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1. **Difference between Decision table and Decision tree is _____**

A value to end user

B form of representation

C one shows the logic while other shows process

D none of these

Correct Alternative :- B

2. **The process of finding data objects with behaviours that are very different from expectation is called _____.**

A Anomalies finding

B Anomalies

C Outlier finding

D Outlier detection

Correct Alternative :- D

3. **“All non-empty subsets of a frequent itemset must also be frequent”. The above is _____**

A Frequent property

B Itemset property

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C Apriori property

D C4.5 property

Correct Alternative :- C

4. Which is not the measure of data quality?

A Accuracy

B Volability

C Completeness

D Consistency

Correct Alternative :- B

5. _____ is an objective measure which helps to assess the degree of certainty of the detected association.

A Correlation

B Regression

C Support

D Confidence

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Correct Alternative :- D

6. In ER diagrammatic notation, each key attribute is _____

A represented in rectangle

B represented in double oval

C underlined inside the oval

D represented in the oval shape

Correct Alternative :- C

7. Name the technique that transforms numeric data by mapping values to intervals or concept labels.

A Data mapping

B Data transformation

C Data mining

D Data discretization

Correct Alternative :- D

8. Structured programming involves

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A Functional modularization

- B Decentralization of program activity
- C Localization of errors
- D Centralized processing

Correct Alternative :- A

9. The railway reservation system currently operational in India can be classified as a

- A Batch processing system

B Real time system

- C On-line system
- D Expert system

Correct Alternative :- B

10. A typical example of frequent itemset mining is _____

- A Market analysis
- B Mining analysis

C Market basket analysis

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D Frequent itemset analysis

Correct Alternative :- C

11. Given two attributes an analysis performed for nominal data, that how one attribute implies the other.

A Chi-Square test

B Correlation Coefficient

C Co-variance

D Pearson Product

Correct Alternative :- A

12. _____ are clustering methods which are based on distance.

A Hierarchical methods

B Grid based methods

C Density based methods

D Partitioning methods

Correct Alternative :- D

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13. Data structure suitable for the application is discussed in _____

A Data design

B Architectural design

C Procedural design

D Interface design

Correct Alternative :- A

14. The system conversion technique of totally removing the existing system and immediately implementing the new system is called as

A Phased conversion

B Pilot conversion

C Parallel run

D Crash conversion

Correct Alternative :- D

15. The entity relationship model comes under

A record based logical model

B file based logical model

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C object based logical model

D physcial data model

Correct Alternative :- C

16. _____ helps in address depletion.

A Compression

B Masking

C Classless Addressing

D Network Address Translation

Correct Alternative :- C

17. _____ feature of fast ethernet allows two devices to negotiate the mode or data rate of operation.

A Handshake

B Auto negotiation

C Pre commit

D Protocol

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Correct Alternative :- B

18. _____ is an individual who is not authorized to use the computer and who penetrate a system's access controls to exploit a legitimate user's account.

A Clandestine User

B Misfeasor

C Malicious coder

D Masquerader

Correct Alternative :- D

19. The downstream rate of VDSC Technology is _____

A 1.5 - 6.1 mbps

B 1.5 - 2.0 mbps

C 768 kbps

D 25 - 55 mbps

Correct Alternative :- D

20. Network mobility is defined for IPv6 in

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A RFC 3963

B RFC 3621

C RFC 3376

D None of these

Correct Alternative :- A

21. A digital transmission system is capable of transmitting signals with a bandwidth of 4 MHz. It transmits binary data as square wave. Assume $f=2$ MHz. What is the achievable data rate?

A 2 Mbps

B 4 Mbps

C 8 Mbps

D 1 Mbps

Correct Alternative :- B

22. What is the duration of guard time in GSM?

A 30 μ s

B 30 ms

C 30 ns

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D 30 sec

Correct Alternative :- A

23. Investigation authorities as per IT Act is

A CCA

B Person authorized by CCA

C Police Officer not below the rank of Deputy Superintendent

D All of these

Correct Alternative :- D

24. Inelastic traffic does not easily adapt to changes in _____ and _____ across the internet.

A Delay and Jitler

B Jitler and Packet loss

C Throughput and Delay

D Delay and Packet loss

Correct Alternative :- C

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25. Applications like _____ can be installed after gaining access to the computer systems that enable the hacker to become super users of the system.

A Dumpster diving

B Honey pots

C Traceroute

D None of these

Correct Alternative :- D

26. The category of hackers who work with computer security consulting firms to bug test a system prior to its launch, looking for exploits so they can be closed.

A Black Hats

B White Hats

C Grey Hats

D Blue Hats

Correct Alternative :- D

27. Maximum data rate = $2 H \log_2 V$ is

A Nyquist formula

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- B Shannon's formula
- C Schaller's formula
- D Bell's formula

Correct Alternative :- A

28. Private peering technique means

- A Larger backbones have numerous direct connections between their routers**
- B Intranets are accessible only within the company
- C Self-organizing to relay messages to each other
- D Interconnection utilizing a multi-party shared switch fabric

Correct Alternative :- A

29. Which of the cabling technique is considered best between buildings for establishing LANs?

- A 10 Base-2
- B 10 Base-5
- C 10 Base-F**
- D 10 Base-T

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Correct Alternative :- C

30. Which of the following is a Multicast address?

A 4A:30:10:21:10:1A

B 47:20:1B:2E:08:EE

C 48:20:30:21:10:EE

D FF:FF:FF:FF:FF:FF

Correct Alternative :- B

31. SMDS stands for

A Simple Mail Distributed Services

B Switched Mobile Domain Services

C Switched Multi-Megabit Data Services

D Switched Megabit Data Services

Correct Alternative :- C

32. Five channels, each with 100 - KHz bandwidth are to be multiplexed together. What is the minimum bandwidth of the link if there is a need for a guard band of 10KHz between the channels to prevent

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interference.

