Roll No.....

## **Total No. of Pages: 02**

## MCA,SEM 3<sup>RD</sup> MAY –2014 JAVA PROGRAMMING Paper Code (MCA-304) Paper Id. [B1160]

Time:3hrs Max Marks: 100

Note:-Attempt five questions in all.Select one question each from Section(A to D). Section E (Question no.9) is Compulsory. Each Question is of 20 Marks.

		G4* A		
Q1:	(a) (b)	Section A  What is Method Overloading? Write a Program in Java to illustrate the concept of Method Overloading.  Broadly explain the concept of Wrapper Classes in Java with a program.	(10) (10)	
Q2:	(a) (b)	What is Constructors? Discuss the use of Constructors in Java. Compare and contrast Abstract Classes and Final Classes.	(10) (10)	
Section B				
Q3:	(a) (b)	What is Exception? How Exceptions can be created and handled in Java. Explain with suitable examples.  Broadly discuss the concept of Multithreading in Java with suitable examples.	(10) (10)	
Q4:	(a) (b)	What is Interface? How Multiple Inheritance can be achieved using Interface. Explain with suitable example.  Define Package? Broadly explain the utilization of Packages in Java with suitable examples.	(10) (10)	
		Section C		
Q5 :	(a) (b)	What is a Swing? Briefly explain the concept and role of Swings with a program in Java.  Broadly explain the concept of JDBC with suitable examples.	(10) (10)	
Q6:	(a) (b)	With the help of a Diagram discuss the different stages in the life cycle of an applet. Distinguish between init() and start() method. What is an Applet? Explain different types of applets. Compare and Contrast applets and application programs.	(10) (10)	
Section D				
Q7:	(a) (b)	What is Socket? Explain its use in java with suitable examples. What is difference between Servlet and Applet? Explain different types of servlets with suitable examples.	(10) (10)	
Q8:	(a) (b)	What is JSP? Explain the concept of JSP with suitable examples. What is the difference between TCP and UDP Sockets?	(10) (10)	

## Section E

## (Compulsory Question)

Q9:	Write short notes on following with help of example/diagram if needed:	
(a)	Structure of Java Program	(2
(b)	Autoboxing and Unboxing	(2
(c)	User defined Exceptions	(2
· (d)	Scanner class	(2
(e)	String Tokenizer	(2
(f)	Finalize() method	(2
(g)	Servlet Life Cycle	(2
(h)	Enumerated data type	(2
(i)	doGET method	(2
(j)	Pop up menus	(2