Code No: 157EU

**R18**

**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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