- A 10 KHz
- B 100 KHz
- C 540 KHz**
- D 540 Hz

Correct Alternative :- C

33. Decryption and encryption of data are the responsibility of the _____ layer.

- A Physical
- B Data link
- C Network
- D Presentation**

Correct Alternative :- D

34. _____ is a multi port repeater.

- A Active hub**
- B Passive hub

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C Router

D Bridge

Correct Alternative :- A

35. What are the components of a browser?

A controller, client program, interpreter

B hypertext, hypermedia, HTML

C hypertext protocol, HTML

D none of these

Correct Alternative :- A

36. The DMA controller, cycle stealing is

A Page Replacement Technique

B Interweaving Technique

C Memory Management Technique

D Device Management Technique

Correct Alternative :- B

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37. The control unit controls other units by generating

A Command signals

B Transfer signals

C Timing signals

D Communication signals

Correct Alternative :- C

38. Which one of the following accessing mode, a word is retrieved based on a position of its content rather than its address?

A Random Access

B Associative

C Direct access

D Sequential access

Correct Alternative :- B

39. Arithmetic shift operation treats the data as a

A Signed integer and does not shift the sign bit

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- B Unsigned integer and does not shift the sign bit
- C Signed integer and shift the sign bit
- D Unsigned integer and shift the sign bit

Correct Alternative :- A

40. A positive exponent exceeds the maximum possible exponent value

A Exponent overflow

- B Exponent underflow
- C Significand underflow
- D Significand overflow

Correct Alternative :- A

41. Which of the following is not a basic phase of floating point arithmetic?

- A Check for zeros
- B Align the significands
- C Normalize the result

D Overflow check the significands

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Correct Alternative :- D

42. Identify the data types used for two 64 bit quad words packed into a 128 bit double quad word, interpreted as a bit field or as an integer.

A Packed byte and packed byte integer

B Packed word and packed word integer

C Packed double word and packed double word integer

D Packed quad word and packed quad word integer

Correct Alternative :- A

43. Increment-and-skip-if-zero(ISZ) instruction is a sample instruction for

A Branch instruction

B Skip instruction

C Unconditional branch instruction

D Procedure call instruction

Correct Alternative :- A

44. In reentrant procedure

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A Several calls open at the same time

- B Only one call is open at the same time
- C Several calls open at start of program execution
- D Only one call open at start of program execution

Correct Alternative :- A

45. International Reference Alphabet (IRA) is represented by a

A Unique 7-bit pattern

- B Unique 8-bit pattern
- C Unique 2-bit pattern
- D Unique 1-bit pattern

Correct Alternative :- A

46. The subtraction of two n-digit unsigned numbers M - N in base r can be done mathematically as

- A $M - (r^n + N) = M - N + r^n$
- B $M + (r^n + N) = M - N + r^n$
- C $M - (r^n - N) = M - N + r^n$

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D $M + (r^n - N) = M - N + r^n$

Correct Alternative :- D

47. Which of the following is false?

- i. 'n' variables forming an OR term with each variable being primed or unprimed is called min term.**
- ii. Each max term is the complement of its corresponding min term and vice versa.**
- iii. Each max term is obtained from an AND term of the 'n' variables.**
- iv. Boolean function expressed as a SOP or POS are called canonical form.**

A i and iii

B i and ii

C ii and iv

D iii and iv

Correct Alternative :- A

48. Which one of the following expression does not represent exclusive NOR of X and Y?

A $XY + X'Y'$

B $X \oplus Y'$

C $X' \oplus Y$

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D $X' \oplus Y'$

Correct Alternative :- D

49. What is the decimal and hexadecimal equivalent of the largest binary that can be expressed with 12 digits

A 4081, FFF

B 4095, 777

C 4095, FFF

D 4081, 77F

Correct Alternative :- C

Given the logical expression

$$D = X \oplus Y \oplus B_{in}$$

$$B_{out} = \bar{X}Y + \bar{X}B_{in} + YB_{in}$$

Name the combinational circuit for the above expression

50.

