

Exam. Code : 107205

Subject Code : 1804

Bachelor of Computer Application (BCA) 5th Semester

JAVA PROGRAMMING LANGUAGE

Paper-IV

Time Allowed—3 Hours] [Maximum Marks—75

Note :— Attempt any **five** questions.

1. Java is secure, robust, and platform independent. Explain the features of Java that make it support this statement. 15
2. Java has two selection statements – if-else-if ladder and the switch statement. Explain the structure of each of them. Give an example to show when it is better to use the switch statement. 10,5
3. What is a method in Java ? How is it defined and called ? Explain the concept of method overloading and overriding with the help of an example. 2,6,7
4. Explain the basic building blocks of the object oriented paradigm. How is this paradigm better than the procedural ? 10,5

5. What is a thread ? How is it different from a process ? Explain the basic constructs to create threads and use them to synchronize asynchronous tasks. 3,2,10
6. Why are exceptions raised ? Explain the Java keywords for catching and handling exceptions. 5,10
7. Which package does contain the methods for handling input/output ? Explain the procedure to read from console characters and strings. 3,12
8. Define an interface for implementing a stack of integers. Use this stack to have two different implementations — one using a fixed sized stack and another using a flexible stack which can grow in size if needed. 15