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TNPSC FA

Previous Year Paper
(Computer Application)
08 Dec, 2022

Post of Forest Apprentice in Tamil Nadu Forest Subordinate Service (Group-VI Services)

1. ————————— is a column of the table used to point to the primary key of another table.

   (A) Candidate key   (B) Primary key

   (C) Natural key   (D) Foreign key ✓

   (E) Answer not known

2. Which is responsible for fetching data from disk into main memory?

   (A) Buffer manager ✓   (B) File manager

   (C) Transaction manager   (D) Authorization manager

   (E) Answer not known

3. Each entity must be uniquely identifiable by an attribute which is not null is called ————————. (If it is null then the entity no longer remains unique)

   (A) Entity integrity ✓

   (B) Key constraints

   (C) Referential integrity

   (D) Null constraints

   (E) Answer not known

4. Whenever a database is created, the server adds one entry in sysusages for each device on which it is created. Such entries in sysusages are known as a

   (A) Segment   (B) Database fragment ✓

   (C) Moving log   (D) Extended database

   (E) Answer not known

5. The master database keeps ——————, which keeps track of information about DBMS as a whole.

   (A) Application table   (B) Permanent table

   (C) Temporary table   (D) ✓ System table

   (E) Answer not known

6. —————— file consists of only one file or table, with each entry containing all the required data defined within it.

   (A) ✓ Flat   (B) Sequential

   (C) Indexed   (D) Hash

   (E) Answer not known

7. —————— may have more than one relationship and can also exist between two entities.

   (A) Binary relationship   (B) ✓ Nonbinary relationship

   (C) Entity relationship   (D) Attribute relationship

   (E) Answer not known

8. Differences between entities must be expressed in terms of attributes known as ——————. These facilitate us to uniquely identify each entity in a set.

   (A) ✓ Keys   (B) Degrees

   (C) Subordinate entities   (D) Relationships

   (E) Answer not known

9. In which operation, it allows us to combine information from any two relations?

(A) Cartesian product ✓   (B) Set difference

(C) Selection   (D) Projection

(E) Answer not known

10. In which mapping cardinalities, an entity in A is associated with any number in B. An entity in B is associated with atleast one entity in A?

(A) one-to-one   (B) one-to-many ✓

(C) many-to-one   (D) many-to-many

(E) Answer not known

11. ——————— is an identifiable distinct object that exists.

(A) Entity ✓   (B) Attributes

(C) Relationship   (D) Cardinalities

(E) Answer not known

12. In which data model, the data is organized in a tree structure and the database is a collection of such disjoint trees?

(A) Relational   (B) Network

(C) Hierarchical ✓   (D) Object relational

(E) Answer not known

13. Which one describes the database design at the programme's level?

(A) Logical subschema   (B) Physical subschema

(C) Logical schema ✓   (D) Physical schema

(E) Answer not known

14. —————— has an ability to change the conceptual schema without changing the external schema or application programs.

   (A) Logical data dependence   (B) ✓ Logical data independence
   (C) Physical data dependence   (D) Physical data independence
   (E) Answer not known

15. —————— means same information may be duplicated in several files.

   (A) Atomicity   (B) Integrity
   (C) Data isolation   (D) ✓ Data redundancy
   (E) Answer not known

16. Which is not an advantage of Network data model?

   (A) ✓ Lack of structural independence
   (B) Conformance to standards
   (C) Promotes database integrity
   (D) Handles more relationship types
   (E) Answer not known

17. Which user interact with the system by invoking one of the permanent applications?

   (A) ✓ Naive user   (B) Application programmer
   (C) Sophisticated user   (D) Specialized user
   (E) Answer not known

18. The symbol used to represent multivalued attributes in ER diagram is

   (A) Double lines   (B) Double rectangles
   (C) ✓ Double ellipses   (D) Dashed ellipses
   (E) Answer not known

19. A ———————— is an entity set that contains sufficient attributes to uniquely identify all its entities.

    (A) Multivalued attributes   (B) Strong entity set ✓

    (C) Weak entity set   (D) Composite attributes

    (E) Answer not known

20. In relational database, data is organized into related

    (A) Files   (B) Databases

    (C) Tables ✓   (D) Record

    (E) Answer not known

21. What is the short cut key to open edit menu in MS Excel?

    (A) Alt + E ✓   (B) Alt + D

    (C) Alt + C   (D) Alt + B

    (E) Answer not known

22. ———————— is the system main interface screen in MS-Windows, displays Icons that provide quick access to programs and information.

    (A) Desktop ✓   (B) Task manager

    (C) Menus   (D) Command window

    (E) Answer not known

23. Powerpoint ———————— view displays miniatures of each slide, enabling the user to adjust the order of presentation.

    (A) Notes page   (B) Outline

    (C) Slide   (D) Slide sorter ✓

    (E) Answer not known

24. What is the short cut key used to open the Print dialog box in Excel?

(A) Ctrl + A (B) Ctrl + Z

(C) Ctrl + P ✓ (D) Ctrl + U

(E) Answer not known

25. The keyboard shortcut to execute the macro in Excel is

(A) Ctrl + A (B) Ctrl + B

(C) Ctrl + C (D) Ctrl + H ✓

(E) Answer not known

26. What is the default file extension for Excel work book?

(A) XLS ✓ (B) PRN

(C) CSV (D) DBF

(E) Answer not known

27. What is the file name extension for MS-Access database?

(A) .PPT (B) .DOC

(C) .XLS (D) .mdb ✓

(E) Answer not known

28. In MS-Access ——————— is an object that is used to store data in rows and columns.

(A) Table ✓ (B) Report

(C) Query (D) Form

(E) Answer not known

29. What is the keyboard short cut used to open an existing database in MS-Access?

   (A) Ctrl + A   (B) Ctrl + C

   (C) Ctrl + X   (D) Ctrl + O ✓

   (E) Answer not known

30. ——————— symbol (before row and column) prefixing the cell reference in Excel indicate absolute reference.