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- A Half Adder
- B Half Subtractor
- C Full Adder
- D Full Subtractor**

Correct Alternative :- D

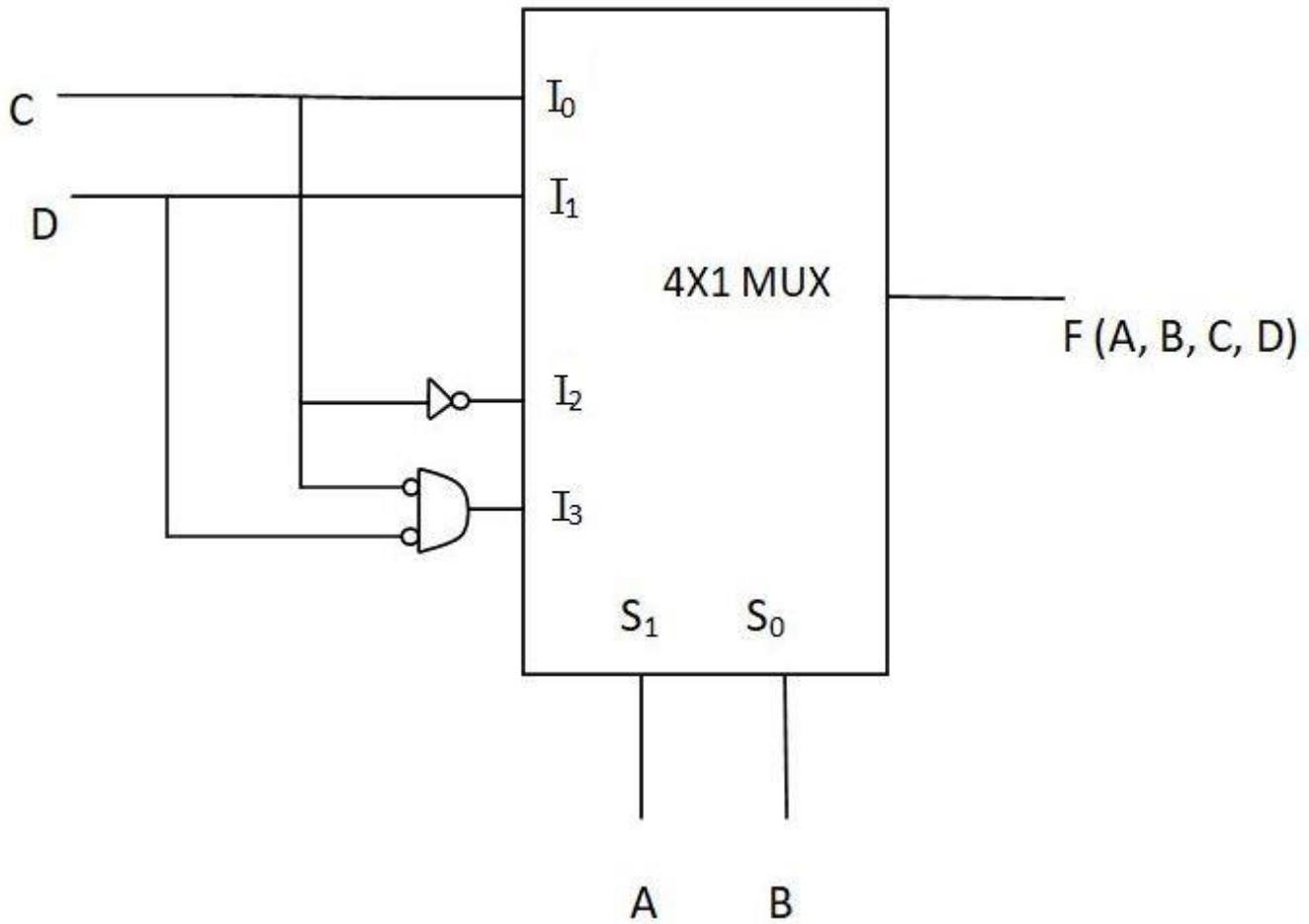
51. The characteristic equation of J-K flip flop is

- A $Q(n+1) = J Q'(n) + K' Q(n)$**
- B $Q(n+1) = J' Q(n) + K Q'(n)$
- C $Q(n+1) = J Q'(n) + K Q(n)$
- D $Q(n+1) = J' Q(n) + K' Q(n)$

Correct Alternative :- A

52. The Boolean function realized by the logic circuit shown is

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A $F = \sum m(0, 1, 3, 5, 9, 10, 14)$

