MCR 24

1. Current age of Ritu and Rinki is in the ratio 3:4. 6 years back, the ratio of their ages was 2:3. What is the present age of Ritu?

   a. 12 years

   b. 18 years

   c. 20 years

   d. 22 years

2. The sum of the ages of a son and father is 56 years; after four years the age of the father will be three times that of the son. What is the age of the father and the son, respectively?

   a. 41 years, 12 years

   b. 30 years, 12 years

   c. 34 years, 11 years

   d. 44 years, 12 years

3. The speed of a motor boat in still water is 7km/hr. If the speed of the motor boat against the stream is 5 km/hr, what is the speed of the stream?

   a. 1.5 km/hr

   b. 2 km/hr

   c. 2.5 km/hr

   d. 1 km/hr

4. Rahul can row downstream at 11 km/h and upstream at 7 km/h. Find the speed of Rahul in still water and speed of current.

   a. 9 km/h and 2 km/h

   b. 8 km/h and 6 km/h

   c. 7 km/h and 3 km/h

   d. 8 km/h and 2 km/h

5. Cynthia has borrowed Rs. 6,000 at the rate of 7% S.I. What amount does she need to pay after 3 years to clear the debt?

   a. Rs. 7,500

   b. Rs. 7,260

   c. Rs. 6,100

   d. Rs. 6,300

6. If Rakesh borrows Rs. 36,000 from Sathesh at rate of interest 6% S.I, at the end of four years, how much interest Rakesh has to pay?

   a. Rs. 8,560

   b. Rs. 8,640

   c. Rs. 8,500

   d. Rs. 8,080

7. A train moving at 108 km/hr crosses a platform in 30 seconds. Then it crosses a man running at 12 km/hr in the same direction of train in 9 seconds. What is the length of train and platform in m?

   a. 240 and 660

   b. 200 and 620

   c. 220 and 600

   d. 250 and 640

8. Two trains are moving towards each other with speeds 50 km/hr and 55 km/hr from different stations R and S. While they meet, the second train from station S has covered 20 km more distance than the first train which starts from station R. What is the distance between the two stations?

   a. 400 km

   b. 440 km

   c. 420 km

   d. 460 km

9. 50 men can paint a building in 15 days working 4 hours a day. In how many days 40 men working 5 hours a day will complete the work?

   a. 14 days

   b. 15 days

   c. 16 days

   d. 17 days

10. Anish and Bala can do a work in 8 days, Bala and Cynthia can do the same work in 12 days. Anish, Bala and Cynthia together can finish it in 6 days. How many days A and C will together do it?

   a. 4 days

   b. 6 days

   c. 8 days

   d. 12 days

11. Reena and Shaloo are partners in a business. Reena invests Rs.35,000 for 8 months and Shaloo invests Rs.42,000 for 10 months. Out of Profit of Rs.31,570, Reena's share is

   a. Rs.9,471

   b. Rs.12,628

   c. Rs.18,040

   d. Rs.18,942

12. A started a business with Rs.21,000 and is joined afterwards by B with Rs.36,000. After how many months did B join if the profit at the end of the year is divided equally?

   a. 3

   b. 4

   c. 5

   d. 6

13. A, B and C enter into a partnership in the ratio $\dfrac{7}{2}:\dfrac{4}{3}:\dfrac{6}{5}$. After 4 months, A increases his share by 50%. If the total profit at the end of one year be Rs.21,600 then B's share in the profit is:

   a. Rs.2,100

   b. Rs.2,400

   c. Rs.3,600

   d. Rs.4,000

14. If 4 (A's capital) = 6 (B's capital) = 10 (C's capital), then out of profit of Rs.4,650 C will receive:

   a. Rs. 465

   b. Rs. 900

   c. Rs. 1,550

   d. Rs. 2,250

15. The greatest number of four digits which is divisible by 15, 25, 40 and 75 is

   a. 9,000

   b. 9,400

   c. 9,600

   d. 9,800

16. The least multiple of 7, which leaves a remainder of 4, when divided by 6, 9, 15 and 18 is:

   a. 74

   b. 94

   c. 184

   d. 364

17. Find the maximum number of students among whom 1001 pens and 910 pencils can be distributed in such a way that each student gets the same number of pens and same number of pencils

   a. 91

   b. 910

   c. 1001

   d. 1911

18. A vendor bought 6 toffees for a rupee. How many for a rupee must he sell to gain 20%?

a. 3

b. 4

c. 5

d. 6

19. A trader mixes 26 kg of rice at Rs.20 per kg with 30 kg of rice of other variety at Rs.36 per kg and sells the mixture at Rs.30 per kg. His profit percent is

a. No profit, no loss

b. 5

c. 8

d. 10

20. Tarun got 30% concession on the labelled price of an article and sold it for Rs.8,750 with 25% profit on the price he bought. What was the labelled price?

