# (Y2K14) (CBCS) (F + R) COMPUTER SCIENCE <br> BCA 504 : Java Programming 

Time : 3 Hours
Instruction : Answer all Sections.
SECTION - A


Max. Marks : 70
I. Answer any ten questions. Each question carries 2 marks.
$(10 \times 2=20)$

1) What are the default values of Boolean and Char primitives data types in Java?
2) Give the general form of switch statement.
3) What is the difference between default constructor and parametrized constructor?
4) What is the difference between static variables and instance variables?
5) What is the use of super keyword?
6) Define JVM.
7) What is the difference between class and interface ?
8) Mention any four thread methods.
9) What is checked exception ? Give an example.
10) Mention the attributes of PARAM tag.
11) What is the use of Java I/O classes?
12) Briefly mention the broad classification of Java stream classes.

## SECTION - B

## II. Answer any five questions.

13) a) Explain the features of Java. ..... 7
b) Explain the difference between Java and C++. ..... 3
14) a) Mention any five Mathematical functions of math class with examples. ..... 5
b) Explain constructor and its types with example. ..... 5
15) a) Demonstrate 'this' keyword with simple Java program. ..... 5
b) Define inheritance. Explain any two types of inheritance with example. ..... 5
16) a) Write a program to sort the given numbers with exception handling concept. ..... 5
b) Explain the process of creating user defined package with an example. ..... 5
17) a) Explain the life cycle of a thread. ..... 5
b) Write the steps involved in creating thread by implementing runnable interface. ..... 5
18) a) Explain user defined exceptions in Java. ..... 5
b) Explain life cycle of an applet with a neat diagram. ..... 5
19) a) Explain any five methods of graphics class with an example for each. ..... 5
b) Write a program to implement keyboard events. ..... 5
20) a) Explain the use of FilelnputStream class and OutputStream class. ..... 5
b) Explain any five, string methods with syntax and example. ..... 5