B $F = \sum m(2, 3, 5, 7, 8, 12, 13)$

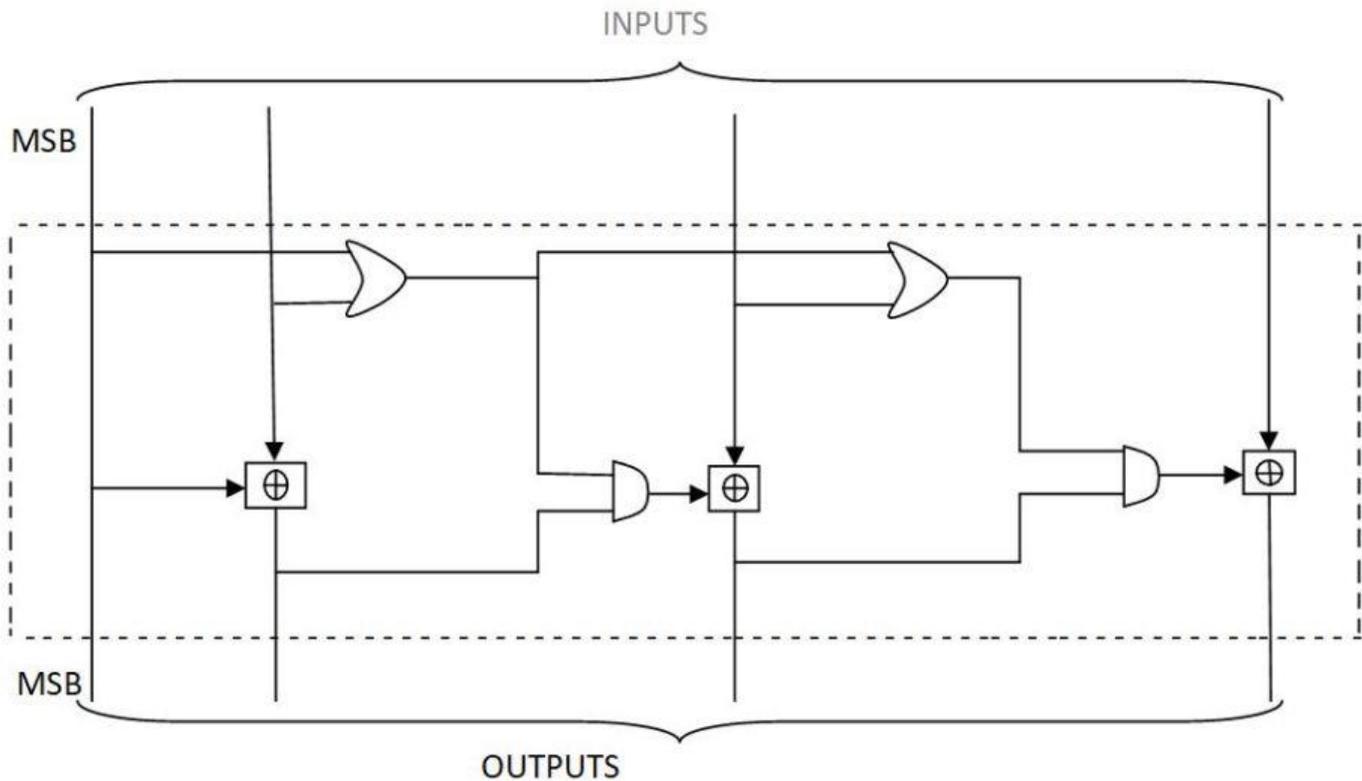
C $F = \sum m(1, 2, 4, 5, 11, 14, 15)$

D $F = \sum m(2, 3, 5, 7, 8, 9, 12)$

Correct Alternative :- D

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53. The circuit shown in the figure converts



- A BCD to binary code
- B Binary to Excess-3 code
- C Excess-3 to gray code
- D Gray to Binary code**

Correct Alternative :- D

54. How many 2-input AND and OR gates are required to realize $Y=CD+EF+G$?

- A 2,2**

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B 2,3

C 3,3

D 2,1

Correct Alternative :- A

55. Which of the following combinations cannot be combined into k-map groups?

A **Corners in the same row**

B Corners in the same column

C Diagonal corners

D Overlapping combinations

Correct Alternative :- C

56. Consider the following statements

I. Depth first search is used to traverse a rooted tree

II. Pre order, post order and inorder are used to list the vertices of an ordered rooted tree

III. Huffman's algorithm is used to find an optimal binary tree with given weights

Which of the above statements are true?

A I and II

B II and III

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C I, II and III

D III and I

Correct Alternative :- C

**57. Given a binary tree whose in order and pre order traversal are given by
In order: EICFBGDJHK
Pre-order: BCEIFDGHJK
The post order traversal of the above binary tree is**

A IEF CGJKHDB

B IEF CJGKHDB

C IEF CGKJHDB

D IEF CGJKDBH

Correct Alternative :- A

58. The balance factor of a binary tree (bf) is defined as

A $bf = \text{height of the left sub-tree } (h_L) + \text{height of the right sub-tree}(h_R)$

B $bf = \text{height of the left sub-tree } (h_L) - \text{height of the right sub-tree}(h_R)$

C $bf = \text{height of the right sub-tree}(h_R) - \text{height of the left sub-tree } (h_L)$

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D $bf = \text{height of the right sub-tree}(h_R) * \text{height of the left sub-tree}(h_L)$

Correct Alternative :- B

59. In a binary tree, certain null entries are replaced by special pointers which point to nodes higher in the tree for efficiency. These special pointers are called

A Leaf

B Branch

C Parent

D Thread

Correct Alternative :- D

60. If five items A, B, C, D and E are pushed in a stack, are after the other starting from A. The stack is popped four times and each element is inserted in a queue. Then two elements are deleted from the queue and pushed back on the stack. Now, one item is popped from the stack. The popped item is

A A

B B

C E

D D

Correct Alternative :- D

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61. The number of edges in a complete undirected graph of n vertices is

A n

B $n(n-1)/2$

C $n(n+1)/2$

D $n^2/2$

Correct Alternative :- B

62. Which one of the following is a non linear data structures?

A Arrays

B Linked list

C Queue

D Sets

Correct Alternative :- D

63. For every node, X, in the tree, the values of all the keys in its left sub-tree are smaller than the key value in X, and the values of all the keys in its right sub-tree are larger than the key value in X is called

A Binary search tree

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- B AVL tree
- C Red-Black tree
- D Heap

Correct Alternative :- A

64. The postfix form for $A + [(B + C) + (D + E) * F] / G$

- A $ABC++DE*+FG/$
- B $ABC+DE+F*+G/+$**
- C $ABC+DE+*F/G+$
- D $ABC+DE+F+*G/+$

Correct Alternative :- B

65. In which sort, an element is to pass through the file sequentially several times?

- A Insertion sort
- B Heap sort
- C Quick sort

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D Bubble sort

Correct Alternative :- D

66. A binary search tree contains values 1 2 3 4 5 6 7 and 8. The tree is traversed in preorder and the values are printed. Which of the following is a valid output?