a. Rs.10,000

b. Rs.12,000

c. Rs.16,000

d. Rs.18,000

21. The difference between the compound interest, compounded annually and the simple interest on a certain sum for 2 years at 6% per annum is Rs.18. Find the sum.

a. 4,500

b. 5,500

c. 5,300

d. 5,000

22. A man deposited Rs.1,000 in a bank. In return he got Rs.1,331. Bank gave interest 10% per annum. How long did he keep the money in the bank?

a. 5 years

b. 4 years

c. 3 years

d. 1 year

23. Two pipes can fill a cistern in 14 hour and 16 hour respectively. The pipes are opened simultaneously and it is found that due to leakage in the bottom it took 32 minutes more to fill the cistern. When the cistern is full, in what time will the leak empty it?

a. 110 hour

b. 112 hour

c. 102 hour

d. 119 hour

24. A tank is filled in 5 hours by three pipes A, B and C. The pipe C is twice as fast as B and B is twice as fast as A. How much time will pipe A alone take to fill the tank?

a. 35 hr

b. 25 hr

c. 20 hr

d. 45 hr

25. Pipes A and B can fill a tank in 5 and 6 hour respectively. Pipe C can empty it in 12 hour. If all the three pipes are opened together then the tank will be filled in

   a. $3\dfrac{9}{17}$ hour

   b. $3\dfrac{7}{9}$ hour

   c. $3\dfrac{9}{12}$ hour

   d. $3\dfrac{7}{17}$ hour

26. Life is to death as pleasure is to

   a.   Poverty

   b.   Suffering

   c.   Anguish

   d.   Pain

27. The new education policy provides a useful _____ for the planners to remove illiteracy.

   a.   breakup

   b.   breakthrough

   c.   breakaway

   d.   break-in

28. Soft minded individuals are _____ to embrace all kinds of superstitions.

   a.   disposed

   b.   eager

   c.   reluctant

   d.   prone

29. The paths of glory lead _____ to the grave.

   a.   straight

   b.   but

   c.   in

   d.   directly

30. Complete the statement correctly and meaningfully.

   She never visits any zoo because she is strong opponent of the idea of _____.

   a.   Setting the animals free into forest

   b.   Watching the animals in their natural abode

   c.   Going out of the house on a holiday

   d.   Holding the animals in captivity for our joy

31. Complete the statement correctly and meaningfully.

   Owing to the acute power shortage, the people of our locality have decided to _____.

   a.   Dispense with other non-conventional energy sources

   b.   Resort to use of electricity only when it is inevitable

   c.   Off-switch the electrical appliance while not in use

   d.   Explore other avenues for utilising the excess power

MCR 24

Directions (32-35). Rearrange the following four sentences in proper sequence to form a meaningful paragraph, then answer the questions given below.

1. The history of mankind is full of such fightings between communities, nations and people.

2. From the primitive weapon of warfare, man has advanced to the modern nuclear weapons.

3. Ever since the dawn of civilisation man has been fighting with man.

4. A modern war is scientific in character, but the effect is the same wiping human existence out of this earth.

32. Which of the following should be the second sentence?

   a. 1
   b. 2
   c. 3
   d. 4

33. Which of the following should be the fourth sentence?

   a. 1
   b. 2
   c. 3
   d. 4

34. Which of the following should be the third sentence?

   a. 1
   b. 2
   c. 3
   d. 4

35. Which of the following should be the first sentence?

   a. 1
   b. 2
   c. 3
   d. 4

36. Spot the error in underlined part:

   However influential he will be, he cannot get an upper hand over his co-workers.

   a. However influenced he will be
   b. However influencial he may be
   c. However influenced he may be
   d. No correction required

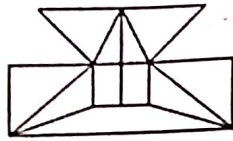37. Choose the word which best expresses the meaning of the word DILIGENT.

