Unit 3: Programming Fundamentals

65 MCQs. Correct option in bold. 1 mark each.

1. Website development is split into two segments:
A. front-end and back-end B. client and customer only
C. hardware and software D. input and output

2. Front-end development is also called
A. server-side **B. client-side**
C. network-side D. database-side

3. Back-end development is also called
A. browser-side B. user-side
C. server-side D. client-side

4. Languages used for front-end development are
A. C only B. Ruby, Python and PHP
C. SQL only **D. HTML, CSS and JavaScript**

5. Languages commonly used for back-end development include
A. Ruby, Python and PHP B. CSS only
C. Paint D. HTML and CSS only

6. Which of the following is primarily associated with front-end development?
A. Server management B. Database design
C. Memory management **D. User interface and design**

7. Back-end developers take care of
A. fonts only B. image layout
C. databases and server logic D. button colours

8. When a customer places an order, the order information goes from
A. CSS to HTML **B. front-end to back-end**
C. back-end to front-end D. database to CSS

9. Responsive design adjusts a website's layout to
A. different screen sizes B. different servers
C. different colours only D. different languages

10. Responsive design scales items using
A. fixed pixel values only
B. percentages rather than fixed pixel values
C. no values
D. random values

11. To take an email address in a form, the required attribute is
A. type="mail" B. type="text-mail"
C. type="email" D. type="address"

12. A radio button allows the user to choose
A. multiple options B. no option
C. any text **D. only one option from a list**

13. Radio buttons are best for
A. free text
B. multiple selections
C. mutually exclusive choices such as gender
D. dates

14. Checkboxes allow users to select
A. no choice **B. multiple choices from a group**
C. only one choice D. only text

15. The input type used to create a drop-down list uses the tag
A. <select> B. <radio> C. <check> D. <drop>

16. The attribute that tells a form where to send the data is
A. type B. name C. method **D. action**

17. The attribute that states the way of submitting form data (e.g. post) is
A. id B. action **C. method** D. type

18. The input type that takes a selected date is
A. tel **B. date** C. text D. time

19. A large box to write details such as the reason for a visit is created with
A. <textarea> B. <input>
C. <select> D. <table>

20. The input type that clears all fields of a form is
A. submit B. clear C. button **D. reset**

21. The input type that sends form information to a server is
A. radio B. reset **C. submit** D. checkbox

22. The tag that marks the beginning and end of a table is
A. <th> **B. <table>** C. <td> D. <tr>

23. The tag that creates a row in a table is
A. <tr> B. <td> C. <th> D. <tbody>

24. The tag for a table's header cell (bold and centred) is
A. <td> B. <tr> C. <caption> **D. <th>**

25. The tag for an ordinary table data cell is
A. <th> **B. <td>** C. <table> D. <tr>

26. The tag that adds a heading or description to a table is
A. <tfoot> B. <thead> C. <title> **D. <caption>**

27. The attributes that make a cell span several columns or rows are
A. merge and join B. span and cell
C. colspan and rowspan D. rowspan only

28. The CSS property that determines the link between borders of neighbouring cells is
A. border-collapse B. border-link
C. border-margin D. border-width

29. Setting border-collapse to "collapse" makes borders
A. disappear B. thicker
C. combine into a single line D. stay separate

30. The distance between a cell's border and its content is called
A. caption B. margin
C. cell spacing **D. padding**

31. The space among borders of neighbouring cells is known as
A. header **B. cell spacing**
C. padding D. caption

32. An element's style during an animation is specified by
A. @keyframes B. @highlight
C. @anchor D. @style

33. In @keyframes, each frame's position is given as a
A. tag name B. colour name
C. percentage from 0% to 100% D. number of pixels

34. The CSS property used to apply an animation is
A. move **B. animation**
C. motion D. transform-style

35. The tag is used to
A. make text bold
B. create a table
C. create an animation
D. group and style other elements as a single unit

36. Without JavaScript, a webpage content update needs
A. a page refresh B. no action
C. a new browser D. a new server

37. JavaScript is used to add _____ to webpages.
A. hardware **B. interactivity**
C. cables D. power supply

38. Conventional websites made with only HTML and CSS are
A. interactive B. responsive only
C. dynamic **D. static**

39. The index of the first element in a JavaScript array is
A. 0 B. 1 C. 2 D. -1

40. To access the third element of myArray, use
A. myArray[3] B. myArray[1]
C. myArray[2] D. myArray[0]

41. A JavaScript array can store
A. only one data type **B. different types of data in one array**
C. only strings D. only numbers

42. The method that adds an item to the end of an array is
A. push() B. concat() C. slice() D. pop()

43. The method that removes an item from the end of an array is
A. toString() B. push()
C. slice() **D. pop()**

44. The property that gives the number of items in an array is
A. count B. size **C. length** D. total

45. indexOf() in an array
A. joins two arrays **B. returns the index of a given element**
C. adds an element D. removes an element

46. concat() is used to
A. merge two arrays B. sort an array
C. split an array D. delete an array

47. slice(2, 4) on [3,5,7,9] returns
A. [5, 7] B. [3, 5] C. [9] **D. [7, 9]**

48. oddNumbers = [3,5,7,9]; after oddNumbers.push(11), oddNumbers.indexOf(11) returns
A. 0 B. 5 **C. 4** D. 3

49. The sum of the first 10 positive integers is
A. 55 B. 100 C. 45 D. 50

50. document.getElementById("id") is used to
A. delete a file **B. access an HTML element by its ID**
C. add a CSS style D. create an array

51. The tag for an unordered list is
A. B. <dl> C. **D. **

52. The tag for an ordered (numbered) list is
A. B. <dl> **C. ** D.

53. Each item in a list is written with the tag
**A. ** B. C. D. <item>

54. A block of code that is used repeatedly for a particular operation is a
A. constant B. variable **C. function** D. comment

55. A list is an
A. variable B. function
C. array only **D. Abstract Data Type (ADT)**

56. In an array, elements are stored in memory at
A. random disks **B. contiguous locations**
C. no location D. non-contiguous locations only

57. In a list, memory locations are
A. always contiguous B. absent
C. fixed **D. not necessarily contiguous**

58. Searching a list by checking every item one by one is called
A. linear (sequential) search B. bubble sort
C. merge sort D. binary search

59. A unit test is used to
A. deploy code
B. validate syntax only
C. test individual parts of the code for correctness
D. style the user interface

60. A unit test for findItem("milk") on an array containing milk expects
A. false **B. true** C. an error D. null

61. A unit test for a non-existing item such as "eggs" expects
A. false B. undefined only
C. an error D. true

62. A breakpoint
A. adds a comment
B. compiles code
C. deletes a line
D. pauses the application at a chosen line so the code can be examined

63. A watchpoint
A. deletes a variable
B. starts the program
C. pauses the program when a rule on a variable or expression is met
D. pauses at a fixed line always

64. In debug mode, Step-Over is used for
A. compiling code **B. line by line execution**
C. deleting code D. finishing the program at once

65. To manually stop JavaScript execution at a certain point, you can use
A. console.log() B. stop
C. debugger D. break