

MCA (Revised)**Term-End Examination****June, 2009****MCS-024 : OBJECT ORIENTED
TECHNOLOGIES AND JAVA
PROGRAMMING***Time : 3 hours**Maximum Marks : 100*

Note : Q. No. 1 is *compulsory*. Attempt *any three* question from the rest.

1. (a) What are the major characteristics of the following : 8
 - (i) procedure oriented approach.
 - (ii) object oriented approach.
- (b) compare and contrast abstraction and encapsulation techniques ? Also, give an example for comparison. 4
- (c) Write steps to create a java applet displaying "Global Warming". 8
- (d) Write the description, use and operations used for "Right Shift" and "Left Shift". 6
- (e) Differentiate between "Final", "Finally" and "Finalize" statements. 6
- (f) What is RMI ? How can you create stub & skeleton ? Write the steps involved. 8

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| 2. | (a) | Describe any five constructors used to create string objects and any five methods used for handling string objects. | 10 |
| | (b) | Describe the "java.io" hierarchy and classify the input stream class. | 7 |
| | (c) | Write the difference between throw and throws. | 3 |
| 3. | (a) | What is listener ? Write a program to implement mouse motion listener. | 10 |
| | (b) | Write a java program to show inter thread communication. | 10 |
| 4. | (a) | Discuss Layout and Layout Manager along five classes in java packages which implement it. | 10 |
| | (b) | Explain the significance of CONTAINER for Java GUI program. | 5 |
| | (c) | Write a program to show how a class implements two interfaces. | 5 |
| 5. | (a) | Write programs to send and receive UDP datagrams. (Make separate sender and receiver program) | 10 |
| | (b) | Explain the life cycle of a servlet along with program which creates a simple servlet generating HTML to write "Welcome to IGNOU" ? | 10 |

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