

END TERM EXAMINATION
FOURTH SEMESTER [MCA] MAY –JUNE 2009

Paper Code: MCA-206
Paper Id-44206

Subject: Java Programming & Website design
(Batch: 2004-2007)

Time : 3 Hours

Maximum Marks : 60

Note: Q1 is compulsory. Attempt one question from each unit.

Section A

Q1. Answer **any 10** Questions

2*10=20

- a) Discuss the need for inner classes?
- b) Who makes compiled JAVA programs platform independent?
- c) How does JAVA solve the problem of memory leakage?
- d) Discuss Java access specifiers.
- e) What is JAVA Bean? What are it's advantages?
- f) Discuss the significance of PATH and CLASSPATH.
- g) What is PushBackInputStream? Give an Example.
- h) What's the difference between the methods sleep() and wait()
- i) Differentiate between server side and client side scripting.
- j) What are interfaces?
- k) Discus the requirements of each keyword in the following Java program statement.

“public static void main(String ar[])”

Section B

UNIT-I

Q2. a) Differentiate between String and StringBuffer. Discuss with example where we should use what. [5]

b) What is class variable? [2]

c) Drive two classes from the class Amount and show is –a relationship redefine withdraw function and set overdraft limit for current account. [3]

Q3. a) What are similarities and differences between an Abstract class and interface? Explain with an example. [5]

b) Write a program to implement a class, Employee, with data members (lastname,firstname, hourlywages,yearswithcompnay.). Take the data Of 100 employees in an array. Write a code segment that will output of the first name, last name, and hourly wage of each employee who has been with the company 20 years or more.

Employee[] employeeData = new Employee[100] [5]

UNIT-II

Q4. a) What do understand by Synchronization? Discuss with an example. [4]

b) Write a program to maintain file using DataInputStream/DataOutputStream object and implement menu driven programming with the following options. [6]

- i) Searching of Object using key values
- ii) Modification

- iii) Append
- Q5. a) What are different types of exceptions in Java? Explain briefly how they work? Give their example. [5]
- b) Create a client server application to implement a dictionary in which client will send a word to the server and server provides the meaning of word to the client. [5]

UNIT-III

- Q6. a) Write code snippets for **any Three**: [2*3 =6]
- i) Check whether right mouse button was pressed when a **MouseEvent** occurred.
 - ii) Check whether CTRL key was down when a **KeyEvent** occurred.
 - iii) Show a particular card when the layout manager is **CardLayout**
 - iv) Check whether the source of an action event was a **Button** or a **List**
 - v) Check whether the source of a text event was the **TextField** `tfName` or `tfPassword`.
 - vi) Set the password character in a textfield to “#”
- b) Explain lifecycle of a servlet. [4]
- Q.7. a) What are the Applet's Life Cycle methods? Explain them? [5]
- b) Write short notes on Layout managers. [5]

UNIT-IV

- Q8. a) Differentiate the following [1.5* 2 =3]
- i) JAVA and JavaScript
 - ii) Get and post method
- b) Discuss the various ASP built in Objects [7]
- Q.9. a) Discuss any four services provided by internet [4]
- b) Write the HTML code to generate a Web page in the format given below: [6]
- i) Background color of the page should be “Cyan”
 - ii) Text style should be Comic Sans MS and color should be Red.
 - iii) Picture used in the page is the file “activity.jpg” located in the subfolder pictures.
 - iv) Table should have a border of color blue.
 - v) Use the concept of nested lists for creating the list given in the web page with specified bullets.
 - vi) Page linked to indoor activities as “in.html” and outdoor activities as “out.html”