CBCS SCHEME

18MCA21

Second Semester MCA Degree Examination, Jan./Feb. 2021
Programming Using Java

Time: 3 hrs.   Max. Marks: 100

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

Module-1

1 a. Explain key attributes of object oriented programming language. **(10 Marks)**
   b. Explain with an example : (i) Finalizer (ii) This key words. **(10 Marks)**

OR

2 a. What are different types of iteration statement and jump statement? **(10 Marks)**
   b. Explain concept of default constructor and parametrifed constructor with example. **(10 Marks)**

Module-2

3 a. Explain different string methods in Java. **(10 Marks)**
   b. What are shift operators? Explain with example. **(10 Marks)**

OR

4 a. Explain cull-by-value and call-by-reference with examples. **(10 Marks)**
   b. What is method over loading? Explain with example. **(10 Marks)**

Module-3

5 a. Explain how super keyword are used to call super class constructors in Java. **(10 Marks)**
   b. Explain abstract classes with example. **(10 Marks)**

OR

6 a. What is interface? Explain how interfaces are implemented in Java. **(10 Marks)**
   b. What are packages in Java? Explain with example. **(10 Marks)**

Module-4

7 a. What is exception? Explain the exception handling mechanism with example. **(10 Marks)**
   b. Explain how to create custom exception with example. **(10 Marks)**

OR

8 a. Explain threading, multi-threading and what are the ways to create threads. **(10 Marks)**
   b. Write a Java program using synchronized threads which demonstrates producer consumer. **(10 Marks)**

Module-5

9 a. What is enumeration? Explain values ( ) and value of ( ) methods with examples. **(10 Marks)**
   b. Define annotation. Explain any four built in annotations in Java. **(10 Marks)**

OR

10 a. Write a short note on:
       (i)   HTTPURL connection class.
       (ii)   Inet address class. **(10 Marks)**
    b. What are collection classes? Write a Java program to demonstrate utilities of linkedlist class. **(10 Marks)**

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