBox iv) JComboBox
 v) JRadioButton
