1. Which of the following transport layer protocols is used to support electronic mail?
   (a) SMTP  (b) IP  
   (c) TCP   (d) UDP

2. Which layer is responsible for process to process delivery?
   (a) network layer  (b) transport layer  
   (c) data link layer (d) session layer

3. Which address identifies a process on a host?
   (a) specific address  (b) port address  
   (c) physical address (d) logical address

4. Which sublayer of the data link layer performs data link functions that depend upon the type of medium?
   (a) logical link control sublayer  (b) media access control sublayer  
   (c) network interface control sublayer (d) none of these

5. An effective way to prevent attenuation is -
   (a) Adding repeaters or amplifiers to a circuit  (b) Shorting a circuit  
   (c) Half duplex (d) Shielding wires

6. Which one of the following is the multiple access protocol for channel access control?
   (a) CSMA/CD  (b) CSMA/CA  
   (c) both (a) & (b) (d) None of these

7. A subset of a network that includes all the routers but contains no loops is called -
   (a) spider structure  (b) spider tree  
   (c) spanning tree (d) none of these

8. What is the access point (AP) in wireless LAN?
   (a) device that allows wireless devices to connect to a wired network  
   (b) wireless devices itself  
   (c) both (a) & (b) (d) none of these

9. The DBMS is the software that interacts with the __________ and the database.
   (a) User’s application programs  (b) User’s system programs  
   (c) User’s system database (d) None of these
10. DDL stands for -
   (a) Database Definition Level   (b) Data Definition Language
   (c) Data Device Latency         (d) None of these

11. An advantage of the database management approach is -
   (a) Data is dependent on programs
   (b) Data redundancy increases
   (c) Data is integrated and can be accessed by multiple programs
   (d) None of the above

12. To include integrity constraint in an existing relation use:
   (a) Create table                (b) Modify table
   (c) Alter table                (d) None of these

13. Which one of the following is a set of one or more attributes taken collectively to uniquely identify a record?
   (a) Candidate key              (b) Sub key
   (c) Super key                  (d) Foreign key

14. An attribute in a relation is a foreign key if the __________ key from one relation is used as an attribute in that relation.
   (a) Candidate                  (b) Primary
   (c) Super                      (d) Sub

15. A __________ integrity constraint requires that the values appearing in specified attributes of any tuple in the referencing relation also appear in specified attributes of at least one tuple in the referenced relation.
   (a) Referential               (b) Referencing
   (c) Specific                  (d) Primary

16. The term __________ is used to refer to a row.
   (a) Attribute                 (b) Tuple
   (c) Field                     (d) Instance

17. A domain is atomic if elements of the domain are considered to be __________ units.
   (a) Different                 (b) Indivisible
   (c) Constant                  (d) Divisible

18. The result which operation contains all pairs of tuples from the two relations, regardless of whether their attribute values match.
   (a) Join                      (b) Cartesian product
   (c) Intersection             (d) Set difference

19. A __________ is a pictorial depiction of the schema of a database that shows the relations in the database, their attributes, and primary keys and foreign keys.
   (a) Schema diagram            (b) Relational algebra
   (c) Database diagram          (d) Schema flow

20. In the relational modes, cardinality is termed as:
    (a) Number of tuples         (b) Number of attributes
    (c) Number of tables         (d) Number of constraints
21. Architecture of the database can be viewed as:
   (a) two levels  (b) four levels
   (c) three levels  (d) one level

22. In an E-R diagram attributes are represented by:
   (a) rectangle  (b) square
   (c) ellipse  (d) triangle

23. The way a particular application views the data from the database that the application uses is a:
   (a) module  (b) relational model
   (c) schema  (d) sub schema

24. The property/properties of a database is/are:
   (a) It is an integrated collection of logically related records.
   (b) It consolidates separate files into a common pool of data records.
   (c) Data stored in a database is independent of the application programs using it.
   (d) All of these

25. The relational model feature is that there:
   (a) is no need for primary key data.
   (b) is much more data independence than some other database models.
   (c) are explicit relationships among records.
   (d) are tables with many dimensions.