A 5 3 1 2 4 7 8 6

B 5 3 1 2 6 4 9 7

C 5 3 2 4 1 6 7 8

D 5 3 1 2 4 7 6 8

Correct Alternative :- D

67. The time complexity of a binary search algorithm is

A $O(n)$

B $O(n^2)$

C $O(n \log n)$

D $O(\log n)$

Correct Alternative :- D

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68. When a node 'n' is accessed it is splayed to make it the

A Root node

B Parent node

C Child node

D Sibling node

Correct Alternative :- A

69. Linked list are

A Dynamic data structure

B Static data structure

C Static and dynamic data structure

D None of these

Correct Alternative :- A

70. In AVL the height of the empty sub tree is defined

A 1

B 0

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C -1

D 2

Correct Alternative :- C

71. The 'Quincy system' of learning, a child-centered progressive approach to education was developed by _____.

A A.S.Neill

B John Dewey

C Francis W.Parker

D W.H.Kilpatrick

Correct Alternative :- C

72. Arun from socially deprived and Asha from socially uplifted family show different behaviour when they enter school life. Which of the following principle of development explains this?

A Principle of interaction

B Principle of predictability

C Principle of interrelation

D Principle of continuity

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Correct Alternative :- C

73. Which one of the following is not a component under indirect influence in the Flander's interaction Analysis category system?

A Justifying authority or Criticising

B Accepts or uses pupils ideas

C Asking questions

D Accepts feelings

Correct Alternative :- A

74. To make a child eat food, the parent provides a favorite toy. Identify the drive and incentive.

A Drive: food, Incentive : toy

B Incentive : food, Drive : toy

C Both food and toy are drive

D Both are incentive

Correct Alternative :- A

75. The National Institute for locomotor disabilities is located at _____

A Secunderabad

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B Kolkata

C Dehradun

D Chennai

Correct Alternative :- B

76. Radha is reading a book when her favorite music starts playing. She continues reading as well as listens to the music. Which phrase describes this behaviour?

A shifting of attention

B division of attention

C span of attention

D sustained attention

Correct Alternative :- B

77. The theory of teaching from known to unknown is based on Piaget's concept of _____.

A Assimilation

B Accomadation

C Scheme formation

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D Equilibration

Correct Alternative :- A

78. Ram tasted ice cream from a cup. When he is offered ice cream with fruits he recognizes it. Name the learning obtained.

A Perceptual

B Conceptual

C Imagery

D Readjusting

Correct Alternative :- A

79. The dual-track approach of promoting simultaneously the Universalization of Elementary Education (UEE) and _____ should continue to inform educational planning, is one of the review made by the Janardhana Reddy Committee (1992).

A Adult Literacy

B Universalization of Primary Education (UPE)

C Secondary Education

D Higher Education

Correct Alternative :- A

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80. Ram goes to a shop to buy many things but forgets to buy few. What strategy will help him to recall it?

A grouping items

B read the list

C memorizing the list

D not letting other to distract him

Correct Alternative :- A

81. A situation where processes wait indefinitely within the semaphore

A Starvation

B Dead lock

C Mutex

D Critical section

Correct Alternative :- A

82. Banker's Algorithm is used as

A Deadlock occurrence method

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B Deadlock avoidance method

C Deadlock detection method

D Deadlock recovery method

Correct Alternative :- B

83. The problem of guaranteeing that no information initially held in an object can migrate outside of its execution environment is called the

A Data capability problem

B Confinement problem

C Domain switching problem

D Encapsulate problem

Correct Alternative :- B

84. At least one resource must be held in a non sharable mode

A Circular wait

B No preemption

C Hold and wait

D Mutual exclusion

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Correct Alternative :- D

85. Kernel is _____

- A The set of primitive functions upon which the rest of operating system functions are built up**
- B Considered as the critical part of the operating system
- C The software which monitors the operating system
- D The software which controls the operating system

Correct Alternative :- A

86. Optimal page replacement algorithm is difficult to implement, because it requires

- A Future knowledge of the reference string**
- B Small length of string is possible
- C Reference string is always provided by the operating systems
- D Reference string size depends on the architecture

Correct Alternative :- A

87. Wasting of memory within a partition due to a difference in size of a partition and of the object resident within it is called _____

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- A fragmentation
- B compaction
- C external fragmentation
- D internal fragmentation**

Correct Alternative :- D

88. In memory placement algorithm, which technique chooses the block that is closest in size to the request?

- A Best fit**
- B First fit
- C Next fit
- D Worst fit

Correct Alternative :- A

89. We cannot allocate more than a total number of available frames except

- A Page fault occur
- B Page sharing**

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- C Memory reference used
- D Single user system

Correct Alternative :- B

90. Critical region is _____

- A A part of the operating system which is not allowed to be accessed by any process
- B A set of instructions that access common shared resource which exclude one another in time
- C The portion of the main memory which can be accessed only by one process at a time**
- D None of these

Correct Alternative :- C

Match the List I and II and choose the correct answer from code given below

List I

- (a) Self respect movement
- (b) Khalsa College
- (c) Madras Mahajan sabha
- (d) Atmiya sabha

List II

- (i) 1815
- (ii) 1884
- (iii) 1925
- (iv) 1892

91.