   (A) +   (B) –

   (C) ^   (D) $ ✓

   (E) Answer not known

31. A function inside another function in Excel is called

   (A) Round function   (B) Test function

   (C) Sum function   (D) Nested function ✓

   (E) Answer not known

32. Formulas in MS-Excel starts with

   (A) %   (B) = ✓

   (C) *   (D) ^

   (E) Answer not known

33. The keyboard short cut to move the cursor to any cell address in the worksheet is

   (A) F1   (B) F2

   (C) F5 ✓   (D) F7

   (E) Answer not known

34. ———————— is an organized collection of inter-related information about a particular subject or purpose.

(A) Record   (B) File

(C) ✓ Database   (D) Field

(E) Answer not known

35. A Spread Sheet consists of rows and column which intersect to form

(A) Labels   (B) Value

(C) Functions   (D) ✓ Cells

(E) Answer not known

36. A letter can be easily prepared through readymade formats which are provided in the word processor. These readymade formats are called as

(A) Documents   (B) ✓ Wizards

(C) Sheet   (D) Presentation

(E) Answer not known

37. In a word document ———————— option is used to print information at the top of each page.

(A) Footer   (B) Headings

(C) ✓ Header   (D) Title

(E) Answer not known

38. In paintbrush application ———————— tool is used to draw circles of any radius on screen.

(A) ✓ Ellipse   (B) Line

(C) Rectangle   (D) File

(E) Answer not known

39. In paint application, ——————— is used to add custom colours with RGB and Hue, Sat, Lum combinations.

(A) Brushes option in tools tab   (B) Edit colors option in colors tab

(C) Select option in Image tab   (D) Fill option in shapes tab

(E) Answer not known

40. The ——————— tag provides a facility to enclose large block quotations from other works within a document.

(A) <QUOTE>   (B) <BLOCK>

(C) <BLOCKQUOTE>   (D) <BQ>

(E) Answer not known

41. An efficient supervisor should be ——————— in dealing with the day-to-day problems of the workgroup.

(A) Impartial   (B) Biased

(C) Strict to his subordinates   (D) None of the above

(E) Answer not known

42. One who does too much work is called

(A) A rate buster   (B) A chiseller

(C) A squealer   (D) None of these

(E) Answer not known

43. Match the following :

List I

(a) Behavioural approach

(b) Scientific management

(c) System approach

(d) Classical theory

List II

1. Interaction between organisation and environment

2. Formulation of principles of organisation

3. Work done at the lowest level in the organisation

4. People in the organisation

	(a)	(b)	(c)	(d)
(A)	3	4	2	1
(B)	4	3	1	2
(C)	2	4	3	1
(D)	4	2	1	3

(E) Answer not known

44. Audio compression can be used for

(A) Voice and Data (B) Speech or Music

(C) Picture and Colors (D) Video and Voice

(E) Answer not known

45. The _____ element allows programs and other binary objects to be directly embedded in a web page.

(A) <base> (B) <meta>

(C) <object> (D) <binary>

(E) Answer not known

46. A frequently used method for determining training needs involves

   (A) In-depth interviews of randomly selected employees

   (B) Group-discussions with employee groups

   (C) Individual skill assessment by supervisor ✓

   (D) Observation analyses conducted by the training experts

   (E) Answer not known

47. What does 'Hierarchy of Authority' means

   1. The lower levels have to pursue the goals laid down by higher levels

   2. The upper levels of hierarchy set the goals to be pursued

   3. The upper levels can not take disciplinary actions against subordinates

   4. The lowest level have freedom to carryout the operations

   (A) 1 and 2 ✓

   (B) 2 and 3

   (C) 3 and 4

   (D) 1 and 4

   (E) Answer not known

48. The most widely used model of the process of communication has evolved from the work of

   (A) Barnard

   (B) Simon

   (C) Norbert Weiner

   (D) Shannon and Weaver ✓

   (E) Answer not known

49. Which of the following statements about the behaviour of organizations as system is incorrect?

    (A) organisations, as systems, seek equilibrium internally

    (B) organisations, as systems, seek equilibrium with their environments

    (C) organisations as systems do not change once adopting to the needs of the environment ✓

    (D) The equilibrium sought by the organisation is a dynamic equilibrium achieved by a constant process of adoption to environment

    (E) Answer not known

50. The Greatman theory of leadership led to the rise of

    (A) the behavioural theory of leadership

    (B) the trait theory of leadership ✓

    (C) the situational theory of leadership

    (D) none of the above

    (E) Answer not known

51. One who do little work is called

    (A) A rate buster

    (B) A chiseller ✓

    (C) A squealer

    (D) None of the above

    (E) Answer not known

52. Behavioural approach focused on

(A) Interpersonal – relations in organisations

(B) Managerial processes in organisation

(C) Decision – making in organisation

(D) Actual behaviour of persons and group in organisation

(E) Answer not known

53. Match :

	List I		List II
(a)	A store clerk tells the top executive when to buy a commodity	1.	Leadership by personality
(b)	A youth rushing to save life and property of a house or fire commands neighbours to collect water	2.	Leadership by position
(c)	A newly elected secretary advises members about their duties	3.	Leadership by function
(d)	A leader attempts to bend his followers to his will in most kind of work	4.	Leadership by situation

	(a)	(b)	(c)	(d)
(A)	1	3	2	4
(B)	2	4	3	1
(C)	3	4	2	1
(D)	3	2	4	1

(E) Answer not known

54. Assertion (A) : Today managers with leadership qualities and skills are preferred to be the managers with expertise alone.

