TECHNICAL
PAPER - II

Time Allowed : 2 hours
Full Marks : 150

Attempt all questions.
All questions carry equal marks of 2 each.

1. The rules followed by interconnected computers to communicate between them is
   (a) Hop
   (c) Agreement
   (b) Consensus
   (d) Protocols

2. What is the principle of optical fiber?
   (a) Total internal reflection
   (c) Scattering
   (b) Reflection
   (d) Refraction

3. Which device transfers message in the form of broadcast?
   (a) Switch
   (c) Hub
   (b) Repeater
   (d) Bridge

4. What is the transmission mode that allowed data to travel only in one direction?
   (a) Simplex
   (c) Full Duplex
   (b) Half Duplex
   (d) Unimode

5. In OSI reference model, which layer is responsible for error checking between Source and Destination?
   (a) Application Layer
   (c) Session Layer
   (b) Presentation Layer
   (d) Transport Layer

6. Which topology gives the maximum connectivity?
   (a) Ring Topology
   (c) Mesh Topology
   (b) Star Topology
   (d) Bus Topology

7. All computers in a _________ need not be in a same network.
   (a) Work Group
   (c) Home Group
   (b) Domain
   (d) None of these

8. To configure Static Client in Windows XP, you have to perform
   (a) Click Start, Click Control Panel, Click Network and Internet connections and then Click Network connections
   (b) Click Start, Click Setting, Click System Settings then click Network
   (c) Right Click on My Computer, Click setting then Click Network Setting
   (d) Click Start, Click run type Network setting.exe then press Enter
9. Storing several copies of data in database system is called
   (a) Populated          (b) Redundancy
   (c) Multiplica         (d) Uncontrolled growth

10. Which of the following will be useful in case of Hardware or Software failure in Distributed database system?
    (a) Data Replication  (b) Robust Data
    (c) Encrypted Data    (d) Data encapsulation

11. What is the primary goal of database system?
    (a) To retrieve information from and store new information in database efficiently
    (b) To utilise available hardware efficiently
    (c) To satisfy user requirement in simple form
    (d) To relate different data according to the user requirement

12. What is the field in the record that holds unique data in database system?
    (a) Unique field      (b) Key field
    (c) Specific field    (d) Critical field

13. In Hierarchical Database Management system, how many parents can each child record have?
    (a) One parent        (b) Two Parents
    (c) Three parents     (d) Unlimited number of parents

14. What is the meaning of Integrity Constraint in Relational Database Management System?
    (a) No Candidate Key can be Null
    (b) No Primary Key can be Null
    (c) No Foreign Key can be Null
    (d) No Super Key can be Null

15. In object Oriented Database Management System, object of a class contains variable defined in its super class is called
    (a) Linkage
    (c) Connectivity
    (d) Inheritance

16. Distributed Database Management System in which all sites have identical Database Management System Software is called
    (a) Unified Database
    (c) Single Mode Database
    (d) Universal Database

17. In Three Level architecture, which level describes the Physical storage structure of database?
    (a) Internal level
    (c) External level
    (d) Intermediate level

18. The capability to change the internal Schema without having to change the conceptual schema is called
    (a) Logical data independence
    (c) Single data independence
    (d) One way data independence