26. It is possible to define a schema completely using:
   (a) VDL and DDL.
   (b) DDL and DML.
   (c) SDL and DDL.
   (d) VDL and DM

27. It is better to use files than a DBMS when there are:
   (a) Stringent real-time requirements.
   (b) Multiple users wish to access the data.
   (c) Complex relationships among data.
   (d) All of these

28. Which database level is closest to the users?
   (a) External
   (b) Internal
   (c) Physical
   (d) Conceptual

29. In E-R diagram generalization is represented by:
   (a) Ellipse
   (b) Dashed ellipse
   (c) Rectangle
   (d) Triangle

30. The purpose of an n-ary association is:
   (a) To capture a parent-child relationship.
   (b) To deal with one-to-many relationships.
   (c) To deal with relationships that involve more than two tables.
   (d) To represent an inheritance relationship.

31. In a database structure, the basic data type char(n) is a ___________ length character string and varchar(n) is ___________ length character.
   (a) fixed, equal
   (b) equal, variable
   (c) fixed, variable
   (d) variable, equal

32. The entity set person is classified as student and employee. This process is called:
   (a) Generalization
   (b) Specialization
   (c) Inheritance
   (d) Constraint generalization
33. Delete from X where Y;
   The above command -
   (a) Deletes a particular tuple from the relation  (b) Deletes the relation
   (c) Clears all entries from the relation  (d) All of these

34. Markup tags tell the web browser -
   (a) How to organise the page  (b) How to display the page
   (c) How to display message box on page  (d) None of these

35. Web pages start with which of the following tag?
   (a) <Body>  (b) <Title>
   (c) <HTML>  (d) <Form>

36. HTML is a subset of -
   (a) SGMT  (b) SGML
   (c) SGMD  (d) None of these

37. Correct HTML to left align the content inside a table cell is -
   (a) <tdleft>  (b) <td raligh = “left”>
   (c) <td align = “left”>  (d) <td leftalign>

38. The tag which allows you to rest other HTML tags within the description is -
   (a) <TH>  (b) <TD>
   (c) <TR>  (d) <CAPTION>

39. How can you open a link in a new browser window?
   (a) < a href = “url” target = “new”>  (b) <a href = “url” target= “_blank”>
   (c) <a href = “url”.new>  (d) <a href = “url” target =”open”>

40. Symbol used at the beginning of the HREF text is -
   (a) #  (b) $
   (c) &  (d) ^

41. If the image cannot be displayed then ___________ specifies an alternate text for an image.
   (a) caption attribute  (b) value attribute
   (c) alt attribute  (d) text attribute

42. Which of the following pair of attribute is required for img tag?
   (a) img and alt  (b) src and a
   (c) src and alt  (d) img and src

43. XHTML Syntax of <img> tag is -
   (a) <img src="" />  (b) <img src=""></img>
   (c) <img>  (d) None of these

44. Which of the following HTML tag is used to define clickable area in an image map?
   (a) <img>  (b) <map>
   (c) <click>  (d) <area>

45. Which tag is used to divide the HTML document into the paragraphs?
   (a) para  (b) p
   (c) paragraph  (d) par
46. In HTML we have ________ type of heading tags.
   (a) 6 (b) 7 (c) 5 (d) 4

47. Link URL in HTML is specified using ________ attribute.
   (a) link (b) href (c) rel (d) src

48. A linked page using anchor tag is normally displayed in the ________.
   (a) Current Window (b) New Window (c) New Tab (d) None of these

49. HTTP uses a TCP connection to -
   (a) Establishment of servers connection (b) Transfer whole database
   (c) Client server connections (d) Transfer files

50. In a URL, the ________ is the client-server program used to retrieve the document.
   (a) path (b) protocol (c) host (d) none of the above

51. A cookie is made by the ________ and eaten by the ________.
   (a) client; client (b) client; server (c) server; server (d) none of the above