Reason (R) : The major organizational chase now emphasize managing people and processes.

(A) ✓ Both (A) and (R) are true and (R) is the correct explanation of (A)

(B) Both (A) and (R) are true but (R) is not the correct explanation of (A)

(C) (A) is true but (R) is false

(D) (A) is false but (R) is true

(E) Answer not known

55. Assertion (A) : The term leader and manager are interchangeable.

Reason (R) : Leadership is a sub-class of management.

(A) (A) and (R) are true and (R) explains (A)

(B) (A) and (R) are true but (R) is not the correct explanation of (A)

(C) (A) is true but (R) is false

(D) ✓ (A) is false but (R) is true

(E) Answer not known

56. 'Co-ordination' is an organisation means :

1. Complete control of the activities of the employees

2. To secure harmony among different units of the organisation

3. Removal of conflict and overlapping in the organization

(A) 1 and 2   (B) 1 and 3

(C) ✓ 2 and 3   (D) 1, 2 and 3

(E) Answer not known

57. The size of a float data type in C is

(A) 1 byte   (B) 2 bytes

(C) ✓ 4 bytes   (D) 8 bytes

(E) Answer not known

58. ———————— is a four-part numeric address indicating a unique computer location on the internet.

(A) ✓ Internet protocol address   (B) Word address

(C) Byte address   (D) Web protocol address

(E) Answer not known

59. Consider the following pairs :

I. 802.11g – 2003

II. 802.11n – 2009

III. 802.11b – 1999

IV. 802.11a – 1997

Which of the pair given above is/are correct?

(A) I and II   (B) ✓ I, II and III

(C) I, III and IV   (D) II and III

(E) Answer not known

60. Find the number of triangles that can be formed by the vertices of an octagon?

(A) 48   (B) 21

(C) ✓ 56   (D) 51

(E) Answer not known

61. How many words can be formed using the letters of "FLOWER"?

(A) ✓ 720   (B) 570

(C) 420   (D) 600

(E) Answer not known

62. For any two sets A and B,

$A - B = A$ if and only if

(A) ✓ $A \cap B = \phi$ (B) $A = B$

(C) $A \subseteq B$ (D) $B \subseteq A$

(E) Answer not known

63. Which of the following are equivalence relations?

I. Equality of numbers on a set of real numbers

II. Similarity of triangles on the set of triangles

III. Relation of being parallel on a set of lines in a plane

(A) I only   (B) II only

(C) III only   (D) ✓ I, II, III

(E) Answer not known

64. A relation R on a set A is called a ——————— relation, if R is the null set ϕ.

(A) Universal   (B) Inverse

(C) ✓ Void   (D) Identity

(E) Answer not known

65. If I_n is the identity matrix of order 'n', then its rank is

(A) $= n$ (B) $\leq n$

(C) $< n$ (D) $= 1$

(E) Answer not known

66. If $A \cup B = A \cap B$ then

(A) $A = B$ (B) $A = \phi$

(C) $B = \phi$ (D) $A \subseteq B$

(E) Answer not known

67. A computer company must hire 25 programmers to handle system programming job and 40 programmers for application programming job. Of those hired, 10 will be expected to perform both the jobs. How many programmers must be hired?

(A) 65   (B) 55

(C) 75   (D) 50

(E) Answer not known

68. Which of the following sets are equal?

$A = \{x : x^2 - 7x + 12 = 0\}$,

$B = \{x : x \in N, x < 7\}$,

$C = \{3, 4\}$

$D = \{4, 3\}$

(A) A, C (B) A, D

(C) A, C, D (D) A, B

(E) Answer not known

69. Write the following in symbolic form.

   Let J : Jerry takes calculus

   K : Ken takes sociology and

   L : Larry takes English

   If either Jerry takes calculus or Ken takes sociology, then Larry will take English.

   (A) $(J \wedge K) \to L$ (B) $L \to (J \wedge K)$

   (C) ✓ $(J \vee K) \to L$ (D) $L \to (J \vee K)$

   (E) Answer not known

70. In a square matrix $A = (a_{ij})$, if $a_{ij} = -a_{ji}$ for all i and j, then the matrix is called as ——————— matrix.

   (A) Symmetric   (B) ✓ Skew-Symmetric

   (C) Hermitian   (D) Skew-Hermitian

   (E) Answer not known

71. A statement A is said to tautologically imply a statement B iff ——————— is a tautology.

   (A) ✓ $A \to B$ (B) $A \rightleftarrows B$

   (C) $\neg A \to \neg B$ (D) $\neg A \rightleftarrows \neg B$

   (E) Answer not known

72. $P \rightleftarrows Q \Leftrightarrow$

   (A) $(P \to Q) \vee (Q \to P)$ (B) ✓ $(P \to Q) \wedge (Q \to P)$

   (C) $(P \wedge Q) \wedge (\neg P \wedge \neg Q)$ (D) $(P \vee Q) \wedge (\neg P \vee \neg Q)$

   (E) Answer not known

73. Let p : It is below freezing and

Let q : It is snowing

Write the compound proposition for the following in symbolic form : "It is not snowing if it is below freezing".