- A a-(iv), b-(ii), c-(iii), d(i)
- B a-(iii), b-(iv), c-(ii), d(i)**

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C a-(iii), b-(i), c-(iv), d(ii)

D a-(i), b-(ii), c-(iv), d(iii)

Correct Alternative :- B

92. Who wrote the book "Poverty and unBritish Rule in India"?

A Gokhale

B Dadabhai Naoroji

C Tilak

D S.N.Banerjee

Correct Alternative :- B

93. Asoka's war with kalinga and its effects are described in the

A Rock Edicts VIII

B Pillar Edicts II

C Rock Edicts II

D Rock Edicts XIII

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Correct Alternative :- D

94. Article 152 to 237 of our Constitution consist of

- A Right to Equality
- B Right to Constitutional Remedies

C Administration of the States

- D Right to Freedom

Correct Alternative :- C

95. According to Central Pollution Control Board (CPCB) the amount of Particulate Matter presence in an atmosphere can causing the greatest harm to human is _____.

- A More than 2.5 Micrometer

B Less than 2.5 Micrometer

- C More than 2.4 Micrometer

- D Less than 2.4 micrometer

Correct Alternative :- B

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Match the following

- | | |
|---------------|--|
| (a) Tetanus | (i) Inhalation of airborne droplets from a sneeze or cough |
| (b) Marasmus | (ii) Contamination of wounds with the bacteria |
| (c) Pneumonia | (iii) Contaminated food |
| (d) Typhoid | (iv) Protein deficiency diseases |

96.

A a-(ii), b-(i), c-(iv), d(iii)

B a-(ii), b-(iii), c-(iv), d(i)

C a-(iv), b-(iii), c-(ii), d(i)

D a-(ii), b-(iv), c-(i), d(iii)

Correct Alternative :- D

97. Read the following statements and select the correct option stating which are True (T) and which one's are False (F)

- (i) Vitamin K - Egg - Clotting of blood
- (ii) Vitamin E - Wheat - Nervous weakness
- (iii) Vitamin C - Green chilli - Rickets
- (iv) Vitamin B - Peas - Night blindness

A (i) - T, (ii) - T, (iii) - F, (iv) - F

B (i) - T, (ii) - F, (iii) - T, (iv) - F

C (i) - F, (ii) - T, (iii) - T, (iv) - F

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D (i) - T, (ii) - F, (iii) - F, (iv) – F

Correct Alternative :- A

98. Assertion (A):

Smash the boiled potato and add two or three drops of dilute iodine solution on the sample. The potato turns blue - black in colour.

Reason (R) :

Iodine react with amino acid to form amino acid - Iodine complex which is blue black in colour and it indicates the presence of amino acid in the food item potato.

A Both A and R are True

B Both A and R are false

C A is False, R is True

D A is True, R is False

Correct Alternative :- D

99. An unconscious patient is rushed into the emergency room and needs a fast blood transfusion.

Because there is no time to check her medical history or determine her blood type, Which type of blood should you as her doctor, give her?

A A⁻

B AB

C O⁺

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D O

Correct Alternative :- C

100. Excess glucose is converted into insoluble glycogen and is stored in liver and muscles for the future. This process is in the presence of which hormone?

A Insulin

B Glucagon

C Vassopressin

D All of these

Correct Alternative :- A

101. In python, which of the following tuple declaration is wrong.

A `person=(first_name, last_name)`

B `person='raja', last_name`

**C `person first_name="raja";
person last_name="kumar"`**

D `person=first_name, last_name`

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Correct Alternative :- C

102. A struct is the same as a class except that

A all members are public

B cannot be used in inheritance hierarchy

C it does have a this pointer

D it does have a friend function

Correct Alternative :- A

103. Which of the following is true with respect to constructor function in C++?

A A class must have at least one constructor

B A constructor is an unique function which cannot be overloaded

C A constructor function must be invoked with the object name

D A constructor function is automatically invoked when an object is created

Correct Alternative :- D

104. Which one of the statement can be executed correctly in python?

**A for x in y:
block**

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B for : x in y:
block

C for x in y
block

D for x in y:
block:

Correct Alternative :- A

105. Manipulating a pointer with the indirection operator which is also known as

A Direction operator

B Dereference operator

C Reference operator

D Indirect operator

Correct Alternative :- B

106. Which of the following is not a member function of a stream object.

A ios :: in

B ios :: binary

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C ios :: text

D ios :: out

Correct Alternative :- C

What is the meaning of following declaration

107. `int (*p[2])();`

A p is array of pointer to function

B p is pointer to array of function

C p is pointer to function

D p is pointer to such function which return type is array

Correct Alternative :- A

108. Which of the following is not a file opening mode?

A ios::ate

B ios::no create

C ios::no replace

D ios::truncate

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Correct Alternative :- D

109. Which of the following is an exit controlled looping statement?

A for

B while

C do..... while

D all of these

Correct Alternative :- C

110. Polymorphism is not implemented through

A Function overloading

B Operator overloading

C Virtual functions

D Constructors and destructors

Correct Alternative :- D

111. When a method in a subclass has the same name and type signature as a method in the super class, then the method in the sub class _____ the method in the super class.

