



# MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(AN AUTONOMOUS INSTITUTION)

(Approved by AICTE, New Delhi &amp; Affiliated to JNTUH, Hyderabad)

Accredited by NBA and NAAC with 'A' Grade &amp; Recognized Under Section 2(f) &amp; 12(B) of the UGC act, 1956

II B.Tech II Sem Supply End Examination, July 2022

## JAVA Programming (CSE & IT)

**Time: 3 Hours.****Max. Marks: 70**

Note: 1. Question paper consists: Part-A and Part-B.

2. In Part - A, answer all questions which carries 20 marks.

3. In Part - B, answer any one question from each unit.

Each question carries 10 marks and may have a, b as sub questions.

**PART- A****(10\*2 Marks = 20 Marks)**

- |       |   |    |     |     |
|-------|---|----|-----|-----|
| 1. a) | Define an object and write the syntax of creating an object.                  | 2M | CO1 | BL1 |
| b)    | What is meant by Inheritance and Polymorphism? Differentiate with an example. | 2M | CO1 | BL2 |
| c)    | Explain the uses of java packages.  | 2M | CO2 | BL4 |
| d)    | What are the types of I/O streams? Explain in detail.                         | 2M | CO2 | BL4 |
| e)    | How are the exceptions handled in java? Explain its mechanism.                | 2M | CO3 | BL4 |
| f)    | What is multitasking? How it is different from multithreading?                | 2M | CO3 | BL1 |
| g)    | What are the main differences between collection and array?                   | 2M | CO4 | BL2 |
| h)    | Explain various interfaces used in collection framework.                      | 2M | CO4 | BL4 |
| i)    | How to create a GUI in java swing?  | 2M | CO5 | BL1 |
| j)    | Define Adapter class.   | 2M | CO5 | BL1 |

**PART- B****(10\*5 Marks = 50 Marks)**

- |           |    |   |     |     |     |
|-----------|----|---|-----|-----|-----|
| 2         | a) | Explain different types of Programming Paradigms.                                 | 5M  | CO1 | BL4 |
|           | b) | Explain the features of java.   | 5M  | CO1 | BL4 |
| <b>OR</b> |    |   |     |     |     |
| 3         |    | Compare class and nested class with help of an program. List the java buzz words. | 10M | CO1 | BL2 |
| <b>OR</b> |    |   |     |     |     |
| 4         | a) | Explain the process of defining and creating a package with suitable examples     | 5M  | CO2 | BL4 |
|           | b) | Discuss about CLASSPATH environment variables.                                    | 5M  | CO2 | BL2 |

**OR**

- 5 What is an interface? What are the similarities between interfaces and classes? Explain with help of a program and mention few advantages of interfaces. 10M C02 BL4
- 6 a) Explain try, catch, finally with suitable example programs. 5M C03 BL4  
b) Differentiate between thread-based multitasking and process-based multitasking. 5M C03 BL2
- OR**
- 7 What is multithreading? Explain how multithreading in single processor system is different from multithreading in multiprocessor system? 10M C03 BL4
- 8 a) Discuss the differences between HashSet and TreeSet with example. 5M C04 BL2  
b) Explain the Bit Set and Calendar classes in detail. 5M C04 BL4
- OR**
- 9 What is Java Collections Framework? List out some benefits of Collections framework and explain in detail. 10M C04 BL1
- 10 a) With a neat sketch, explain the Swing architecture. 5M C05 BL4  
b) What is an applet? Explain the life cycle of Applet with a neat sketch. 5M C05 BL4
- OR**
- 11 What is an Layout manager? Explain different types of Layout managers with example of each layout manager. 10M C05 BL4

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