

Aptitude Questions

1. One of the following is my secret word: AIM DUE MOD OAT TIE. With the list in front of you, if I were to tell you any one of my secret word, then you would be able to tell me the number of vowels in my secret word. Which is my secret word?

Ans. TIE

2. In the following figure: A B C

D
E F G
H
I

Each of the digits 1, 2, 3, 4, 5, 6, 7, 8, and 9 is:

- a) Represented by a different letter in the figure above.
 - b) Positioned in the figure above so that each of $A + B + C$, $C + D + E$, $E + F + G$, and $G + H + I$ is equal to 13.
- Which digit does E represent?

Ans. E is 4

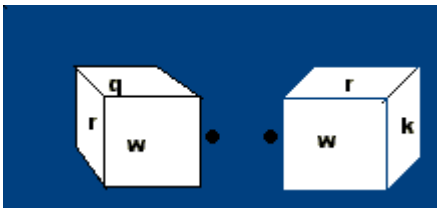
3. One of Mr. Horton, his wife, their son, and Mr. Horton's mother is a doctor and another is a lawyer.

- a) If the doctor is younger than the lawyer, then the doctor and the lawyer are not blood relatives.
- b) If the doctor is a woman, then the doctor and the lawyer are blood relatives.
- c) If the lawyer is a man, then the doctor is a man.

Whose occupation you know?

Ans. Mr. Horton: he is the doctor.

4. Here is a picture of two cubes:



- a) The two cubes are exactly alike.
 - b) The hidden faces indicated by the dots have the same alphabet on them.
- Which alphabet- q, r, w, or k is on the faces indicated by the dots?

Ans. q

5. In the following figure:

A		D
B	G	E
C		F

Each of the seven digits from 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9 is:

a) Represented by a different letter in the figure above.

b) Positioned in the figure above so that $A*B*C$, $B*G*E$, and $D*E*F$ are equal.

Which digit does G represent?

Ans. G represents the digit 2.

6. Mr. and Mrs. Aye and Mr. and Mrs. Bee competed in a chess tournament. Of the three games played:

a) In only the first game were the two players married to each other.

b) The men won two games and the women won one game.

c) The Ayes won more games than the Bees.

d) Anyone who lost a game did not play the subsequent game.

Who did not lose a game?

Ans. Mrs. Bee did not lose a game.

7. Three piles of chips--pile I consists one chip, pile II consists of chips, and pile III consists of three chips--are to be used in game played by Anita and Brinda. The game requires:

a) That each player in turn take only one chip or all chips from just one pile.

b) That the player who has to take the last chip loses.

c) That Anita now have her turn.

From which pile should Anita draw in order to win?

Ans. Pile II

8. Of Abdul, Binoy, and Chandini:

a) Each member belongs to the Tee family whose members always tell the truth or to the El family whose members always lie.

b) Abdul says "Either I belong or Binoy belongs to a different family from the other two."

Whose family do you name of?

Ans. Binoy's family--El.

9. In a class composed of x girls and y boys what part of the class is composed of girls

A. $y/(x + y)$

B. x/xy

C. $x/(x + y)$

D. y/xy

Ans. C

10. What is the maximum number of half-pint bottles of cream that can be filled with a 4-gallon can of cream (2 pt. = 1 qt. and 4 qt. = 1 gal)

- A. 16
- B. 24
- C. 30
- D. 64

Ans. D

11. If the operation, \wedge is defined by the equation $x \wedge y = 2x + y$, what is the value of a in $2 \wedge a = a \wedge 3$

- A. 0
- B. 1
- C. -1
- D. 4

Ans. B

12. A coffee shop blends 2 kinds of coffee, putting in 2 parts of a 33p. a gm. grade to 1 part of a 24p. a gm. If the mixture is changed to 1 part of the 33p. a gm. to 2 parts of the less expensive grade, how much will the shop save in blending 100 gms.

- A. Rs. 90
- B. Rs. 1.00
- C. Rs. 3.00
- D. Rs. 8.00

Ans. C

13. There are 200 questions on a 3 hr examination. Among these questions are 50 mathematics problems. It is suggested that twice as much time be spent on each maths problem as for each other question. How many minutes should be spent on mathematics problems

- A. 36
- B. 72
- C. 60
- D. 100

Ans. B

14. In a group of 15, 7 have studied Latin, 8 have studied Greek, and 3 have not studied either. How many of these studied both Latin and Greek

- A. 0
- B. 3
- C. 4
- D. 5

Ans. B

15. If $13 = 13w/(1-w)$, then $(2w)^2 =$

- A. $1/4$
- B. $1/2$
- C. 1
- D. 2

Ans. C

16. If a and b are positive integers and $(a-b)/3.5 = 4/7$, then

- (A) $b < a$
- (B) $b > a$
- (C) $b = a$
- (D) $b \geq a$

Ans. A

17. In June a baseball team that played 60 games had won 30% of its games played. After a phenomenal winning streak this team raised its average to 50%. How many games must the team have won in a row to attain this average?

