

**Java Programming**

P. Pages : 2

Time : Three Hours



AHK/KW/19/2206

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. Assume suitable data whenever necessary.
  9. Illustrate your answers whenever necessary with the help of neat sketches.

1. a) Explain the following operators used in Java Programming. 8  
i) Arithmetic operators. ii) Relational operators.  
iii) Logical operators. iv) Bitwise operators.
- b) With suitable java program segment explain the keywords static, this & final. 5

**OR**

2. a) What is constructor? Explain different types of constructors with example. 7  
b) What are the significance of wrapper classes in Java programs? Explain java wrapper class with suitable java code. 6
3. a) Write a program in java to read ixj matrix and find 7  
i) The average of each row.  
ii) The average of each column.  
iii) The average of all the ixj entries.  
iv) Max & min element in array.
- b) Differentiate string and string Buffer class? Give its different methods. 6

**OR**

4. a) Write program in java to demonstrate valueOf ( ) and toString ( ) methods. 6  
b) Write a program which reads a string and check whether the entered string is palindrome or not. 7
5. a) Write a java program to understand the steps in the creation of packages. 6  
b) Write different types of inheritance with suitable example. 7

**OR**

6. a) How multiple inheritance is implemented in java, give suitable examples. 4  
 b) Define exception handling. Write program "No match" exception that is thrown when string is not equal to 'java'. 6  
 c) Write a note on "abstract classes". 3
7. a) Explain "Thread Life Cycle" with neat diagram. 6  
 b) How thread priorities are decided? Explain 2 ways of creating thread with suitable example. 7

OR

8. a) Explain the difference between  
 i) isAlive() and join()  
 ii) Sleep() and Suspend() method. 6  
 b) Explain the significance of main thread. What is the flow of a java program when a main thread present in it. 7
9. a) Write a java program to copy the contents of one file named as source.java to destination.txt read the files source.java and destination.txt as command line arguments. 8  
 b) Explain instance of() and volatile modifier in java. 6

OR

10. a) Write a java program that randomly generates 'n' integers and store them in a file. 7  
 b) Differentiate between serialization and Deserialization. 7
11. a) Explain the event handling concept used by swing. Explain the AWT event handling, foreground event and Background events. 8  
 b) Explain different layout managers with suitable example. 6

OR

12. a) Explain the following swing components with suitable code :- 8  
 i) JButton ii) JRadioButton  
 iii) JTextField iv) JCheckBox  
 b) Explain the following with respect to swing package :- 6  
 i) Container. ii) Component.

\*\*\*\*\*