(A) $p \rightarrow q$

(B) $q \rightarrow p$

(C) $p \rightarrow \sim q$

(D) $q \rightarrow \sim p$

(E) Answer not known

74. The value of the definite integral $\int_{0}^{1} 1 + \exp(-x^2) dx$ is

(A) -1

(B) 2

(C) $1 + e^{-1}$

(D) None of these

(E) Answer not known

75. Any equation contains n-arbitrary constants, then the order of differential equation derived from it is

(A) n

(B) $n - 1$

(C) 2

(D) $n + 1$

(E) Answer not known

76. If p and q are non-zero constants and the roots of the equation $x^2 + px + q = 0$ are u and v, then the roots of $qx^2 + px + 1 = 0$ are

(A) u and $\dfrac{1}{v}$

(B) $\dfrac{1}{u}$ and v

(C) $\dfrac{1}{u}$ and $\dfrac{1}{v}$ ✓

(D) None of these

(E) Answer not known

77. The general solution of the equation $\dfrac{dy}{dx} = -\dfrac{x}{y}$ is

(A) $x^2 + y^2 = a^2$ ✓

(B) $x^2 - y^2 = a^2$

(C) $x = -y$

(D) $x + y = a$

(E) Answer not known

78. If m denotes the order and a the degree of a given differential equation respectively, then

(A) $m = n$

(B) $m < n$

(C) $m > n$

(D) None of the above ✓

(E) Answer not known

79. For Abelian group, the additional postulate is

(A) Closure property

(B) Associativity

(C) Commutativity ✓

(D) None of the above

(E) Answer not known

80. Positive member less than 2^{-127} is called

    (A) positive underflow   (B) positive overflow

    (C) positive infinite   (D) positive zero

    (E) Answer not known

81. Which type of operating system feature includes a very powerful program that can run several different operating systems at a time?

    (A) Real-Time   (B) Virtual machine

    (C) Time sharing   (D) Virtual storage

    (E) Answer not known

82. —————— connects multiple inputs to a single output. At any time, one of the inputs is selected to be passed to the output.

    (A) Encoder   (B) Decoder

    (C) Multiplexer   (D) Demultiplexer

    (E) Answer not known

83. In a —————— each of the 2^n possible combinations of input signals and the binary value of each of the m output signals are included

    (A) Logical gate   (B) Boolean equation

    (C) Graphical symbol   (D) Truth table

    (E) Answer not known

84. —————— is the process of aligning significands such that digits may flow off the right end of the significand.

    (A) Significand underflow   (B) Significand overflow

    (C) Significand alignment   (D) Significand zero

    (E) Answer not known

85. Negative numbers less than $-(2-2^{-23})\times 2^{128}$ is called

   (A) Negative overflow ✓   (B) Negative underflow
   (C) Zero   (D) Infinite
   (E) Answer not known

86. ———————— describes each frame of real memory and is indexed by frame number. This table is used by the replacement algorithm.

   (A) Page table   (B) Disk block descriptor
   (C) Page frame data table ✓   (D) Frame table
   (E) Answer not known

87. With ——————, a page is written out to secondary memory only when it has been selected for replacement.

   (A) Demand cleaning ✓   (B) Precleaning
   (C) Paging   (D) Kernal memory allocator
   (E) Answer not known

88. ———————— algorithm treats the page frames allocated to a process as a circular buffer, and pages are removed in round-robin style.

   (A) Optimal   (B) LRU
   (C) FIFO ✓   (D) Clock
   (E) Answer not known

89. ———————— allows the programmer to view memory as consisting of multiple address spaces.

   (A) Segmentation ✓   (B) Paging
   (C) Framing   (D) Mounting
   (E) Answer not known

90. The portion of a process that is actually in ——————— memory at any time is defined to be the resident set of the process.

    (A) Virtual memory   (B) Main memory ✓

    (C) Cache memory   (D) Associative memory

    (E) Answer not known

91. Which time is more desirable for an individual user to minimize the time elapsed between the submission of a job and obtaining the result?

    (A) Bandwidth   (B) Throughput

    (C) Turnaround ✓   (D) Speed

    (E) Answer not known

92. A translator which reads an entire program written in a high level language and converts it into machine language code is

    (A) An Assembler   (B) An Interpreter

    (C) A compiler ✓   (D) Code Converter

    (E) Answer not known

93. A front-end processor is used in ——————— operating system.

    (A) Embedded   (B) Multi processing

    (C) Time sharing ✓   (D) Distributed

    (E) Answer not known

94. Which of the following is not an advantage of multiprogramming?

    (A) Increased throughput

    (B) Shorter response time

    (C) Decreased operating-system overhead ✓

    (D) Ability to assign priorities to jobs

    (E) Answer not known

95. Each operating system has a —————— which is a program that accept requests from users (processes) and interprets them for the rest of the operating system.

