

Code No: 157EU

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech IV Year I Semester Examinations, January/February - 2023****JAVA PROGRAMMING  
(Common to CE, ME, ECE)****Time: 3 Hours****Max.Marks:75**

- Note:** i) Question paper consists of Part A, Part B.  
ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.  
iii) 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****(25 Marks)**

- 1.a) What is type casting? [2]
- b) Explain about “this” keyword. [3]
- c) What is an abstract class? [2]
- d) What are benefits of inheritance? [3]
- e) How do you create your own exception in java? [2]
- f) How exception handling is done through throw keyword. [3]
- g) What is layout manager? [2]
- h) Explain AWT component – button. [3]
- i) What are thread groups? [2]
- j) Explain thread life cycle. [3]

**PART – B****(50 Marks)**

2. Explain various parameter passing techniques in java. Explain with examples. [10]  
**OR**
3. Distinguish between nested and inner classes. [10]
4. What is the difference between abstract class and interface? [10]  
**OR**
5. Discuss the accessibility of a class in another package when it is defined as private, public, protected or default with suitable examples. [10]
6. Explain how exception handling is done through try and catch block. [10]  
**OR**
7. Write a java program to find whether a given string is palindrome or not. [10]
8. Explain flow and card layout managers in detail. [10]  
**OR**
9. Explain AWT canvas and scrollbar components with examples. [10]
10. What are different types of applets? Explain parameter passing to applets. [10]  
**OR**
11. Explain is Alive() and join() methods of thread class with suitable example. [10]