True/False
Indicate whether the statement is true or false.

__T__ 1. You can use text strings as literal values or assign them to a variable.

__F__ 2. The ASCII character set contains the Unicode character set as a subset.

__F__ 3. The length property counts escape sequences such as \n as two characters.

__T__ 4. The replace() method of the String class is case sensitive.

__F__ 5. Regular expression patterns in JavaScript must begin and end with backward slashes.

__T__ 6. A run-time error cannot be caused by a syntax error.

__?T__ 7. All error messages generated by a Web browser are run-time errors.

__T__ 8. One method of locating bugs in a JavaScript program is to transform lines that you think may be causing problems into comments.

__T__ 9. Each time a program calls a procedure, the procedure is added to the top of the call stack, and then removed after it finishes executing.

__T__ 10. You can use a for...in loop to determine if values are being assigned to the correct properties in an object.

__T__ 11. One way to preserve information following a user’s visit to a Web page is to append a query string to the end of a URL.

__T__ 12. For a Web page to use the information in a query string, your JavaScript program must first parse the string.

__F__ 13. Query strings permanently maintain state information.

__F__ 14. Hidden form fields maintain state information between Web pages, and the data they contain are kept once the Web page that reads the hidden fields closes.

__T__ 15. The Web was originally designed to be read-only.

Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 16. To parse the text strings in your scripts, you use the methods and ____ property of the String class.
   a. size  c. index
   b. charAt  d. length
17. The `fromCharCode()` method is called a ____ method because it is not used as a method of any string objects (which can be literal strings or variables) in your scripts.
   a. local  
   b. static 
   c. global 
   d. dynamic

18. The ____ method converts a text string to lowercase.
   a. `toMinCase()`  
   b. `toLocaleLowerCase()` 
   c. `toLowerCase()` 
   d. `toUpperCase()`

19. The ____ method converts a text string to uppercase.
   a. `toUpperCase()`  
   b. `toMaxCase()` 
   c. `toHigherCase()` 
   d. `toTitleCase()`

20. The `String` class ____ property returns the number of characters in a string.
   a. `elements`  
   b. `size` 
   c. `length` 
   d. `maxIndex`

21. The ____ method returns the Unicode character code at the specified position in a text string.
   a. `match(pattern)`  
   b. `charAt(index)` 
   c. `indexOf(text [, index])` 
   d. `charCodeAt(index)`

22. The ____ method returns the position of the first instance of the first character of a text string that is passed as an argument.
   a. `charAt()`  
   b. `indexOf()` 
   c. `slice()` 
   d. `search()`

23. The ____ method of the `String` class returns the position of the first occurrence of one string in another string.
   a. `search()`  
   b. `charAt()` 
   c. `indexOf()` 
   d. `substring()`

24. The JavaScript `String` class includes the ____ method, which creates a new string by combining strings that are passed as arguments.
   a. `strcpy()`  
   b. `strcat()` 
   c. `strpstr()` 
   d. `concat()`

25. Regular expression patterns consist of literal characters and ____.
   a. metacharacters  
   b. metadata 
   c. metabytes 
   d. supercharacters

26. A pattern that matches the beginning or end of a line is called a(n) ____.
   a. tail  
   b. metacharacter 
   c. metastring 
   d. anchor

27. You use ____ classes in regular expressions to treat multiple characters as a single item.
   a. `expression`  
   b. `character` 
   c. `pattern` 
   d. `metarule`

28. To allow a string to contain an alternate set of substrings, you separate the strings in a regular expression pattern with the ____ metacharacter.
   a. `$`  
   b. `/` 
   c. `|` 
   d. `&`
29. To manipulate arrays in your scripts, you use the methods and length property of the ____ class.
   a. Array          c. Matrix
   b. String         d. Vector

30. The ____ method adds one or more elements to the end of an array.
   a. pop()          c. shift()
   b. push()         d. unshift()

31. To sort elements of an array alphabetically, you use the ____ method.
   a. arrange()      c. list()
   b. order()        d. sort()

32. You use the ____ method of the String class to split a string into an indexed array.
   a. toArray()      c. split()
   b. slice()        d. shift()

33. ____ errors occur when the interpreter fails to recognize code.
   a. Logic          c. Web
   b. Syntax         d. Run-time

34. A ____ error occurs when the JavaScript interpreter encounters a problem while a program is executing.
   a. run-time       c. logic
   b. syntax         d. browser