(A) ✓ User interface   (B) Scheduler

(C) Input/Output queue   (D) Request/Response queue

(E) Answer not known

96. Find the equivalent decimal number of the given hexadecimal number $(F9A \cdot BC3)_{16} = ($ $)_{10}$

(A) ✓ $(3994 \cdot 7351074)_{10}$ (B) $(3984 \cdot 7251073)_{10}$

(C) $(3993 \cdot 7352064)_{10}$ (D) $(3983 \cdot 725163)_{10}$

(E) Answer not known

97. In Karnaugh map, the presence of 8 adjacent 1's are named as

(A) Pairs   (B) Quads

(C) ✓ Octets   (D) Squares

(E) Answer not known

98. Which gate is known as Universal gate?

(A) NOT gate   (B) AND gate

(C) ✓ NAND gate   (D) XOR gate

(E) Answer not known

99. A —————— circuit is central to most digital circuits that perform addition or subtraction using inverters.

(A) Multiplexer   (B) Demultiplexer

(C) ✓ Full adder   (D) Full subtractor

(E) Answer not known

100. MPEG-1 is used in

    (A) DVDs and Digital TV   (B) Video CDS
    (C) Meta Data   (D) Audio and Visual data
    (E) Answer not known

101. An audio repository is which of the following?

    (A) A web presentation that warehouses audio files
    (B) A library cataloguing all MIDI music
    (C) A website that provides tutorials on sound
    (D) A webserver capable of playing audio files
    (E) Answer not known

102. When words are indexed and linked to other words for rapid retrieval, the system is known as

    (A) Hyper text   (B) Hyper media
    (C) Hyper link   (D) None of the above
    (E) Answer not known

103. ————————smoothes the edges of the image by altering the contrast and color of its edge pixels.

    (A) Tweening   (B) Antialiasing
    (C) Shading   (D) Kinematics
    (E) Answer not known

104. With reference to multimedia elements

Pick the odd-one out of the following.

(A) Graphics   (B) Audio
(C) Animation   (D) Story boarding
(E) Answer not known

105. DAT is an acronym for ——————————

(A) Digital Audio Track   (B) Data Audio Track
(C) Digital Audio Type   (D) Digital Audio Tape
(E) Answer not known

106. Which HTML tag is used to insert a flash movie on a web page?

(A) Ahref   (B) Ling
(C) Lingsrc   (D) Embed
(E) Answer not known

107. —————————— is a single point on a computer screen

(A) cell   (B) element
(C) bit   (D) pixel
(E) Answer not known

108. The effect in which one image transforms to another is termed as

(A) kinematics   (B) morphing
(C) cell animation   (D) path animation
(E) Answer not known

109. Sound pressure is measured in

(A) Bands   (B) Bits

(C) Decibels   (D) Watts

(E) Answer not known

110. When sound is digitally recorded, it is said to be

(A) rerecorded   (B) animated

(C) analoged   (D) digitized

(E) Answer not known

111. When a program assigns 8 bits to a pixel, that pixel can display upto —————————— colors.

(A) 32   (B) 64

(C) 256   (D) 1024

(E) Answer not known

112. Which of the following file extension is used for a Quick Time movie?

(A) .avi   (B) .mpg

(C) .mov   (D) .sgi

(E) Answer not known

113. Hardcopy devices produce color output using —————————— color model

(A) RGB   (B) CMY

(C) YIQ   (D) HSV

(E) Answer not known

114. —————— approach looks for duplicate information in frames that follow one another.

(A) ✓ Intraframe compression   (B) Interframe compression

(C) MPEG   (D) MP3

(E) Answer not known

115. In Real Time interactive audio video, Jitter is introduced in real-time data by delay between

(A) Frames   (B) Layers

(C) Pixels   (D) ✓ Packets

(E) Answer not known

116. Most Common compression used to create CD-quality audio is based on technique.

(A) predictive encoding   (B) ✓ perceptual encoding

(C) MPEG   (D) JPEG

(E) Answer not known

117. —————— images use a lossy compression method.

(A) GIF   (B) MPEG

(C) ✓ JPEG   (D) PNG

(E) Answer not known

118. Authoring done at user's desktop using common cameras, sounds and light is called

(A) Page based authoring   (B) Time based authoring

(C) Icon based authoring   (D) ✓ ad hoc authoring

(E) Answer not known

119. Why is lossy compression preferred?

    (A) applications where speed is more important than quality

    (B) information is extremely important

    (C) suitable for discrete data

    (D) suitable for pdf files

    (E) Answer not known

120. What is the output of the following program?

```
# include <stdio.h>
main( )
{                  prinf ("Hello");
void f₁( );
        {        }
printf("Hi");
}
```

    (A) Syntax error

    (B) Runtime error

    (C) Hi Hello

    (D) Hello

    (E) Answer not known

121. Which of the following is valid?

    I. void p;

    II. void *p;

    III. void **p;

    (A) I only   (B) I and II

    (C) II and III   (D) II only

    (E) Answer not known

122. The data type of the controlling variable at a switch statement cannot be of the type

    (A) int   (B) char
    (C) short   (D) float ✓
    (E) Answer not known

123. In C++, ———————— are the visibility modifiers.

    (A) public and private
    (B) public, private and protected ✓
    (C) default, private and protected
    (D) public, private, default and protected
    (E) Answer not known

124. ———————— is a function specifier which specifies to the compiler that the function definition should be substituted in all places wherever this function is called.

