

# END TERM EXAMINATION

THIRD SEMESTER [MCA] DECEMBER 2013

Paper Code: MCA 205

Subject: Java Programming  
(Batch 2010 onwards)

Time: 3 Hours

**Note: Attempts any five questions, including Q.no1 is compulsory. Select one question from each unit.**

Q.1 Attempt all-

10 x 2=20

- a) Differentiate String and String Buffer.
- b) What is 'out' in System.out.println ().
- c) Give two major requirements of event listeners.
- d) What is dynamic method dispatch?
- e) What are Wrapper Classes?
- f) What is applet in java?
- g) Define adapter Classes
- h) Give the uses of final keyword.
- i) What is numeric promotion?
- j) What does the following statement display-  
String s=" six, "+3+3;  
System.out.println(s);

## UNIT-I

Q.2

- a) What is JVM? Explain the architecture of JVM. 5
- b) What is Interface? Write a program in java to explain the concept of multiple inheritances by using interface. 5

OR

Q.3

- a) Discuss access protection in java classes and packages. 5
- b) Write a program in java to search a particular String stored in an array.(The elements should be entered in array through keyboard). 5

## UNIT-II

Q.4

- a) What do you mean multithreading? Explain suspending, resuming and stopping threads in java?
- b) What are different keywords in java Exception? Explain briefly, how they work? Give their examples. 2 x 5=10

OR

Q.5

- a) What is difference between process-based and thread-based multitasking? Describe thread priorities and synchronization. 5
- b) Describe the functions of File class in java? 5

### UNIT-III

Q.6

- a) What are the different models of Event-Handling in java? Write a program to display the sum of two numbers of two textboxes within third textbox on clicking ADD button on the screen. 5
- b) Explain JDBC Application architecture and steps for obtaining a connection with database. 5

OR

Q.7

- a) Explain Collection Interface and give examples of Collection Classes. 5
- b) Explain various JDBC models. 5

### UNIT-IV

Q.8

- a) What is RMI? Explain steps involved in developing an RMI object. 5
- b) Write short notes on (1) Comparisons of Swing with AWT (2) JFC. 5

OR

Q.9

- a) What is java bean? Explain its architecture and packing beans-the manifest and the .jar. 5
- b) What is Swing? Explain the advance controls of Swings. 5

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