

MCA (Revised) / BCA (Revised)

Term-End Examination

June, 2021

**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.*

1. (a) Compare Object Oriented and Procedure Oriented approaches. Give salient features of both. 5
- (b) What is Dynamic Binding ? Explain the advantage of dynamic binding. 5
- (c) Explain Function Overloading with the help of suitable example. 5
- (d) Explain why the main method in Java is always static. 5

- (e) What is an Interface ? Write a program to show how a class implements two interfaces. 5
 - (f) What is Object Serialization ? Briefly discuss the working of Object Serialization. 5
 - (g) Compare StringBuffer Object with String Object. When should StringBuffer Object be preferred over String Object ? 5
 - (h) What is Stream Tokenizer ? Discuss with suitable example. 5
- 2.**
- (a) Discuss the life cycle of applet, with the help of a suitable block diagram. 5
 - (b) What is a Stream Socket ? How is it different from Datagram Socket ? 5
 - (c) Briefly discuss the different kinds of drivers used in JDBC. 5
 - (d) How do Servlets differ from Applets ? Briefly discuss the Servlet Life Cycle. 5
- 3.**
- (a) What is RMI ? Briefly discuss the RMI object hierarchy. Discuss how distributed applications are created using RMI. 10
 - (b) Write a JAVA program that overloads the function 'SUM' that computes the sum of two integers and the sum of two float values. 5
 - (c) Compare doGet() and doPost() method. 5

4. (a) What is a Literal ? How many types of literals are there in Java ? 5
- (b) Briefly discuss the term Garbage Collection. Give advantages and disadvantages of Garbage Collection. 5
- (c) What are uses of final keyword in Java ? 5
- (d) Explain how threads are created by implementing Runnable Interface. What is thread priority ? 5
5. Write short notes on the following : 4×5=20
- (a) Transient and Volatile Modifiers
- (b) Random Access File and its Methods
- (c) TCP/IP Sockets
- (d) Multidimensional Array in JAVA
-