    (A) virtual   (B) static
    (C) inline ✓   (D) friend
    (E) Answer not known

125. ———————— is not a data type in C

    (A) int   (B) char
    (C) real ✓   (D) void
    (E) Answer not known

126. What will be the output of the following program?

```
# indude<stdio.h>
# define square(x) x*x
main ( )
{
int r;
r=125/square(5);
printf("%d",r);
 }
```

(A)   5

(B)   25

(C)   125 ✓

(D)   error

(E)   Answer not known

127. ——————— is an exit-controlled looping statement.

(A)   while   (B) for

(C)   do..while ✓   (D) if

(E)   Answer not known

128. A ——————— member of a class cannot be inherited either in public or in private mode by a subclass.

(A)   private ✓   (B) protected

(C)   public   (D) static

(E)   Answer not known

129. The keyword —————————— is a function declaration/definition prevents the compiler from performing early binding.

    (A) static   (B) friend

    (C)✓ virtual   (D) inline

    (E) Answer not known

130. Which of the following is not correctly method?

    (A) abort( ) – Abnormally terminate-program

    (B) atof( ) – Convert string to float

    (C) strcpy( ) – Copy string

    (D)✓ quit( ) – Terminate the program

    (E) Answer not known

131. —————————— function locates the position of a character within a string.

    (A) strlen( )   (B) strcpy( )

    (C) strcmp( )   (D)✓ strchr( )

    (E) Answer not known

132. What will be the output of the following program?

```
#include<stdio.h>
void main( )
    {
    printf ("%d%d",size of (NULL), size of (""));
    }
```

    (A) 0 0   (B) 0 1

    (C) 1 1   (D)✓ 2 1

    (E) Answer not known

133. How many times "C programming" is printed?

```
#include<stdio.h>
void main( )
        {
    for (int i=0; i<10; i++)
                {    if(i<5) continue;
else
break;
printf("C programming");
}
}
```

(A) 0 times   (B) 1 time

(C) 10 times   (D) 5 times

(E) Answer not known

134. ————————— constructors need not be defined

(A) copy   (B) default

(C) base class   (D) parameterized

(E) Answer not known

135. A function declared as a ——————— is not in the scope of the class to which if has been declared.

(A) static   (B) inline

(C) friend   (D) constructor

(E) Answer not known

136. Data hiding is also known as

(A) Data abstraction   (B) Data encapsulation

(C) Polymorphism   (D) Data protection

(E) Answer not known

137. If P is a printer variable that points to variable V which of the following pairs specifies the value of variable V and its address?

    (A)   P, &P   (B)   *P, P ✓

    (C)   *P, &P   (D) *V,&V

    (E)   Answer not known

138. Which operator is used to retrieve the address of a variable?

    (A)   & ✓   (B) *

    (C)   →   (D) •

    (E)   Answer not known

139. Which of the following header file defines malloc( )?

    (A)   c type.h

    (B)   process.h

    (C)   stdio.h

    (D)   stdlib.h ✓

    (E)   Answer not known

140. Which of the following is an attribute of Input Form control?

    (A)   Readonly   (B) Writeonly ✓

    (C)   Disabled   (D) Checked

    (E)   Answer not known

141. ———————— present a set of choices, from which only one can be chosen.

    (A)   check box   (B) radio button ✓

    (C)   list   (D) menu

    (E)   Answer not known

142. Which of the following is not a web browser?

(A) Internet explorer   (B) opera

(C) ✔ eclipse   (D) netscape navigator

(E) Answer not known

143. Which of the following statements regarding Email Attachment is not correct?

(A) The Internet Email system transmit only text

(B) MIME is used to encode email attachments

(C) Different file extensions can be attached in an email attachment

(D) ✔ Movies can't be attached

(E) Answer not known

144. Which of the following is incorrectly paired?

(A) Email   –   Enable people to send private messages

(B) File transfer –   Exchange of files between computers

(C) DNS   –   Translate between numeric IP address and the corresponding domain name

(D) ✔ Web server –   Handles incoming and outgoing mail

(E) Answer not known

145. Match the following :

   (a) Bookmark   1. A small amount of information stored in the client machine

   (b) Cookies   2. Sits between two networks for security reasons

   (c) Firewall   3. Secured was transaction

   (d) SSL   4. An HTML file of links

	(a)	(b)	(c)	(d)
(A) ✔	4	1	2	3
(B)	4	3	1	2
(C)	3	1	4	2
(D)	2	3	4	1

   (E) Answer not known

146. An application run by computers to communicate with web servers on the internet is

   (A) HTML

   (B) ✔ Web Browser

   (C) Java

   (D) Web server

   (E) Answer not known

147. Match the following :
   (a) Moderated
   (b) Archived
   (c) Digest
   (d) Reply to sender

   1. Save all messages
   2. Want to keep chatter to minimum
   3. Review all messages before posting
   4. Receive each day's message in single big message

	(a)	(b)	(c)	(d)
(A)	1	3	4	2
(B)	2	1	4	3
(C)	3	1	4	2
(D)	3	4	2	1

   (E) Answer not known

148. PGP stands for ——————, a program to decrypt and encrypt email inaddition to authenticating email messages through digital signatures and file encrytion.

   (A) Public Grant privacy
   (B) Pretty Good privacy
   (C) Pretty Good policy
   (D) Public Good Privacy
   (E) Answer not known

149. —————— is the term that internet users apply to unsolicited commercial email.

