

Registration no:

--	--	--	--	--	--	--	--	--	--

Total Number of Pages: 02

MCC-401

**4<sup>th</sup> Semester Regular/Back Examination – 2016**

**PROGRAMMING WITH JAVA**

**Branch : MCA**

**Time: 3 Hours**

**Max marks: 70**

**Q Code : MCC 401**

**Answer Question No.1 which is compulsory and any five from the rest.  
The figures in the right hand margin indicate marks.**

- Q1 Answer the following questions (2 x 10)
- What is signature of a method? How it is written in java?
  - Assume double [ ] [ ] x = new double [4][5], what are x.length and x[2].length?
  - Suppose s1 and s2 are two strings. What is the result of the following code?  
s1.equals(s2) == s2.equals(s1)
  - What are the two ways of overriding an method?
  - Give two examples of heavy weight components?
  - What should be the code to draw a circle with radius 20 centered at (50, 50) given a Graphics object g?
  - Differentiate between abstract class and abstract method?
  - What exception type does the following program throw?  
public class Test {  
public static void main(String[] args) {  
System.out.println(1 / 0);  
}down the statement used for  
}
  - What will happen if the an applet does not contain init() method?
  - Write down the statement used by the server which listens for a connection request from a client
- Q2 Differentiate between method overloading and method overriding with an example? (10)
- Q3 Define inheritance? What are the types of inheritance supported by Java, explain with neat diagrams? (10)
- Q4 a) Define a package? Create a package with the name power that can be used to calculate the power of a number? (5)  
b) How thread priorities are set, explain with an example? (5)
- Q5 a) Write down a java applet to display the message "My first applet" on a browser? What is the use of applet viewer? (5)

b) Discuss the Java error handling mechanism? What is the difference between **unchecked** exceptions and **checked** exceptions? (5)

Q6 a) What is the difference between synchronized method and synchronized block, explain with an example? (5)

b) What is a socket? How do you facilitate inter process communication in Java? (5)

Q7 a) Discuss the major differences between shallow cloning and deep cloning of objects? (5)

b) Write down a java program to create a Frame window in an applet? (5)

Q8 Write Short notes (Any Two) (5 x 2)

- a) Java Collection Frame work
- b) Layout Managers
- c) Remote Method Invocation(RMI)
- d) JDBC