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| **Exposure Java** | **Multiple Choice Test** |
| **Chapter 08** | **The String Class & Magpie Lab** |
| **DO NOT WRITE ON THIS TEST****This test includes program segments, which are not complete programs. Answer such questions with the assumption that the program segment is part of a correct program.** |

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| 01. A **String** *variable* is (A) an array of characters. (B) simple, primitive data type. (C) an object, which stores a set of characters, which behaves as a single unit. (D) an object, which is neither a data structure nor a simple type.   |
| 02. A **String** *literal* is (A) a set of characters delimited with double quotations. (B) a String object with a final value that cannot be changed. (C) the type of String object that can only be used with class methods. (D) a variable of a simple String data type.  |
| 03. **String** variables shown in early Java computer course programs are declared in the same manner as (A) objects of a class. (B) simple data type variables, like **int** and **double**. (C) array variables. (D) **boolean** variables.  |
| 04. String processing is done with (A) email messages. (B) word processing programs. (C) online testing. (D) all of the above.  |

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| 05. The creation of a **String** object (A) requires the **new** operator. (B) can be done with or without the **new** operator. (C) is always done without the **new** operator. (D) requires using the **new** operator as well as one **String** parameter. |
| 06. The statement  **String name = "Kathy Smith";** constructs **name** as(A) a String object. (B) a primitive data type. (C) an array characters. (D) a literal string. |
| 07. Which method(s) can be used to convert simple data types into **String** objects? (A) **valueOf** (B) **parseInt** (C) **parseDouble** (D) All of the above |
| 08. Which of the following **String** objects can be converted into a simple data type?(A) "1000" (B) "3.14159" (C) "100 Main Street" (D) All of the above (E) A & B only |
| 09. When is it frequently necessary to convert **String** values into **int** values or **double** values?(A) When numerical values are entered into the main method argument. (B) When numerical values are entered using the **readLine** method. (C) When numerical values are entered in a GUI window box. (D) All of the above |

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| 10. Method **parseInt** is a member of the \_\_\_\_\_\_\_\_\_\_ class. (A) **Integer** (B) **String** (C) **Int** (D) **Number** |
| 11. Is comparing **String** values different from comparing simple data type values? (A) No, it is the same. In both cases you can use the == operator. (B) No, it is the same. In both cases you can use the == operator or the **equals** method. (C) Yes, it is different. Simple types use the == operator and strings use the **equals** method. (D) Yes, it is different. Simple types use the **equals** method and strings use the **==** operator. |
| 12. Which of the following **String** methods are *overloaded*? (A) **substring** (B) **length** (C) **indexOf** (D) **trim** (E) A and C |
| 13. Which of the following is a literal string? (A) 1000000 (B) "Oklahoma" (C) Dallas (D) 3.14159 |
| 14. Which of the following is a literal string? (A) "1000000" (B) ABC (C) 123456789 (D) 3.14159 (E) All of the above |

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| 15. Which of the following methods can alter a **String** object? (A) **length** (B) **substring** (C) **trim** (D) **indexOf** (E) **compareTo** |
| 16. Which of the following declarations is correct?  I. String s1 = "Mambo"; II. String s2; s2 = "Mambo"; III. String s3 = new String("Mambo"); (A) I only (B) I and II only (C) II and III only (D) I, II and III |
| 17. What is the output of the following code segment? String s1 = "Seymour";String s2 = "Snodgrass";String s3 = s1 + s2;System.out.println(s3);  (A) SeymourSnodgrass (B) Seymour Snodgrass (C) Snodgrass, Seymour (D) Snodgrass Seymour (E) SnodgrassSeymour |

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| 18. What is the output of the following code segment? String s1 = "Seymour";String s2 = "Snodgrass";String s3 = s2 + ", " + s1;System.out.println(s3.length());  (A) 3 (B) 15 (C) 17 (D) 18 (E) 20 |
| 19. What is the output of the following code segment? String s1 = "North";String s2 = s1.substring(1,4);System.out.println(s2);  (A) ort (B) orth (C) Nor (D) Nort (E) Runtime Exception error |
| 20. What is the output of the following code segment? String s1 = "North";String s2 = s1.substring(0,5);System.out.println(s2);  (A) ort (B) orth (C) Nor (D) North (E) Runtime Exception error |

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| 21. What is the output of the following code segment? String s1 = "North";String s2 = s1.substring(1,6);System.out.println(s2);  (A) ort (B) orth (C) Nor (D) North (E) Runtime Exception error |
| 22. What is the output of the following code segment? String s1 = "Aardvark";String s2 = "";for (int k = 1; k <= 3; k++) s2 += s1.substring(k);System.out.println(s2);  (A) Aardvarkardvarkdvark (B) ardvarkrdvarkdvark (C) ardvark (D) rdvark (E) dvark |
| 23. What is the output of the following code segment? String s1 = "Noel";String s2 = "";int n = s1.length();for (int k = 0; k < n; k++) s2 += s1.substring(0,k);System.out.println(s2);  (A) Noe (B) No Noe Noel (C) NoNoeNoel (D) N No Noe (E) NNoNoe |

