

**SECTION – D**

8. (a) What is Callable statement in Java ? How we can use Callable Statement in Java to call Stored Procedure ? 10
- (b) Explain any *five* Java features briefly. 5
9. (a) Which collection classes are thread-safe in Java ? 7
- (b) Explain properties class in Java. Write a program of properties class to get information from the properties file. 8

Roll No. ....

**3231**

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

**PROGRAMMING IN JAVA**

Paper : PCC-CSE-309-G

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 Section. Question No. 1 is *compulsory*

1. (a) Briefly explain the difference between JVM, JRE and JDK.
- (b) Explain reference variable in Java with its syntax.
- (c) List explicit class loading in Java.
- (d) What are checked exceptions in JAVA ?

- (e) What is importance of wait, notify and notify all methods in java ?
- (f) Explain any *three* differences between enumeration and iteration in java.  $2.5 \times 6 = 15$

### SECTION – A

2. (a) What is Java Naming Convention ? What are the advantages of naming conventions in Java ? 7
- (b) Write a detailed note on object-oriented programming structure. 8
3. Explain the following : 5 + 5 + 5
- (a) Type casting in JAVA.
- (b) Client-side Programming.
- (c) Sandbox security model.

### SECTION – B

4. (a) Define an Applet. How is an Applet different from an application ? Describe the lifecycle of an applet. 10

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- (b) What is wrapper class ? What are the uses of wrapper classes in java ? 5

5. (a) Explain the Constructor chaining with the help of example. What are the rules and needs of constructor chaining ? 8
- (b) Explain method overriding with a suitable example program. 7

### SECTION – C

6. (a) How to handle multiple catch blocks for a nested try block ? Explain with an example. 7.5
- (b) What is the significance of layout managers ? Discuss about various layout managers. 7.5

7. (a) What is user defined exception ? Write a program to create a user defined exception in java. 7
- (b) What is inheritance ? Write a program to show the private inheritance in java. 8

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