19. In three Schema architecture, the process of transforming request and result between levels are called
    (a) Transformation
    (c) Communication
    (b) Interchange
    (d) Mapping
20. Which one is the responsibility of Database administrator?
   (a) Retrieving Data    (b) Storing Data
   (c) Defining Language  (d) Authorising access
21. In E-R diagram, which symbol is used to represent attribute?
   (a) Rectangle          (b) Diamond
   (c) Oval               (d) Arrow
22. What is the entity that do not have key attribute of their own?
   (a) Weak entity type   (b) Regular entity type
   (c) Strong entity type (d) Discrete entity type
23. If a class takes the properties of more than one super class, it is called
   (a) Multiple Inheritance (b) Multi Value Inheritance
   (c) Multi Level Inheritance (d) Multi Dimensional Inheritance
24. Taking the union of two or more disjoint entity set to produce higher level entity set is called
   (a) Specialisation     (b) Aggregation
   (c) Generalisation     (d) Categorisation
25. The process of decomposing tables in Database to eliminate redundancy and undesirable characteristics
    is called
   (a) Analysis           (b) Synthesis
   (c) Structuring        (d) Normalisation
26. The First Normal Form (1NF) says that
   (a) There should be no partial dependency
   (b) Multivalue attribute must be a key
   (c) An attribute value must be atomic
   (d) There should not be more than one candidate Key
27. Which statement is true?
   (a) Every relation in 3NF is also BCNF
   (b) Every relation in BCNF and 3NF are equivalent
   (c) Every relation in 3NF is also BCNF
   (d) Every relation in BCNF can be converted to its equivalent 3NF
28. What is the Rule 1 of Codd’s twelve rules?
   (a) Guaranteed access rule (b) View updating rule
   (c) Information rule       (d) Comprehensive Data Sub sublanguage rule
29. The upper part of query design window in Microsoft Access shows
   (a) Name of field, Field type and Size
   (b) Table with Field and Relationship
   (c) Criteria               (d) Sorting Check Boxes
30. In Microsoft Access 2007, when creating table with table design the size of a field with number data
    type cannot be
   (a) Single
   (b) Double
   (c) Integer
   (d) Floating point
31. When creating a new table, in Microsoft Access 2003, which method can be used to choose fields from standard databases and tables?
   (a) Create table in design view       (b) Create table using wizard
   (c) Create table by entering data     (d) None of these

32. Which of the following is not a type of Microsoft Access data object?
   (a) Table                         (b) Form
   (c) Worksheet                    (d) Modules

33. Microsoft Access is which type of Database system?
   (a) Relational Database management system
   (b) Object Oriented Database management system
   (c) Object Relational Database management system
   (d) Network Database Model

34. How many heading tags are there in HTML?
   (a) 5                                (b) 6
   (c) 7                                (d) 8

35. What is cookie?
   (a) Computer code used to show animations and play sound
   (b) Information sent to your computer that is used later to give information back to visited website
   (c) Computer code that automatically records all purchases and payments made from a computer
   (d) An advertisement that will at sometime be display on a computer

36. The pages of the web sites are connected by
   (a) Hyperlink                      (b) Proxy Server
   (c) HTML server                   (d) Web Crawler

37. With the help of ....................., Web pages can be seen as stored on the web server.
   (a) Hypertext Transfer Protocol (HTTP)
   (b) Hypertext Transfer Protocol Secure (HTTPS)
   (c) Browser
   (d) ISP (Internet Service Provider)

38. When a client connects to the server, makes a request, gets response, and then maintains connections to handle future request, this type of connection protocol is called
   (a) Stateless Protocol              (b) Connectionless Protocol
   (c) Stateful Protocol               (d) Connection Oriented Protocol

39. Who is responsible for replying request coming from web browser for a file?
   (a) Network Administrator          (b) File Transfer Protocol
   (c) Web Server                     (d) Internet

40. Transferring a file from a computer to Net server is
   (a) File Handling                  (b) Uploading
   (c) Downloading                    (d) Server Feeding
41. One of the several considerations to be made while designing a web page is
   (a) Used compressed images so that a web page gets quickly loaded
   (b) Make button and link as much as possible so that user can navigate to other web sites
   (c) Make the page that is compatible with specific browser
   (d) Each web page must be divided into two parts one for title another for description

42. One of the important points of planning a website is
   (a) Identify where the server is located
   (b) Define the target audience
   (c) Define number of links so that it is not required to update in future
   (d) Identify Number of users

43. Which of the following is not an internet search engine?
   (a) Google
   (b) Infoseek
   (c) Excite
   (d) Scientreans

44. An HTML file starts with the tag
   (a) <TITLE>
   (b) <HEAD>
   (c) <BODY>
   (d) <HTML>

45. Which of the following is used as a dimension in a frame?
   (a) Relative
   (b) Percentage
   (c) Absolute
   (d) All of these

46. VRML code is based on
   (a) BCD
   (b) ASCII
   (c) Unicode
   (d) Hex Code

47. Which of the following gives the equivalence between VRML and HTML?
   (a) VRML is 1D equivalent to HTML
   (b) VRML is 2D equivalent to HTML
   (c) VRML is 3D equivalent to HTML
   (d) VRML is Multidimensional equivalent to HTML

48. What part of the web page should the <TITLE> tag be used in?
   (a) Head
   (b) Footnote
   (c) Body
   (d) Anywhere

49. Which of the following is an italic tag?
   (a) <IT>
   (b) <LI>
   (c) <I>
   (d) <ILI>

50. What is the tag to be used to create an ordered list?
   (a) <UL>  </UL>
   (b) <P>  </P>
   (c) <A>  </A>
   (d) <OL>  </OL>