52. HTTP uses the services of ________ on well-known port 80.
   (a) UDP (b) IP (c) TCP (d) none of the above

53. In HTTP, a ________ server is a computer that keeps copies of responses to recent requests.
   (a) regular (b) proxy (c) both a and b (d) none of the above

54. The HTTP request line contains a ________ method to request a document from the server.
   (a) GET (b) POST (c) COPY (d) none of the above

55. JavaScript is designed for following purpose:
   (a) To Execute Query Related to DB on Server (b) To Style HTML Pages
   (c) To add interactivity to HTML Pages (d) To Perform Server Side Scripting Operation

56. Why JavaScript is called as Lightweight Programming Language?
   (a) because JS can provide programming functionality inside but up to certain extend.
   (b) because JS is available free of cost.
   (c) because JS is client side scripting.
   (d) because we can add programming functionality inside JS.

57. Which file controls how your frames will appear?
   (a) Frameset (b) Master Document (c) Template (d) Timeline
58. A Session variable is created:
   (a) when the application is first placed on a web server.
   (b) when the web server is first started.
   (c) when the first client requests a URL resource.
   (d) every time a new client interacts with the web application.

59. The most important goal of business communication is ___________
   (a) Favorable relationship between sender and receiver
   (b) Organizational goodwill
   (c) Receiver response
   (d) Receiver understanding

60. The following is (are) the most effective ways of communication.
   (a) Verbal
   (b) Non verbal
   (c) Written
   (d) All of these

61. The following is the permanent records for business -
   (a) Business letters
   (b) Ledgers
   (c) Production reports
   (d) All of the above

62. The resume type that showcases the job seeker’s qualifications and skills is the -
   (a) reverse-chronological
   (b) functional
   (c) combination
   (d) scannable

63. The heading of a resume includes -
   (a) personal information such as name and address
   (b) names of references
   (c) title of most recent job
   (d) career objective

64. An interview where candidates are being asked about relevant past experiences is known as -
   (a) situational interview
   (b) stress interview
   (c) behavioral test
   (d) job related interview

65. Common mistakes people make in job interviews include ___________.
   (a) knowing little about the company or the role they would play at the company.
   (b) having little idea of how their education prepares them for work.
   (c) having only vague ideas about how they could benefit the employer.
   (d) All of these

66. Find the missing number.
   17, 36, 74, 150, ?, 606
   (a) 205
   (b) 303
   (c) 302
   (d) 300

67. There were total of 10 bicycles and tricycles. If the number of wheels was 24, how many tricycles were there?
   (a) 2
   (b) 6
   (c) 8
   (d) 4
68. Find the missing number in the following figures?

```
8
6  54  7
  4

12
8  51  4
  7

14
9  ?  8
  9
```

(a) 53  (b) 68  (c) 71  (d) 76

69. Which one of the following words is correctly spelt?

(a) Faranheit  (b) Fahrenhiet  
(c) Farenhiet  (d) Fahrenheit

70. A person who pretends to have more knowledge or skill than he really has-

(a) Apostle  (b) Apotheosis  
(c) Charlatan  (d) Renegade

71. Which image can be made from the three shapes shown?

```
(a)  
(b)  
(c)  
(d)  
```

72. Which of the Answer Figures belongs in neither group?

```
Group 1
(a)  
(b)  
(c)  
(d)  
```

```
Group 2
(a)  
(b)  
(c)  
(d)  
```
73. Five friends are standing in a row. John is taller than Sam. Philip is taller than Lalremruata but not as tall as Sam. Allan is shorter than Lalremruata. Who among them is the shortest?
   (a) John   (b) Lalremruata
   (c) Allan   (d) Sam

74. A man is standing facing west. He turns 45° in the clockwise direction and then another 180° in the same direction. Then, he turns 270° in the anti-clockwise direction. Which direction is he facing now?
   (a) South   (b) West
   (c) North west   (d) South west

75. ‘A’ can do a piece of work in 25 days which ‘B’ alone can finish in 20 days. Both together work for 5 days and then A leaves off. The number of days taken by B to finish the remaining work is-
   (a) 10 days   (b) 11 days
   (c) 13 days   (d) 15 days