   a. Progressive
   b. Brilliant
   c. Inventive
   d. Hard-working

38. Find the number of triangles in the given figure.

   a. 22
   b. 24
   c. 26
   d. 28
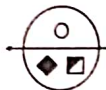
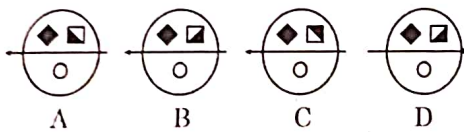39. Find the minimum number of straight lines required to make the given figure.

a. 16
b. 17
c. 18
d. 19

40. Choose the correct water image of the given problem figure from the answer figures.

Problem Figure

Answer Figures

a. A
b. B
c. C
d. D

41. What do you understand by - 'If K is there L has to be there'

a. K and L will always be together
b. K is not there, then L will not be there
c. K is there, then L will also be there
d. K and L will always be not together

42. Vineet is taller than Raman but shorter than Jyoti. Sumit is the shortest. Deepak is taller than Sumit but shorter than Raman. Who is the tallest?

a. Jyoti
b. Raman
c. Vineet
d. Deepak

43. The square boxes in the figures given are to be painted with different colours such that no two adjacent boxes (even diagonally) have same colour. How many minimum colours do you need in each case?
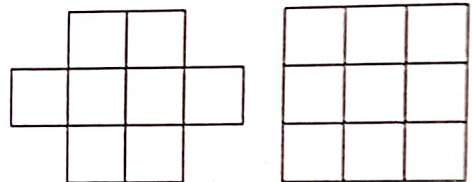
a. (3, 4)
b. (4, 4)
c. (4, 5)
d. (3, 5)

44. Find the missing numbers

15	6	5
13	3	9
8	2	?
20	7	13

a. 1
b. 6
c. 7
d. 14

45. Select the figure in which the given figure is hidden

a. 1
b. 2
c. 3
d. 4

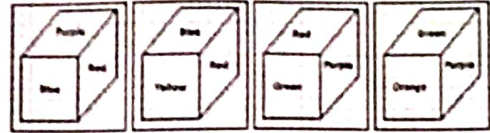46. What does this symbol mean '^'?

a. Caret
b. Bar
c. Ampersand
d. Reversed Caret
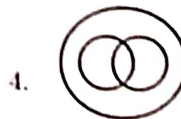
47. $8+(6*5) - 10 = ?$

a. 76
b. 28
c. 80
d. 82

48. In the give cubes, which colour is opposite to purple?

a. Violet
b. Red
c. Yellow
d. Blue

49. Identify the diagram that best represents the relationship among classes given below Males, Fathers, Engineers

Options:

1.

2.

3.

4.

a. 1
b. 2
c. 3
d. 4

50. If a mirror is placed on the line MN, then which is the right figure of the given image?

Options:

1.

2.

3.

4.
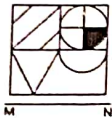
a. 1

b. 2

c. 3

d. 4

51. What is in this sequence?

Y, V, S, P, ____

a. N

b. M

c. Q

d. L

52. Biology : Study of life, Geology : ?

a. Study of plants

b. Study of water

c. Study of earth

d. Study of clouds

53. A, B and C are persons. Consider these relations – If A+B means A is a brother of B, A%B means A is a father of B, and AXB is A is a sister of B. What does M%N%P represent?

a. M is grandfather of P

b. N is brother of M

c. P is grandfather of M

d. M is uncle of P

54. If eye is linked to webcamera, brain is linked to

a. Keyboard

b. Mouse

c. Random Access Memory

d. Processor

55. Find the odd one in this sequence 5, 10, 15, 26, 37

a. 5

b. 10

c. 15

d. 26

56. Which of the following does not exist?

   a. Megabyte

   b. Kilobyte

   c. Yugabyte

   d. Gigabyte

57. A is to the east of B, B is to the north of C and D is to the south of C. What is the direction of D with respect to A?

   a. East

   b. North East

   c. South

   d. South West

58. If addition is represented by &, multiplication by −, division by / and subtraction by ×, and, find the value of 5 & 3 × 6 − 2

   a. 4

   b. 0

   c. −4

   d. Cannot be determined

59. What letter replaces the question mark?

   C   G   L   R

   X   T   O   ?

   a. G

   b. E

   c. L

   d. I

60. In a group of 25, 10 have studied French, 11 have studied Spanish, and 8 have not studied either. How many of these studied both French and Spanish?

   a. 0

   b. 4

   c. 12

   d. 6

61. Sita, Rita, Gita and Latha are 4 Sisters. If the following statements are all true, who among them is the youngest?

   (i) Sita is the oldest.