A Overloads

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B Friend class

C Inherits

D Overrides

Correct Alternative :- D

112. The operator that cannot be overloaded is

A ++

B ::

C --

D *

Correct Alternative :- B

113. If a derived class C is derived from class B which is derived from class A, all through public inheritance, then a class C member function can access

A Protected and public data in C and B

B Protected and public data only C

C Private data in A and B

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D Protected data in A and B

Correct Alternative :- D

114. A leaf class is

A A class with one sub class

B A class with no sub class

C A class having more than one sub classes

D A class having exactly two sub classes

Correct Alternative :- B

115. Modules design is used to maximize cohesion and minimize coupling. Which of the following is the key to implement this rule?

A Inheritance

B Polymorphism

C Encapsulation

D Abstraction

Correct Alternative :- C

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116. If p1 and p2 are properly declared and initialized pointers, then which of the following statements is invalid?

A *p2=*p2+15;

B y=*p1 **p2;

C a=6*(-*p2/*p1);

D x=6>(*p2/p1);

Correct Alternative :- B

Consider the following statements

```
int x=22; int y=15;
```

```
x=(x>y)?(x+y):(x-y);
```

117. What will be the value of x after executing the statements?

A 22

B 37

C 7

D Error: cannot be executed

Correct Alternative :- B

118. Consider the following statements
char *ptr;

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```
ptr="Welcome";  
cout<<*ptr;  
What will be the output?
```

- A Wel come
- B Compile time error
- C Run time error
- D W**

Correct Alternative :- D

119. A function in a derived class that has the same name as a function in the parent class

- A will override the base class function**
- B will cause an error message to display
- C will be overridden by the base class function
- D will execute immediately often the base class function executes

Correct Alternative :- A

120. Virtual functions allow you to

- A create an array of type pointer-to-base class that can hold pointers to derived classes

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- B create functions that have no body
- C group objects of different classes so they can all be accessed by the same function code
- D use the same function call to execute member functions of objects from different classes**

Correct Alternative :- D

- 121. Let R(a,b,c) and S(d,e,f) be two relations in which d is the foreign key of S that refers to the primary key of R. Consider the following four operations on R and S**
- I. Insert into R**
 - II. Insert into S**
 - III. Delete from R**
 - IV. Delete from S**

Which of the following is true about the referential integrity constraint above?

- A None of I,II and IV can cause its violation
- B All of I, II, III and IV can cause its violation
- C Both I and IV can cause violation

D Both I and III can cause its violation

Correct Alternative :- D

- 122. Which of the following combinations represents a valid data model?**

- A E-R model, network data model, normal form data model

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B Relational data model, hierarchical data model, SQL data model

C E-R model, relational data model, Object based data model

D Object based data model, table data model

Correct Alternative :- C

**123. ALTER TABLE order-status
ADD CONSTRAINT order-status-status-ck
CHECK (STATUS IN ('PLACED', 'PENDING', 'SHIPPED'));**

A Will generate check error

B Ensures the status columns is set to PLACED, PENDING OR SHIPPED

C Changes the order-status table to include an id

D New column status is added

Correct Alternative :- B

124. Which of the following statement is TRUE?

A A prime attribute cannot be transitively dependent on a key in BCNF relation

B A prime attribute can be transitively dependent on a key in PJNF relation

C A prime attribute can be transitively dependent on a key in 3NF relation

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D A prime attribute can be transitively dependent on a key in 5NF relation

Correct Alternative :- C

125. Consider the schema $R = (S\ T\ U\ V)$ and the dependencies $S \rightarrow T$, $T \rightarrow U$, $V \rightarrow S$ and $U \rightarrow V$. Let $R = (R_1$ and $R_2)$ be a decomposition such that $R_1 \cap R_2 = \emptyset$. The decomposition is

A NOT in 2 NF

B In 2 NF but not 3 NF

C In 3 NF but not 2 NF

D In both 2 NF and 3 NF

Correct Alternative :- D

126. A functional dependency of the form $X \rightarrow Y$ is trivial if

A $Y \subseteq X$

B $Y \subset X$

C $X \subseteq Y$

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D $X \subset Y$ and $Y \subset X$

Correct Alternative :- A

127. Consider the following relations pertaining to a student database

Student (rollno, name, address)

Enroll (rollno, courseno, coursename)

Where the primary keys are shown underlined. The number of tuples in the Student and Enroll tables are 120 and 8 respectively. What are the maximum and minimum number of tuples that can present, if natural join is performed

A 8, 8

B 120, 8

C 960, 8

D 960, 120

Correct Alternative :- A

128. JDBC is used to

A Connect and execute the query with the database

B Connect the query with the database engine only

C Execute the query with the database engine only

D Access any database without knowing the proprietary

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Correct Alternative :- D

Match list I and II and select the correct answer using the codes given below the lists.

List I

List II

- P. Functional dependency
- Q. A record
- R. A database
- S. The value in the primary key field

- 1. a row in a table
- 2. is a collection of related tables
- 3. different for each record
- 4. describes how one field determines another

129.

A P-2, Q-4, R-3, S-1

B P-4, Q-1, R-2, S-3

C P-3, Q-2, R-4, S-1

D P-3, Q-4, R-2, S-1

Correct Alternative :- B

130. Consider the following two tables

Emp (name, dept, salary, city)

Department(dept, designation, city)

Which of the following query will display the employee names with 'r' as the second letter and ends with 'n'?

A Select * from Emp where name starts 'r' and 'n';

B Select name from Emp where name like '*r%n';

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C Select name from Emp where name like '%r%n';

D Select name from Emp where name like '_r%n';

Correct Alternative :- D

131. A style sheet defined in the header section is called as

A in-line style

B internal style sheet

C external style sheet

D all of these

Correct Alternative :- C

132. The attributes of the anchor tag (<a>) are

A url, name

B name, href

C href, url

D all of these

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Correct Alternative :- B

133. The alt attribute is used to display the text

A In the place of a graphic in a non-graphic browser

B if browser takes lot of time to load a picture

C Both In the place of a graphic in a non-graphic browser and if browser takes lot of time to load a picture

D Image resolution is low

Correct Alternative :- C

134. _____ is used to locate a particular resource on the network.

A URL

B URN

C URI

D None of these

Correct Alternative :- C

135. Which one of the following is true about method attribute in form tag?

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- A Value in the method = Get means getting inputs from the user
- B Sending values using **Get** method has no restriction
- C More number of data can be send to the server using post method than Get method**
- D **Get** method is used only in internet explorer

Correct Alternative :- C

136. What are the possible values of VALIGN parameter in table tag can hold?

- A left, top
- B left, middle
- C middle, bottom**
- D center, right

Correct Alternative :- C

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Identify the output for the following sample code.

