

# Java Syllabus

| Topic                         | Test/Interview | Status    |
|-------------------------------|----------------|-----------|
| 1. Types of Java              |                | Completed |
| 2. JDK & Eclipse Installation |                | Completed |
| 3. JDK, JRE ,JVM              |                | Completed |
| 4. Java Features              |                | Completed |
| 5. Java Basics                |                | Completed |
| a. Identifiers                |                | Completed |
| b. Keywords                   |                | Completed |
| c. Access Modifiers           |                | Completed |
| i. Private                    |                | Completed |
| ii. Default                   |                | Completed |
| iii. Protected                |                | Completed |
| iv. public                    |                | Completed |
| d. Variables                  |                | Completed |
| i. Local variable             |                | Completed |
| ii. Instance variable         |                | Completed |
| iii. Static variable          |                | Completed |
| e. Data Types                 |                | Completed |
| i. Primitive data type        |                | Completed |
| ii. Non primitive data type   |                | Completed |
| f. Operators                  |                | Completed |
| i. Arithmetic Operators       |                | Completed |
| ii. Logical Operator          |                | Completed |
| iii. Comparison Operator      |                | Completed |
| iv. Unary Operator            |                | Completed |
| v. Bitwise Operator           |                | Completed |
| vi. Assignment Operator       |                | Completed |
| vii. Ternary Operator         |                | Completed |
| <b>Assessment MCQ-1</b>       | <b>Test</b>    | Completed |
| 6. Java Comment               |                | Completed |
| 7. Java Statements            |                | Completed |
| a. If                         |                | Completed |
| b. If else                    |                | Completed |
| c. Nested if else             |                | Completed |
| d. Switch case                |                | Completed |
| e. While                      |                | Completed |
| f. Do while                   |                | Completed |
| g. For                        |                | Completed |

|  |                             |             |
|--|-----------------------------|-------------|
| h. For each                                  |                             | Completed   |
| i. Break                                     |                             | Completed   |
| 8. Java Constructor                          |                             | Completed   |
| a. Super                                     |                             | Completed   |
| b. This                                      |                             | Completed   |
| <b>Java Assessment MCQ-2</b>                 | <b>Test</b>                 | Completed   |
| <b>Mock Interview - 1</b>                    | <b>Interview</b>            | In Progress |
| <b>Interview Preparation and discussion</b>  | <b>Interview discussion</b> | In Progress |
| <b>Mini Project - 1 ( Java Calculator )</b>  | <b>Mini Project</b>         | Completed   |
| 9. Java Object Oriented                      |                             | Completed   |
| a. Inheritance                               |                             | Completed   |
| <b>Java Assessment MCQ-3</b>                 | <b>Test</b>                 | Completed   |
| b. Abstraction                               |                             | Completed   |
| i. Interface                                 |                             | Completed   |
| ii. Abstract Class                           |                             | Completed   |
| c. Encapsulation                             |                             | Completed   |
| d. Polymorphism                              |                             | Completed   |
| i. Method Overloading                        |                             | Completed   |
| ii. Method Overriding                        |                             | Completed   |
| <b>Mini Project - 2 ( Bank Application )</b> | <b>Mini Project</b>         | Completed   |
| <b>Java Assessment MCQ-4</b>                 | <b>Test</b>                 |             |
| 10. Java String                              |                             | In Progress |
| a. String                                    |                             |             |
| b. String Buffer                             |                             |             |
| c. String Builder                            |                             |             |
| d. String operations                         |                             |             |
| e. String Interview programs                 |                             |             |
| <b>Java Assessment MCQ-5</b>                 | <b>Test</b>                 |             |
| <b>Mock Interview - 2</b>                    | <b>Interview</b>            |             |
| <b>Interview Preparation and discussion</b>  | <b>Interview discussion</b> |             |
| 11. Exception Handling                       |                             |             |
| a. Exception Hierarchy                       |                             |             |
| b. Try..catch                                |                             |             |
| c. Throw and throws                          |                             |             |
| d. Catch Multiple Exception                  |                             |             |
| e. Try with resources                        |                             |             |
| <b>Java Assessment MCQ-6</b>                 | <b>Test</b>                 |             |
| 12. Java Multithreading                      |                             |             |

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|--|-----------------------------|--|
| a. Thread life cycle                         |                             |  |
| b. How to create a thread                    |                             |  |
| c. Thread methods                            |                             |  |
| d. Garbage collection                        |                             |  |
| e. User thread vs Daemon thread              |                             |  |
| f. Synchronization                           |                             |  |
| <b>Java Assessment MCQ-7</b>                 | <b>Test</b>                 |  |
| <b>13. Java Collection</b>                   |                             |  |
| a. Introduction to Collection                |                             |  |
| b. Collection Interfaces                     |                             |  |
| c. Collection Classes                        |                             |  |
| d. Iterator and ListIterator                 |                             |  |
| e. Array List Class                          |                             |  |
| f. Linked List Class                         |                             |  |
| g. Hash Set Class                            |                             |  |
| h. linkedhashset Class                       |                             |  |
| <b>Java Assessment MCQ-8</b>                 | <b>Test</b>                 |  |
| i. Tree Set Class                            |                             |  |
| j. Map Interface                             |                             |  |
| k. Hashmap Class                             |                             |  |
| l. Treemap Class                             |                             |  |
| m. Hashtable Class                           |                             |  |
| n. Collections Class                         |                             |  |
| o. Comparable Class                          |                             |  |
| p. Comparator Interface                      |                             |  |
| <b>Java Assessment MCQ-9</b>                 | <b>Test</b>                 |  |
| <b>14. Java 8</b>                            |                             |  |
| a. Java Lambda Expression                    |                             |  |
| b. Java Collectors Class                     |                             |  |
| c. Java Interface Default and Static Methods |                             |  |
| d. Java Functional Interface                 |                             |  |
| e. Java Optional Class                       |                             |  |
| f. Java Stream API                           |                             |  |
| <b>Java Assessment MCQ-10</b>                | <b>Test</b>                 |  |
| <b>Mock Interview - 3</b>                    | <b>Interview</b>            |  |
| <b>Interview Preparation and discussion</b>  | <b>Interview discussion</b> |  |