   (ii) Latha is not the oldest.

   (iii) Gita is younger to Rita

   (iv) Gita is not the youngest

   a. Sita

   b. Latha

   c. Gita

   d. Rita and Latha

62. Consider the following statements:

   (i) Hari weighs less than Guru

   (ii) Hari weighs more than Mano

   (iii) Mano weighs the least

   Which of the following is correct?

   a. (iii) is a conclusion from (i) and (ii)

   b. (iii) is true, but not (i)

   c. (iii) cannot be determined from (i) and (ii)

   d. (i) and (iii) are false

63. At IPL matches, Peter was sitting in seat 102. Maria was sitting in the 2nd seat right of Peter. Tom was sitting in the seat to the left of Peter. Max was sitting right to Peter at 106. John in the middle of Max and Maria. In which seat John was sitting?

 a. 101

 b. 103

 c. 104

 d. 105

64. Arrange in a meaningful sequence

 1. Appointment

 2. Consultation

 3. Sick

 4. Treatment

 5. Recovery

 a. 1, 2, 3, 4, 5

 b. 3, 1, 2, 4, 5

 c. 3, 2, 1, 4, 5

 d. 3, 1, 4, 5, 2

65. Which is the most important part of a book?

 a. Education

 b. Pages

 c. Knowledge

 d. Images

66. If WPKX is UNIV, _____ is ANNA.

 a. CPPC

 b. WPPW

 c. PCCP

 d. VCCV

(Questions 67, 68, 69, 70 are from these statements)

A company has four offices, numbered 1, 2, 3, and 4. Each of its offices has exactly one computer and exactly one printer. Each of these eight machines was bought in either 2019, 2020 or 2021 The eight machines were bought in a manner consistent with the following conditions:

(i) In all the four offices, computers are bought earlier than printers or in the same year.

(ii) Computer in office 2 and printer in office 1 are bought in the same year.

(iii) Computer in office 3 and printer in office 4 are bought in the same year.

(iv) Computer in office 2 and Computer in office 3 are not purchased in the same year.

(v) Computer in office 1 and Printer in Office 3 are purchased in the same year 2020.

67. If the computer in office 3 is bought earlier than the printer in the same office, then

 a. Printer in office 1 is bought in 2019

 b. Computer in office 2 is bought in 2019

 c. Printer in office 4 is bought in 2019

 d. Computer in office 1 is bought in 2021

68. If the computer in office 3 is bought earlier than the printer in the same office and printer in office 1 is bought during 2021, then printer in office 2 is bought during

a. 2019

b. 2020

c. 2021

d. 2020 or 2021

69. If the computer and printer in office 3 are bought in the same year, then

a. Printer in office 2 and printer in office 3 are bought in the same year

b. Computer and printer in office 2 are purchased in 2021

c. Printer in office 1 is bought during 2019

d. Printer in office 4 is bought during 2019

70. If the computer and printer in office 3 are bought in the same year, then the computer in office 4 is bought during.

a. 2020

b. 2021

c. 2019

d. 2020 or 2019

(Questions 71 - 75)

There are six students A, B, C, D, E, F Each student opts two courses, 1 core and the other elective.

(i) D's elective is Maths and three other students have a core course.

(ii) E and F have Chemistry as one of their subjects.

(iii) F's core course is Physics, which is elective for both C and E.

(iv) Maths and English are A's subjects as core and elective, respectively.

(v) Biology is an elective of only one of them

(vi) The only female student is the one who has Maths as elective and English as core course.