35. A ____ error is a flaw in a program’s design that prevents the program from running as anticipated.
   a. compile-time   c. logic
   b. syntax         d. run-time

36. When using write() and writeln() methods to trace bugs, it is helpful to use a ____ program.
   a. script         c. tracing
   b. hub            d. driver

37. Microsoft’s debugging tool, called ____ , can be used with Internet Explorer to debug JavaScript code.
   a. Script Debugger c. Scripter
   b. JavaScript Debugger d. MSDebugger

38. ____ breakpoints can be set for executable statements within a local function and notify JavaScript Debugger to enter break mode before the statement executes.
   a. Future         c. Hard
   b. Near           d. Soft

39. In JavaScript Debugger, you can end a debugging session without executing the rest of the program by selecting the ____ command from the Debug menu.
   a. Exit           c. End
   b. Stop           d. Finish

40. The ____ command allows you to skip function calls.
   a. Step Into      c. Step Out
   b. Step Over      d. Step Onto

41. The term ____ refers to the order in which procedures, such as functions, methods, or event handlers, execute in a program.
   a. call queue     c. call stack
   b. call heap      d. methods list
42. ____ allows programs to handle errors as they occur in the execution of a program.
   a. Error coding  c. Input validation
   b. Form validation  d. Exception handling

43. The term ____ refers to some type of error that occurs in a program.
   a. exception  c. bullet
   b. bulletproof  d. call stack

44. You execute code that may contain an exception in a ____ statement.
   a. throw  c. throws
   b. catch  d. try

45. You use a ____ statement to indicate that an error occurred within a try block.
   a. catch  c. throw
   b. call  d. throws

46. After you throw an error, you use a ____ statement to handle the error.
   a. try  c. handle
   b. catch  d. capture

47. HTTP was originally designed to be ____ , which means that Web browsers stored no persistent data about a visit to a Web site.
   a. stateless  c. state-aware
   b. statefull  d. state-active

48. You create hidden form fields with the ____ element.
   a. <state>  c. <input>
   b. <information>  d. <hidden>

49. The only attributes that you can include with a hidden form field are the name and ____ attributes.
   a. expires  c. secure
   b. path  d. value

50. You can use a(n) ____ to pass information, such as search criteria, from one Web page to another.
   a. text area  c. label
   b. query string  d. image button

51. To pass data from one Web page to another using a query string, add a(n) ____ immediately after a URL, followed by the query string (in name=value pairs) for the information you want to preserve.
   a. &  c. ?
   b. !  d. %

52. You separate individual name=value pairs within the query string using ____.
   a. %  c. $
   b. &  d. ?

53. The ____ property of the Location object contains a URL’s query or search parameters.
   a. query  c. parameters
   b. arguments  d. search

54. To make it possible to store state information beyond the current Web page session, Netscape created ____.
   a. cookies  c. hidden form fields
   b. scripts  d. query strings
55. _____ cookies remain available only for the current browser session.
   a. Persistent       c. Local
   b. Temporary       d. Global

56. _____ cookies remain available beyond the current browser session and are stored in a text file on a client computer.
   a. Persistent       c. Local
   b. Global       d. Temporary

57. You use the _____ property of the Document object to create cookies in name=value pairs.
   a. query       c. hidden
   b. state       d. cookie

58. The cookie property is created with a required _____ attribute and four optional attributes: expires, path, domain, and secure.
   a. value       c. name
   b. string       d. size

59. You can use special characters in your cookies if you use _____.
   a. encoding       c. strings
   b. Unicode       d. URIs

60. The built-in _____ function is used in JavaScript for encoding the individual parts of a URI.
   a. encodeCookie()       c. encodeURIComponent()
   b. encodeURLComponent()       d. encodeComponent()

61. When you read a cookie or other text string encoded with the encodeURIComponent() function, you must first decode it with the _____ function.
   a. parseURI()       c. decodeURIComponent()
   b. parseCookie()       d. decodeURIComponent()

62. The _____ attribute of the cookie property determines how long a cookie can remain on a client system before it is deleted.
   a. path       c. secure
   b. expires       d. domain

63. The _____ attribute determines the availability of a cookie to other Web pages on a server.
   a. domain       c. path
   b. secure       d. expires

64. The _____ attribute is used for sharing cookies across multiple servers in the same domain.
   a. expires       c. path
   b. domain       d. secure

65. _____ refers to the writing of code in such a way that minimizes any intentional or accidental security issues.
   a. Secure coding       c. Seal coding
   b. Bulletproofing       d. Strong coding