

Roll No.

3231

**B. Tech. (CSE) 5th Semester
Examination – February, 2022**

PROGRAMMING IN JAVA

Paper : PCC-CSE-309-C

Time : Three hours]

[Maximum Marks : 75

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt five questions in all, selecting **one** question from each Unit. Question No. 1 is **compulsory**. All questions carry equal marks.

1. (a) What is a JAR file? 2.5 × 6 = 15
- (b) Write a short note on explicit class loading in java.
- (c) Briefly explain the uses of 'throw' and 'throws' clauses of exception handling?
- (d) What is the advantage of property file?
- (e) Briefly explain the role of equals and hash code methods.
- (f) What are unchecked exceptions in Java.

UNIT - I

2. (a) What is JVM ? Explain the various operations performed by JVM. 7
- (b) Explain the Java Security Architecture. 8
3. (a) Explain the various characteristics of JAVA language. 8
- (b) Explain the sandbox security model. 7

UNIT - II

4. (a) What is anonymous inner class ? Explain the types of anonymous inner classes. 8
- (b) What is Polymorphism ? Explain runtime polymorphism in Java by writing a suitable code. 7
5. (a) Explain the Constructor chaining with the help of example. What are the rules and needs of constructor chaining ? 8
- (b) What is wrapper class ? What are the uses of wrapper classes in Java ? 7

UNIT - III

6. (a) Describe the need of thread synchronization. How is it achieved in Java programming ? Explain with a suitable program. 10
- (b) What are various advantages of using Package in Java ? 5

3231 - (P-3)(Q-9)(22) (2)

7. (a) What is user defined Exception. Write a program to create a user defined exception in Java. 7
- (b) What is the significance of layout managers ? Discuss about various layout managers. 8

UNIT - IV

8. (a) What is Framework ? What are the advantages of Collection Framework ? 7
- (b) What is Java reflection API ? Where it is used. Write the advantages and disadvantages of using reflection. 8
9. (a) What is JDBC ? Explain the steps for connectivity between Java program and database. 10
- (b) Write a note on list in Java collection. 5

3231 - (P-3)(Q-9)(22) (3)