16/17MCA32

USN

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.
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