

MCA (Revised) / BCA (Revised)

Term-End Examination

June, 2018

07005

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

Time : 3 hours

Maximum Marks : 100

(Weightage 75%)

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

1. (a) What is method overloading ? Explain with suitable example. 5
- (b) What is an abstract class ? How is it used to implement polymorphism in Java ? Give suitable example in support of your answer. 7
- (c) What is JVM ? Explain advantages of JVM. 3
- (d) Differentiate between "Final", "Finally" and "Finalize" statements. 6
- (e) Compare throw statement in Java with throws statement. 4

- (f) Explain container class in Java. Give its significance for Java GUI programming. 5
- (g) What is public access specifier ? How is it different from private access specifier ? Explain with example. 5
- (h) What is an applet ? Explain various ways to execute an applet. 5
2. (a) What is servlet life cycle ? Explain GET and POST methods in servlet programming. 10
- (b) What is import ? Explain the need of importing a package in Java. 5
- (c) What is a classpath ? Discuss the utility of classpath with suitable example. 5
3. (a) What is inheritance ? How is inheritance related to interface ? Explain, how multiple inheritance can be implemented using interface in Java. Give suitable example. 10
- (b) Write a Java program to create a Teacher class and derive Professor/Associate_Professor/Assistant_Professor class from Teacher class. Define appropriate constructor for all the classes. Also define a method to display information of Teacher. Make necessary assumptions as required. 10

4. (a) What are the features of Object Oriented Programming ? Explain encapsulation and its advantages, with an example. 6
- (b) How is String class different from StringBuffer class ? Write a program in Java to find the length of a given string. 7
- (c) Write a program in Java, to copy the text content of one file into another file. 7
5. (a) Explain each component of the statement "public static void main (string args [])". 6
- (b) What is an event in Java ? How does Java handle events ? Write a program in Java, to capture any event generated by a keyboard. 7
- (c) What is exception in Java ? What are the basic causes of occurrence of exception ? Write a program in Java, to exhibit the concept of exception handling. Support your program with suitable comments. 7
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