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| 24. What is the output of the following code segment? String s1 = "Noel";String s2 = "";int n = s1.length();for (int k = 0; k < n; k++) s2 += s1.substring(k);System.out.println(s2);  (A) Noel (B) Noe Noel (C) Noeloelell (D) No Noe Noel (E) NNoNoeNoel |
| 25. What is the output of the following code segment? String s1 = "Noel";String s2 = "";for (int k = s1.length(); k > 0; k--) s2 += s1.substring(k);System.out.println(s2);  (A) oel el (B) NoeNoel (C) leloel (D) o oe oel (E) ooeoel |
| 26. What is the output of the following code segment? String s1 = "The rain in Spain falls mainly in the plain";String s2 = "main";System.out.println(s1.indexOf(s2));  (A) 23 (B) 24 (C) 25 (D) 18 (E) 19 |

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| 27. What is the output of the following code segment? String s1 = "The rain in Spain falls mainly in the plain";String s2 = "in";System.out.println(s1.indexOf(s2));  (A) 6 (B) 12 (C) 23 (D) 28 (E) 6 12 23 28 37 |
| 28. What is the output of the following code segment? String s1 = "The rain in Spain falls mainly in the plain";String s2 = "ain";System.out.println(s1.indexOf(s2));  (A) 5 (B) 6 (C) 24 (D) 25 (E) 26 |
| 29. What is the output of the following code segment? String s1 = "The rain in Spain falls mainly in the plain";String s2 = "in";System.out.println(s1.indexOf(s2,15));  (A) 15 (B) 6 (C) 7 (D) 25 (E) 26 |

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| 30. What is the output of the following code segment? String s1 = "The rain in Spain falls mainly in the plain";String s2 = "in";for (int k = 10; k < s1.length(); k+=10){ System.out.print(s1.indexOf(s2,k) + " ");}  (A) 15 (B) 26 (C) 31 (D) 41 (E) 15 26 31 41 |
| 31. What is the output of the following code segment? int n1 = 100;String s1 = String.valueOf(n1);System.out.print(s1 + s1);  (A) 100 (B) 200 (C) 100100 (D) 100200 (E) 300 |
| 32. What is the output of the following code segment? String s1 = "100";int n1 = Integer.parseInt(s1);System.out.print(n1 + n1);  (A) 100 (B) 200 (C) 100100 (D) 100200 (E) 300 |

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| 33. What is the output of the following code segment? String s1 = "100 Main Street";int n1 = Integer.parseInt(s1);System.out.print(n1);  (A) 100 (B) 100 Main Street (C) Main Street (D) Main Street 100 (E) Runtime exception error |
| 34. What is the output of the following code segment? int n1 = 100;int n2 = 200;String s1 = String.valueOf(n2);System.out.print(n1 + s1);  (A) 100 (B) 200100 (C) 300 (D) 100200 (E) Runtime exception error |
| 35. What is the output of the following code segment? String s1 = new String("Hello");String s2 = new String("Neighbor");String s3 = new String("Hello"); System.out.println(s1 == s2); System.out.println(s1 == s3);  (A) false (B) true (C) false (D) true false false true true |

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| 36. What is the output of the following code segment? String s1 = new String("Hello");String s2 = new String("Neighbor");String s3 = new String("Hello"); System.out.println(s1.equals(s2)); System.out.println(s1.equals(s3));  (A) false (B) true (C) false (D) true false false true true |
| 37. What is the output of the following code segment? String s1 = new String("Hello");String s2 = s1;String s3 = new String(s1); System.out.println(s1 == s2); System.out.println(s1 == s3);  (A) false (B) true (C) false (D) true false false true true |
| 38. What is the output of the following code segment? String s1 = new String("Hello");String s2 = s1;String s3 = new String(s1); System.out.println(s1.equals(s2)); System.out.println(s1.equals(s3));  (A) false (B) true (C) false (D) true false false true true |

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| 39. What is the output of the following code segment? String s1 = new String("AAA");String s2 = new String("BBB"); System.out.println(s1.compareTo(s2)); System.out.println(s2.compareTo(s1));  (A) -1 (B) 1 (C) -1 (D) 1 -1 1 1 -1 |
| 40. What is the output of the following code segment? String s1 = new String("AAA");String s2 = new String("ABB");String s3 = new String("ABC"); System.out.println(s1.compareTo(s2)); System.out.println(s2.compareTo(s3));  (A) -1 (B) 1 (C) -1 (D) 1 -1 1 1 -1 |
| 41. What is the output of the following code segment? String s1 = new String(" QWERTY "); // 5 spaces on each side.String s2 = s1.trim(); System.out.println(s1.length()); System.out.println(s2.length());   (A) 16 (B) 16 (C) 6 (D) 6 (E) 14 16 6 6 16 8 |

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| 42. What is the output of the following code segment? String s1 = new String("Aardvark");String s2 = new String("Aardvark");s1 = s1.toUpperCase();s2 = s2.toLowerCase();System.out.println(s1); System.out.println(s2); (A) aardvark (B) AARDVARK (C) AARDVARK (D) aardvark aardvark AARDVARK aardvark AARDVARK |