71. Who is the female student?

a. A

b. C

c. D

d. E

72. What is the core course of C?

a. Maths

b. Physics

c. Chemistry

d. English

73. Which of the following has same courses set as that of F?

a. A

b. C

c. D

d. E

74. Who among the following have Maths as the core course?

    a.   B and C

    b.   Only B

    c.   D and E

    d.   D and F

75. Who has taken the course of Biology?

    a.   A

    b.   B

    c.   C

    d.   D

76. Binary equivalent of 10 is

    a.   1010

    b.   1110

    c.   1101

    d.   1001

77. 1s complement of 1001

    a.   0110

    b.   0111

    c.   1111

    d.   0101

78. BCD of 82 is

    a.   0110 0010

    b.   0000 0110

    c.   1000 0010

    d.   0110 0110

79. In Boolean algebra $A + A' =$

    a.   A

    b.   A'

    c.   1

    d.   0

80. Full adder adds

    a.   2 bits

    b.   1 bit

    c.   3 bits

    d.   1/2 bit

81. Even parity bit for the given binary number 100111 is

    a.   0

    b.   1

    c.   2

    d.   error

82. Flip flops can be generated using

    a.   Not gate

    b.   NAND gate

    c.   OR gate

    d.   AND gate

83. A functional unit of the computer that performs logical operations.

    a.   ALU

    b.   adder

    c.   AND gate

    d.   OR gate

84. Collection of wires that carry address data signals from control unit to other parts of computer system is called as

    a. Data bus

    b. Control bus

    c. Address bus

    d. Communication wires

85. Cache memory used for

    a. Increasing storage space

    b. Increasing CPU cycles

    c. Increasing clock speed

    d. Improving performance of system

86. High speed memory placed between the processor and main memory is

    a. Flash memory

    b. Cache memory

    c. Magnetic disk

    d. Secondary memory

87. In binary addition 0011 + 0010 equals

    a. 0111

    b. 0101

    c. 0110

    d. 1000

88. Which is the shortest covering network?

    a. LAN

    b. MAN

    c. WAN

    d. PAN

89. Which of the following statements in SQL is/are considered as Data manipulation language?

    a. Update

    b. Insert

    c. Delete

    d. All of the Above

90. Which of the following represents a nibble data?

    a. 2 bits

    b. 4 bits

    c. 6 bits

    d. 8 bits

91. Which of these tech company owns Firefox web browser?

    a. Lenovo

    b. IBM

    c. Apple

    d. Mozilla

92. Which is the layer of a computer system between the hardware and the user program?

    a. System environment

    b. Operating environment

    c. Operating system

    d. Software Environment

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   d. Software Environment

93. Which of the following is a set of keywords, symbol, and a system of rules for constructing statements by which humans can communicate the instructions to be executed by a computer?

   a. Computer program

   b. Programming language

   c. Assembler

   d. Syntax

94. Which keystroke will take you at the beginning or the end of a long document?

   a. Ctrl+PageUp and Ctrl + PageDown

   b. Shift+Home and Shift+End

   c. Ctrl+Home and Ctrl+End

   d. The only way is by using the right scroll bar

95. BIOS stand for

   a. Basic Input Output System

   b. Basic Instruction Output System

   c. Basic Interface Output System

   d. Basic Interaction Output System

96. In which year was the first web browser created?

   a. 1992

   b. 1991

   c. 1990

   d. 1995

97. Codes consisting of bars or lines of varying widths or lengths that are computer-readable are known as

   a. A bar code

   b. An ASCII code

   c. A magnetic tape

   d. A light pen

98. What is the limit of characters for a tweet on Twitter?

   a. 110

   b. 280

   c. 120

   d. 150

99. The address given to each computer on the Internet is known as

   a. Hardware number

   b. Device address

   c. IP address

   d. NET address

100. A compiler is used to translate a program written in

   a. A low level language

   b. A high level language

   c. Assembly language

   d. Machine language

MCA

QNO	KEY
1	B
2	D
3	B
4	A
5	B
6	B
7	A
8	C
9	B
10	C
11	B
12	C
13	D
14	B
15	C
16	D
17	A
18	C
19	B
20	A
21	D
22	C
23	B
24	A
25	A
26	D
27	B
28	D
29	B
30	D
31	B
32	A
33	D
34	B
35	C
36	B
37	D
38	D
39	B
40	A
41	C
42	A
43	B
44	A
45	C
46	A
47	B
48	C
49	C
50	B
51	B
52	C
53	A
54	D
55	C
56	C
57	D
58	C
59	D
60	B
61	B
62	A
63	D
64	B
65	B
66	A
67	C
68	C
69	A
70	A
71	C
72	A
73	D
74	A
75	B
76	A
77	A
78	C
79	C
80	C
81	A
82	B
83	A
84	C
85	KEY
86	B
87	B
88	D
89	D
90	B
91	D
92	C
93	B
94	C
95	A
96	C
97	A
98	B
99	C
100	B