

A (Printed Pages 3)  
(21222) Roll No. \_\_\_\_\_  
B.Sc. (Com-Sci.)-V

## NP-3610

**B.Sc. (Com.Sc.) Examination, Dec.-2022**  
**Web Designing with Java Programming**  
(BCS-503)

*Time : Three Hours ] [Maximum Marks : 75*

**Note :** Attempt all questions from all sections as per instructions.

### Section - A

**Note :** Attempt all questions.

1. State the five features of Java. 3
2. What is the role of Garbage collection in Java. 3
3. What is Java Beans? 3

**P.T.O.**

4. What is the difference between AWT and swing? 3
5. What do you mean by W3 C? 3

### Section-B

**Note :** Attempt any two questions.

6. What is JDBC prepared statement. 7½
7. What are the differences between Array list and Vector. 7½
8. Write a Java program to find the given alphabet is a vowel or not using switch statement. 7½

### Section-C

**Note :** Attempt any three questions.

9. Describe the collection hierarchy in Java with suitable diagram. 15

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10. What is JDBC Driver? List out and explain all type of Driver in detail. 15
11. Write a note on following:
- (a) JDK, JRE and JVM 7½
  - (b) Abstract class and Interface 7½
12. What is Java Applet used for? Explain the Life cycle of the applet with example. 15
13. Write a note on :
- (a) Web application Development. 7½
  - (b) Java package with example. 7½