

**R17****Code No: 843AE****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****MCA III Semester Examinations, December - 2019****JAVA PROGRAMMING****Time: 3hrs****Max.Marks:75****Note:** This question contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART - A**5 × 5 Marks = 25**

- 1.a) Explain various iterative statements in Java with examples. [5]
- b) Define CLASSPATH. Discuss the role of class path in packages. [5]
- c) What is Multi threading? Differentiate between the multi tasking and multi threading. [5]
- d) Explain mouse event class with an example. [5]
- e) Compare and contrast Swing and AWT in Java. [5]

PART - B**5 × 10 Marks =50**

- 2.a) Explain principles of object oriented programming languages.
 - b) What are constructor, destructor? How to implement constructors in Java? [5+5]
- OR**
- 3.a) Explain how to implement Dynamic method dispatch in Java.
 - b) What is Inner class? What are its Advantages? How to implement Inner class in Java? [5+5]
- 4.a) What is inheritance? Describe various forms of inheritance in Java? Give an example Java code for each case.
 - b) What is package? How to implement user defined packages in Java. [5+5]
- OR**
- 5.a) What is interface? How to implement interface in Java.
 - b) List out various classes in Java.io package and explain them clearly. [5+5]
- 6.a) How to implement multithreading in Java.
 - b) How to implement user defined exceptions in Java with example. [5+5]
- OR**
- 7.a) Explain how to implement thread priorities in Java with examples.
 - b) Explain multiple catch statement with example. [5+5]

- 8.a) Discuss about Border and grid Layout managers in Java
b) What is Listener Interfaces? Illustrate Mouse motion listener interfaces with suitable Java Program. [5+5]

OR

- 9.a) What is AWT? Explain in detail about hierarchy for AWT.
b) Explain about Events, Event sources event classes. [5+5]
- 10.a) What is swing? Explain various swing components.
b) Develop an applet that receives principle, rate of interest, number of years from the key board and display the simple interest on the screen. [5+5]

OR

- 11.a) Write Java program that works as a calculator using in Java swings.
b) Describe parameters passing to an applet with a program. [5+5]

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