```
< frameset rows = "50%, 50%" >  
< frame src = "a.html" >  
< frameset cols = "25%, 75 %" >  
< frame src = "b.html" >  
< frame src = "c.html" >  
< /frameset >
```

137.

- A Error in the code
- B Display area of c.html is more
- C Only a.html file will display
- D Display area of a.html is more**

Correct Alternative :- D

138. Which of the following is the valid URL?

- A <https://www.tn.edu.in>
- B <file:///D:/exam/Q.doc>
- C <news:tn.st.exam>
- D All of these**

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Correct Alternative :- D

139. Which one of the following is not true about server side includes while building the Asp page?

- A Insert the value of an environment variable into a page
- B Insert a file into another file
- C Run an application or command in the client**
- D Run an application or command and insert the results into a page

Correct Alternative :- C

140. What is the role of response.write method of the response object?

- A Add information into the HTTP response stream being sent to the client**
- B Add error message into the HTTP response stream being sent to the server
- C Add error message into the HTTP response stream being sent to the client
- D Add information into the HTTP response stream being sent to the server

Correct Alternative :- A

141. Which are the events that have default actions that can be cancelled by event handlers?

- A Submit and form-related events

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B Reset and form-related events

C Submit and Reset events

D Form related events

Correct Alternative :- C

142. Removing blank space or “dead air” at the beginning or end of a recording is called as

A Quieting

B Pre-rolling

C Quantizing

D Trimming

Correct Alternative :- D

143. Which of these formats does not change the image quality when the image is saved

A TIFF

B JPEG

C PNG

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D GIF

Correct Alternative :- A

144. What is the shortcut key to create a duplicate layer of a layer?

A Ctrl + J

B Ctrl + T

C Ctrl + N

D Ctrl + D

Correct Alternative :- A

145. Drop shadow, inner glow and level are examples of _____ you need to use with text.

A Filters

B Blending options

C Image adjustments

D Layer modes

Correct Alternative :- B

146. How will you add special filters to a layer?

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A Select layer -> Special Filters

B Select Filters -> Filter Gallery -> then choose the desired filter from the available options

C You cannot add special filters to text

D Choose the Filter icon from the tools menu then use the options bar at the top of the screen to choose the desired filter

Correct Alternative :- B

147. Consider the following javascript code

```
a = new Array();  
b = new Array();  
a[1] = 3;  
b[2] = 5;  
a = b;
```

After execution, what are the values present in a[1] and a[2].

A a[1] = 3 and a[2] = 5

B a[1] is undefined and a[2] = 5

C a[1] and a[2] are undefined

D Error

Correct Alternative :- B

148. The file size of a five- second recording sampled at 22 kHz, 16-bit stereo (two tracks) would be about

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A 110,000 bytes

B 220,000 bytes

C 440,000 bytes

D 880,000 bytes

Correct Alternative :- C

149. The slower a user's connection, the longer he must wait for enough of the sound to download so that the entire file will have downloaded by the time the sound reaches the end. This effect is called

A Streaming latency

B Post-processing

C Compression

D Multitap delay

Correct Alternative :- A

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150. Which of these statements regarding the MIDI audio format is not true?

- A The sound can easily be changed by changing instruments
- B Sound tracks can be created using sequencing software
- C MIDI is analogous to bitmapped images**
- D Files are generally smaller than the same digital audio sound

Correct Alternative :- C