

Third Semester MCA Degree Examination, June/July 2019

Java Programming

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions, choosing one full question from each module.

Module-1

- 1
 - a. Explain the key attributes of object oriented programming? (08 Marks)
 - b. Explain the parameterized constructor with an example. (08 Marks)

- 2
 - a. What is the use of StringBuffer? Explain StringBuffer class with a suitable example. (08 Marks)
 - b. Write the syntax of for loop, enhanced for loop, while loop, do-while, with suitable example. (08 Marks)

Module-2

- 3
 - a. Explain : (i) Method overloading (ii) Constructor overloading. (08 Marks)
 - b. Briefly explain 'Varargs' with suitable example. (08 Marks)

- 4
 - a. Write short notes on :
 - (i) Abstract class (ii) Final. (08 Marks)
 - b. Define Inheritance. Write a Java program to demonstrate inheritance. (08 Marks)

Module-3

- 5
 - a. Define Interface. Explain how it is implemented in Java with suitable example. (08 Marks)
 - b. What is an Exception? Explain exception handling mechanism with an example. (08 Marks)

- 6
 - a. What are packages in Java? Why is it required package java program? (08 Marks)
 - b. Write the following java program to create package and import it in other program:
 - (i) Create a package called shape
 - (ii) Write a class called Triangle.java in shape package. Triangle.java should calculate the area of a triangle.
 - (iii) Compile and import shape. (08 Marks)

Module-4

- 7
 - a. What is multithreading? Write a Java program to create multiple threads in Java by implementing runnable interface. (08 Marks)
 - b. What is Enumeration? Explain value() and valueOf() methods. (08 Marks)

- 8
 - a. Explain synchronization in multithread programming. (08 Marks)
 - b. Write short notes on : (i) Auto Boxing (ii) Auto unboxing. (08 Marks)

Module-5

- 9 a. Define Applet. Give a complete applet skeleton. (08 Marks)
b. Explain about URL connection class. Give suitable example. (08 Marks)
- 10 a. With an example explain the LinkedList collection class. (08 Marks)
b. What is TCP/IP client socket? Explain the two constructs used to create client sockets. (08 Marks)