MCA
(SEM II) THEORY EXAMINATION 2022-23
OBJECT ORIENTED PROGRAMMING

Time: 3 Hours   *Total Marks: 100*

Note: Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1.   **Attempt** *all* **questions in brief.**   **2 x 10 = 20**

   (a) How are objects implemented in Java?
   (b) What are the limitations of static members?
   (c) Write a java program to create a list.
   (d) List out the types of constructors.
   (e) Explain about try-catch with example.
   (f) What is the advantage of static class in Java?
   (g) List out various Layout Managers used in Java.
   (h) Discuss Generic programming in java
   (i) Define ServerSocket in java.
   (j) Compare thread based and process based multitasking in java

SECTION B

2.   **Attempt any** *three* **of the following:**   **10x3=30**

   (a) Compare Java Runtime Environment and Java Virtual Machine.
   (b) Distinguish between Procedure Objected Programming and Object Oriented Programming.
   (c) What is meant by Stream and what are the types of Streams and classes of the Streams?

   (d) Write short note on following components:
      (i)   Label
      (ii) TextField
      (iii) TextArea
      (iv) List
      (v)   Choice
   (e) Discuss Synchronizing threads and Daemon Threads.

SECTION C

3.   **Attempt any** *one* **part of the following:**   **10x1=10**

   (a) Explain in detail about Array with syntax and example.
   (b) Describe in detail about the types of inheritance in java.

4.   **Attempt any** *one* **part of the following:**   **10x1=10**

   (a) What do you understand by Layout manager? Illustrate three type of layout available in Java with the help of suitable syntax.
   (b) Explain event handling model in Java with proper example.

5. **Attempt any *one* part of the following:** 10x1=10

   (a) What is Open Data Base Connectivity (JDBC)? How it is used in java data base connectivity.

   (b) Write short notes on the following:
     (i) Toggle buttons
     (ii) Combo box
     (iii) Tabbed Panes
     (iv) Scroll Panes

6. **Attempt any *one* part of the following:** 10x1=10

   (a) What do you mean by Constructor? How many type of constructor availed in java? Explain with suitable examples.

   (b) What do you mean by generics in java? Explain advantage and disadvantage of genetic programming in java.

7. **Attempt any *one* part of the following:** 10x1=10

   (a) Which is the alternative approach to implement multiple inheritances in Java? Explain, with an example?

   (b) What do you mean by Exception? What is checked and unchecked exception? Explain Exception chaining.