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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 |