

**R18**

**Code No: 157EU**

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**B. Tech IV Year I Semester Examinations, February/March-2022**

**JAVA PROGRAMMING**

**(Electrical and Electronics Engineering)**

**Time: 3 Hours**

**Max. Marks: 75**

**Answer any Five Questions  
All Questions Carry Equal Marks**

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- 1.a) Explain the features of object oriented programming.
- b) Write an example program to describe the concept of constructors. [7+8]
- 2.a) Compare procedural languages with object oriented languages.
- b) Write a java program that implements binary search operation. [7+8]
- 3.a) Describe the usage of 'super' keyword with suitable program segments.
- b) Can inheritance be applicable to interfaces? Justify your answer with suitable java program. [8+7]
- 4.a) Explain the process of creating and importing a package with suitable examples.
- b) Write a java program to implement multilevel inheritance. [8+7]
- 5.a) Define thread. Explain how threads can be created by extending Thread class.
- b) Write a java program to implement producer-consumer problem using the concept of inter thread communication. [7+8]
- 6.a) List and explain the different built in exceptions with examples for each.
- b) Explain the concept of exceptions in java with example. [8+7]
- 7.a) What are events in java? Write a program for keyboard event.
- b) Discuss about the significance of GridLayout manager in java using an example. [7+8]
- 8.a) Explain different stages in the life cycle of an applet.
- b) Why Multithreading is used? Explain briefly about Multithreading with an example. [8+7]

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