   (A) Virus
   (B) Spam
   (C) Trash
   (D) Phishing
   (E) Answer not known

150. Which of the following is a file containing the list to be appended to outgoing message?

    (A)   stationary
    (B)   signature ✓
    (C)   header
    (D)   subject
    (E)   Answer not known

151. An _____ allows people to connect into the network over the Internet.

    (A)   extranet ✓
    (B)   intranet
    (C)   arpanet
    (D)   adhoc network
    (E)   Answer not known

152. Web browsing and most other internet activities rely on ———————— (DNS) to quickly provide information to connect users to remote hosts.

    (A)   Domain Name Services
    (B)   Domain Name System ✓
    (C)   Domain Network Services
    (D)   Domain Network System
    (E)   Answer not known

153. Provides services for other computers on the network.

(A) server ✓

(B) client

(C) admin

(D) supercomputer

(E) Answer not known

154. Match the following HTML tags :

(a)	& lt	1.	©
(b)	& copy	2.	®
(c)	& reg	3.	TM
(d)	N/A	4.	<

	(a)	(b)	(c)	(d)
(A) ✓	4	1	2	3
(B)	1	4	3	2
(C)	1	3	4	2
(D)	2	1	4	3

(E) Answer not known

155. _____ the HTML tag used to break a line.

(A) <line>

(B) <bk>

(C) <line break>

(D)
 ✓

(E) Answer not known

156. ————————— indicates a media object to include in an HTML documet.

(A) <MEDIA>

(B) ✓ <IMG>

(C) <IOBJECT>

(D) <SOUND>

(E) Answer not known

157. Identify the incorrect statement from the following statement.

(A) <!DOCTYPE> tag should be used as the first line of all HTML documents

(B) <a> tag indicates hyperlink

(C) ✓ <OWNER> marks up text indicating ownership of information

(D) <applet> for the inclusion of a Java applet

(E) Answer not known

158. ————————— element is used to create a floating frame.

(A) <FF>

(B) <FFRAME>

(C) <FLOAT>

(D) ✓ <IFRAME>

(E) Answer not known

159. In HTML individual items it an ordered list are marked using

(A) <OL>

(B) <UL>

(C) ✓ <LI>

(D) <ITEM>

(E) Answer not known

160. The —————————— topology arranges the devices on the network in a circular array.

(A) Bus

(B) Ring ✓

(C) Star

(D) Diamond

(E) Answer not known

161. ——————————allows transaction data to be processed immediately after they are generated

(A) Batch processing

(B) Data processing

(C) Quick processing

(D) Online transaction processing ✓

(E) Answer not known

162. Management Information system is basically used by managers at

(A) Top level

(B) Lower level

(C) Middle level ✓

(D) Supervisory level

(E) Answer not known

163. ———————— is the tool for the management, delivery, tracking and assessment of various types of employee learning.

   (A) Academic management system

   (B) Academic monitoring system

   (C) Learning monitoring system

   (D) Learning management system ✓

   (E) Answer not known

164. The term DFD stands for

   (A) Device functional design

   (B) Data flow design

   (C) Device function diagram

   (D) Data flow Diagram ✓

   (E) Answer not known

165. The expansion for CASE is

   (A) Computer Activated Software Engine

   (B) Computer Aided Software Engineering ✓

   (C) Computed Activated Software Engineering

   (D) Connectivity Assisted Software Engine

   (E) Answer not known

166. The main objective of ———————— is to ensure effective and efficient use of resources to carry out activities within the budget constraints.

   (A) Strategic decisions

   (B) Tactical decisions

   (C) Operational decisions ✓

   (D) Group decisions

   (E) Answer not known

167. CGI stands for

   (A) Common Gateway Interface ✓
   (B) Common Gateway Interaction
   (C) Computer Generated Interface
   (D) Central Gateway Interface
   (E) Answer not known

168. The operating system developed by AT & T Bell laboraties is

   (A) DOS
   (B) Windows
   (C) Macintosh
   (D) Unix ✓
   (E) Answer not known

169. The ability of the computer to run more than one program concurrently is referred to

   (A) multithreading
   (B) multiprocessing
   (C) multi programming ✓
   (D) Time sharing
   (E) Answer not known

170. ROI stands for

   (A) Return on Inventory
   (B) Range of Investment
   (C) Return on Investment ✓
   (D) Return on Innovation
   (E) Answer not known

171. The integration of multiple AI technologies into a single application to take advantage of the best features of these technologies is called a

(A) Integrated AI system

(B) Hybrid AI system ✓

(C) Inference AI system

(D) Fuzzy AI system

(E) Answer not known

172. Formal review process conducted after a system has been placed in production to determine how well the system has met its original objectives is called as

(A) predictive analytics

(B) pre-implementation audit

(C) portfolio analysis

(D) post-implementation audit ✓

(E) Answer not known

173. A structured repository of data about data is called

(A) Data structures

(B) Data Dictionary ✓

(C) Data base

(D) Data mining

(E) Answer not known

174. ———————— is a proprietary network or a data centre that ties together servers, storage, networks, data and applications as a set of virtualized services that are shared by users inside a company.

   (A) private cloud

   (B) public cloud

   (C) on-demand computing

   (D) ubiquitous network access

   (E) Answer not known

175. The MIS provides timely and effective information to support decision making and other necessary management function. Point out the subsystem which does not belong to the MIS?

   (A) Automated office system

   (B) Data communication system

   (C) Decision support system

   (D) Operational tactical system

   (E) Answer not known

176. Competitive strategy for developing new market niches for specialized products or services where a business can complete in the target area better than its competitions is called

   (A) Focused Differentiation

   (B) Focused Integration

   (C) Market penetration

   (D) Focused penetration

   (E) Answer not known

177. ———————— is a commercial organization with a permanent connection to the internet that sells temporary connection to subscribers.

