

1487/V

**B.C.A. (PART-III) EXAMINATION, 2022-23**

**(Fifth Semester)**

9090

**(BCA 501 : INTERNET & JAVA PROGRAMMING)**

**Paper : I**

**Time : Three Hours ]**

**[Maximum Marks : 70**

**Note: (i) Answer Five Questions in all.**

**(ii) Question No.1 is Compulsory.**

**(iii) Answer remaining Four questions, selecting  
Two from each Section A and B.**

**(iv) All questions carry equal marks.**

**1. Answer all parts of the following in brief :**

**(a) Briefly explain the following:**

**(i) JDK**

**(ii) JVM**

**(iii) JRE**

- (b) What is exceptional handling in Java?  
Explain with an example.
- (c) Write about the purpose of 'final' keyword.  
Can we inherit a method referred as 'final'?
- (d) Write a Java program to reverse the given string.

### SECTION-A

2. What is Java Applet and its life cycle? Write a simple example to execute the applet by HTML file.
3. What is runtime polymorphism in Java? Explain with an example.
4. Briefly explain the use of following keywords in Java with example.
- (i) Final
  - (ii) This
  - (iii) Super

5. What is Java AWT? Explain AWT hierarchy and method to create Java AWT with an example.

### SECTION-B

6. (a) What is method overloading? How it is different from method overriding?
- (b) What is hierarchical inheritance? Explain with an example.
7. (a) What are the different types of drivers in Java database connectivity? What are the required steps to establish database connectivity in Java?
- (b) What is multithreading? What are the advantages of multithreading?
8. (a) What is Servlet and its life cycle? How it is better than CGI?
- (b) What is JSP and its life cycle? How it is better than servlet?



9. Write notes on any two of the following:

(i) RMI

(ii) Cookies

(iii) Java swing

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