51. Which of the following does not require closing tag?
   (a) <H1>
   (b) <SUB>
   (c) <BR>
   (d) <P>
52. The <ADDRESS> tag is similar to
   (a) Italic and Bold facing (b) Emphasis or Bold facing
   (c) Color/Alignment (d) Italic or Emphasis
53. Which script is designed to receive value from the web user?
   (a) WebScript (b) CGI Script
   (c) JavaScript (d) ShellScript
54. The environment provided by ASP is based on
   (a) Client/Server (b) Network
   (c) Centralised System (d) Distributed System
55. VB Script can perform
   (a) Calculation on Data (b) Create 3D animation effect
   (c) Presentation of Fixed information (d) All of these
56. What is the key difference between Java and JavaScript?
   (a) The JavaScript language structure is simpler than Java
   (b) Java is high level language where JavaScript is not
   (c) JavaScript is suitable for internet while Java is not
   (d) JavaScript provide Applet while Java is not
57. For Non Programmer, the tool for developing website is
   (a) Microsoft Front Page (b) Adobe After Effect
   (c) Netscape Navigator (d) Corel Draw
58. What type of object can be drawn using Macromedia Flash?
   (a) Scalar based (b) Vector based
   (c) Matrix based (d) Array based
59. What are the two methods of interview?
   (a) Structured and Unstructured interview (b) Problem and Periodical Interview
   (c) Selection and Group interview (d) Situational and Sequential interview
60. The First Step in interview preparation is
   (a) Practice the interview (b) Full block form
   (c) Dress appropriately on the day of interview (d) NOMA form
   (c) Learn as much as you can about the organisation
   (d) Identify your key skills
61. What is the letter layout that does not have indentation from left margin so that every line begins at the left margin?
   (a) Hanging indent form (b) Special marking
   (c) Semi indent form (c) The reference
62. If you are to send a letter to an organisation, and you know the person who is handling the matter and you want your letter to go to that person without delay. Which part of the letter should be included?
   (a) Inside address (b) Special marking
   (c) Attention line (d) The reference
63. In a resume, in what order should the professional experience be written?
(a) Ascending order (no particular focus)
(b) Alphabetical order (focus on all experience equally)
(c) Chronological order (focus on first experience)
(d) Reverse chronological order (focus on the last experience)

64. What are the two types of correspondences?
(a) Internal and External correspondences
(b) Local and Outside correspondences
(c) Single and Multiple correspondences
(d) Upward and Downward correspondences

65. What are the classifications of mail in an office?
(a) Priority and Standard mails
(b) Personal and Official mails
(c) Physical and Electronic mails
(d) Incoming and Outgoing mails

66. Fill in the next number in the series
2, 5, 11, 23, 47, ___
(a) 59
(b) 70
(c) 95
(d) 98

67. Liana and Sanga together can finish a job in eight days. Liana can do the same job on his own in 12 days. How long will Sanga take to do the job by himself?
(a) 16
(b) 24
(c) 26
(d) 30

68. Rearrange the parts which are labeled P, Q, R, and S to produce the correct sentence. Choose the proper sequence. It was
P: in keeping with my mood
Q: a soft summer evening
R: as I walked sedately
S: in the direction of new house
(a) P Q R S
(b) Q R P S
(c) P Q S R
(d) S P R Q

69. Choose the correct meaning of proverb/idiom – ‘To drive home’
(a) To find one’s roots
(b) To return to place of rest
(c) Back to original position
(d) To emphasise

70. Which figure is the odd one out?

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(a) A
(b) B
(c) C
(d) D
71. Which figure is next in series?

![Series Grid]

(a) A
(b) B
(c) C
(d) D

72. Which figure complete the series?

![Series Grid]

(a) A
(b) B
(c) C
(d) D

73. A man starts walking towards south. After walking 10m he turns left at right angles. Then after 15m he again turns left at right angles. In what direction is he finally walking?

(a) north
(b) south
(c) east
(d) west

74. A clock shows the time as 12:25. What is the angle the hour hand makes with the minutes’ hand?

(a) 130
(b) 140
(c) 150
(d) 160

75. What comes next in the following letter series: BEI, DGK, FIM, HKO....

(a) JMN
(b) JMQ
(c) JMP
(d) KMP

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