(A) ✓ Internet service provider

(B) Internet security provider

(C) Information service provider

(D) Internet Browsers

(E) Answer not known

178. ———————— is a person who gains unauthorized access to a computer network for profit, criminal mischief or personal pleasure.

(A) Demolizer

(B) Informer

(C) Thief

(D) ✓ Hacker

(E) Answer not known

179. The creation of illegitimate sites which appear to be published by established organisations is called

(A) ✓ Spoofing

(B) Cyber vandalism

(C) Sniffer programs

(D) Trojan horse

(E) Answer not known

180. Find the odd one from the following protocols.

   (A)   TCP/FP

   (B)   UDP

   (C)   SMTP

   (D)   ✓ FDDI

   (E)   Answer not known

181. How many channels can a half-inch diameter fiber optic cable carry?

   (A)   ✓ 5,000

   (B)   5,500

   (C)   50,000

   (D)   55,000

   (E)   Answer not known

182. A network which is present within the users home and can be used to connect persons digital devices is called as

   (A)   LAN

   (B)   MAN

   (C)   WAN

   (D)   ✓ HAN

   (E)   Answer not known

183. In a ─────────── network, all devices are connected to a device called hub and communicate through it.

   (A)   Bus

   (B)   ✓ Star

   (C)   Ring

   (D)   Mesh

   (E)   Answer not known

184. In digital transmission the data rate is also called as

(A) bit rate ✓
(B) pulse rate
(C) band rate
(D) byte rate
(E) Answer not known

185. ——————— is the process of converting digital data to digital signals

(A) Line coding ✓
(B) Baseline wandering
(C) Self-synchronizing
(D) Polar schemes
(E) Answer not known

186. Before 1993, the ITU-T was called as

(A) CCITT ✓
(B) ITU-IRTF
(C) ITU-R
(D) ITU-D
(E) Answer not known

187. For web standards, the ——————— develops protocols and guidelines to facilitate the long-term growth of the web.

(A) WWW
(B) W3C ✓
(C) RFC
(D) W2C
(E) Answer not known

188. Point out the wrong match given below.

   I.   Fair queuing algorithm   — Nagle 1987
   II. Random early detection algorithm   — Danthine 1980
   III. Packet scheduling algorithm   — Bhatti and crowcroft 2000
   VI. Retri Net model   — Floyd 1993

   (A) I
   (B) II and IV
   (C) II and III
   (D) III and IV
   (E) Answer not known

189. Which one is not a circuit-switched network phase?

   I.   Connection setup
   II. Data transfer
   III. Connection teardown
   IV. Connection Boost-up

   (A) I
   (B) I and III
   (C) IV
   (D) II and IV
   (E) Answer not known

190. Protection against wrapped sequence Number (PAWS) is described in

   (A) RFC 1323
   (B) RFC 1423
   (C) RFC 1326
   (D) RFC 1332
   (E) Answer not known

191. Which quantization version is used in North America and Japan?

(A) μ-Law ✓

(B) A- Law

(C) α- Law

(D) β- Law

(E) Answer not known

192. 265 kbps to be sent over a noiseless channel with a bandwidth of 20KHz. How many signal levels do we need?

(A) 98.7 levels ✓

(B) 96.8 levels

(C) 97.9 levels

(D) 98.6 levels

(E) Answer not known

193. Which radio transmission bands used by military for their communication?

(A) VLF

(B) VHF,LF

(C) VHF,HF ✓

(D) LF,HF

(E) Answer not known

194. Match the following :

	List I		List II
(a)	Omnidirectional Antenna	1.	gigantic scoop
(b)	Parabolic Antenna	2.	Infrared light
(c)	Horn Antenna	3.	Micro wave
(d)	Electro magnetic spectrum	4.	Radio waves

	(a)	(b)	(c)	(d)
(A)	4	3	1	2
(B)	3	1	4	2
(C)	2	4	1	3
(D)	1	2	3	4
(E)	Answer not known			

195. Point out the wrong statement out of the following

(A) Packet sniffers examine all packets being transmitted over a network

(B) Filtering software enables to block employee access to certain websites

(C) In file server network, all nodes on the network have equal relationships to all other nodes.

(D) A node is a processing location

(E) Answer not known

196. C=12 log (1+P/N) is a ——————— expressing the information capacity of a communication channel.

(A) Mackey – Glass equation

(B) Shannon's formula

(C) Nyquist formula

(D) Hartley's law

(E) Answer not known

197. POTS ——————— allow phone calls to jump the gap present between the POTS and the Internet

   (A) Network   (B) Router

   (C) Hub   (D) Gateways

   (E) Answer not known

198. Which is the wrong resolution level of MPEG-2?

   (A) Low (352×240)

   (B) High (1920×1080)

   (C) Main (720×480)

   (D) Very High (2010×1020)

   (E) Answer not known

199. Database systems have several schemas, partitioned according to the

   (A) Views of Data

   (B) Device

   (C) Levels of abstraction

   (D) Instances

   (E) Answer not known

200. The modulation scheme can be used to transmit 6-bits per symbol is called ——————

   (A) QAM - 16

   (B) QAM - 64

   (C) QAM - 60

   (D) QAM - 46

   (E) Answer not known