



**R19**

**Code No: 862AD**

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**MCA II Semester Examinations, July/August - 2021**

**OBJECT ORIENTED PROGRAMMING**

**Time: 3 Hours**

**Max.Marks:75**

**Answer any five questions  
All questions carry equal marks**

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- 1.a) Discuss the need of object oriented programming paradigm.  
b) List the data types supported by Java and give their size. [8+7]
- 2.a) How to perform constructor overloading in Java? Explain with an example program.  
b) Write a Java program to count number of words in a given sentence. [8+7]
- 3.a) Explain the benefits and costs of inheritance.  
b) Demonstrate package creation and accessing with a suitable program. [8+7]
- 4.a) How to implement multiple inheritance in Java? Explain with a program.  
b) What are the two ways of using 'super' keyword?  
c) Differentiate between an interface and an abstract class. [5+5+5]
- 5.a) What is an exception? Discuss exception handling in Java.  
b) How to create a user defined exception? Illustrate handling such an exception.  
c) Compare String and String Buffer class. [5+5+5]
- 6.a) What are the sources for action events? What methods of the Action Listener interface have to be over written to handle action events? Explain with an example.  
b) Write a program to handle mouse events. [8+7]
- 7.a) Describe model-view-controller architecture.  
b) Write a program to create a JFrame for student registration to a technical event using swing components. [8+7]
- 8.a) Explain life cycle of an applet.  
b) How to execute an applet?  
c) Write a program to create multiple threads using suitable methods. [5+5+5]

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