

08086

MCA (Revised)

Term-End Examination

December, 2010

**MCS-024 : OBJECT ORIENTED
TECHNOLOGIES AND JAVA
PROGRAMMING**

Time : 3 hours

Maximum Marks : 100

Note : Question. No. 1 is compulsory. Attempt any three questions from the rest.

1. (a) Write a Java program to read the contents of binary file as integers and print out their values on the standard output. 10
- (b) What are anonymous classes? Explain with a code fragment. 5
- (c) What is the purpose of serialization of an object? How does the volatile modifier to a data type affect serialization? 5
- (d) Justify "Java is a secure" and "architectural neutral" Language. 5
- (e) Write a program to generate a fibonaaci series. 5
- (f) What is a synchronized block? 5
- (g) What is the difference between the notify () and notify All () methods? 5

2. (a) Explain the purpose of Inet Address class and list three of its methods. 5
- (b) Explain the difference between (a & b) and (a & & b). 5
where a and b are logical expressions.
- (c) Explain with an example the use of the ternary operator. 5
- (d) Java is architecture neutral, secure and distributed language. Justify. 5
3. (a) Develop an applet to display a solid circle that fits perfectly inside the outline of a square. 10
- (b) What is the difference between a process and a thread ? Also mention any three methods of thread class and describe briefly. 8
- (c) What is grid layout ? 2
4. (a) Write a Java applet to present pull down list of the seven colours (violet, indigo, blue, green, yellow, orange red) of a rainbow and allow the user to select one of the colours. Print out the index number of the selected choice. 10
- (b) What are the principles of event delegation model ? What are the sources of event and event listener interface ? 7
- (c) Explain briefly the concept of RMI. 3

5. (a) Write a Java program that draws a line, a triangle or a circle depending on whether 2, 3 or 1 point parameters are given to it : 8
Line between the two points
Triangle joining the three points
Circle of default radius at that point
- (b) What are checked and unchecked exceptions ? Explain with example. 7
- (c) What is wrong with the following program fragment ? Make the needed changes to correct it. 5

```
double d ;  
d =4.75 ;  
switch (d)  
{  
case 0 :  
case 1 :  
case 2 : { Println ("small") ;  
          break } ;  
case 3 :  
case 4 :  
case 5 : { println ("medium") ;  
          break } ;  
default :  
          println ("large") ;  
}
```