

**MCA (Revised) / BCA (Revised)**

**Term-End Examination**

**December, 2018**

08553

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

*Time : 3 hours*

*Maximum Marks : 100*

*(Weightage : 75%)*

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

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1. (a) What do you understand by 'this' keyword ?  
Explain its usage with an example. 5
- (b) What is an event in Java ? Describe  
different components of an event. 5
- (c) What is an interface ? Discuss the utility of  
interface with suitable example. 5
- (d) What are cookies ? Discuss the role of  
cookies in session tracking. 5
- (e) Compare AWT and Swing components. 5
- (f) Write a Java program, to find factorial of a  
given number. 5

- (g) What is a layout manager ? Explain Border layout with an example. 5
- (h) Explain the Java RMI architecture with the help of a diagram. 5
2. (a) Write a Java program that reads the content of a text file and counts the number of white spaces, number of characters, number of words and number of full stops in the content. Support your code with comments, to describe your logic. 10
- (b) What is multithreading ? Explain the steps for creating thread in Java. Also explain the predefined thread priorities in Java. 10
3. (a) What are class and objects ? Explain how an object is created in Java ? Also explain the role of constructor in Java using Java code. 10
- (b) What is Polymorphism ? Explain the difference between method overloading and method overriding with the help of example. 10
4. (a) Explain the life cycle of Applet. List the methods involved in it. 10
- (b) Write a Java program which takes two  $3 \times 3$  matrices as input and finds the sum of the two matrices. Define constructor for initialization of matrix objects. 10

5. Write short notes on the following (Give example for each) : 4×5=20

(a) Message Passing

(b) Java Beans

(c) Strings in Java

(d) Package

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