- A. 12
- B. 20
- C. 24
- D. 30

Ans. C

18. M men agree to purchase a gift for Rs. D . If three men drop out how much more will each have to contribute towards the purchase of the gift?

- A. $D/(M-3)$
- B. $MD/3$

- C. $M/(D-3)$
D. $3D/(M^2-3M)$

Ans. D

19. A company contracts to paint 3 houses. Mr. Brown can paint a house in 6 days while Mr. Black would take 8 days and Mr. Blue 12 days. After 8 days Mr. Brown goes on vacation and Mr. Black begins to work for a period of 6 days. How many days will it take Mr. Blue to complete the contract?

- A. 7
B. 8
C. 11
D. 12

Ans. C

20. 2 hours after a freight train leaves Delhi a passenger train leaves the same station travelling in the same direction at an average speed of 16 km/hr. After travelling 4 hrs the passenger train overtakes the freight train. The average speed of the freight train was?

- A. 30
B. 40
C. 58
D. 60

Ans. B

21. If $9x-3y=12$ and $3x-5y=7$ then $6x-2y = ?$

- A. -5
B. 4
C. 2
D. 8

Ans. D

22. There are 5 red shoes, 4 green shoes. If one draw randomly a shoe what is the probability of getting a red shoe

Ans $5C_1 / 9C_1$

23. What is the selling price of a car? If the cost of the car is Rs.60 and a profit of 10% over selling price is earned

Ans: Rs 66/-

24. $\frac{1}{3}$ of girls , $\frac{1}{2}$ of boys go to canteen .What factor and total number of classmates go to canteen.

Ans: Cannot be determined.

25. The price of a product is reduced by 30% . By what percentage should it be increased to make it 100%

Ans: 42.857%

26. There is a square of side 6cm . A circle is inscribed inside the square. Find the ratio of the area of circle to square.

Ans. $\frac{11}{14}$

27. There are two candles of equal lengths and of different thickness. The thicker one lasts of six hours. The thinner 2 hours less than the thicker one. Ramesh lights the two candles at the same time. When he went to bed he saw the thicker one is twice the length of the thinner one. How long ago did Ramesh light the two candles .

Ans: 3 hours.

28. If $M/N = 6/5$, then $3M+2N = ?$

29. If $p/q = 5/4$, then $2p+q= ?$

30. If PQIRST is a parallelogram what it the ratio of triangle PQS & parallelogram PQIRST .

Ans: 1:2

31. The cost of an item is Rs 12.60. If the profit is 10% over selling price what is the selling price ?

Ans: Rs 13.86/-

32. There are 6 red shoes & 4 green shoes . If two of red shoes are drawn what is the probability of getting red shoes

Ans: $\frac{6C_2}{10C_2}$

33. To 15 lts of water containing 20% alcohol, we add 5 lts of pure water. What is % alcohol.

Ans : 15%

34. A worker is paid Rs.20/- for a full days work. He works $1\frac{1}{3}, 2\frac{2}{3}, 1\frac{3}{4}$ days in a week. What is the total amount paid for that worker ?

Ans : 57.50

35. If the value of x lies between 0 & 1 which of the following is the largest?

- (a) x
- (b) x^2
- (c) $-x$
- (d) $1/x$

Ans : (d)

36. If the total distance of a journey is 120 km .If one goes by 60 kmph and comes back at 40kmph what is the average speed during the journey?

Ans: 48kmph

37. A school has 30% students from Maharashtra .Out of these 20% are Bombay students. Find the total percentage of Bombay?

Ans: 6%

38. An equilateral triangle of sides 3 inch each is given. How many equilateral triangles of side 1 inch can be formed from it?

Ans: 9

39. If $A/B = 3/5$, then $15A = ?$

Ans : 9B

40. Each side of a rectangle is increased by 100% .By what percentage does the area increase?

Ans : 300%

41. Perimeter of the back wheel = 9 feet, front wheel = 7 feet on a certain distance, the front wheel gets 10 revolutions more than the back wheel .What is the distance?

Ans : 315 feet.

42. Perimeter of front wheel =30, back wheel = 20. If front wheel revolves 240 times. How many revolutions will the back wheel take?

Ans: 360 times

43. 20% of a 6 litre solution and 60% of 4 litre solution are mixed. What percentage of the mixture of solution

Ans: 36%

44City A's population is 68000, decreasing at a rate of 80 people per year. City B having population 42000 is increasing at a rate of 120 people per year. In how many years both the cities will have same population?

Ans: 130 years

45Two cars are 15 kms apart. One is turning at a speed of 50kmph and the other at 40kmph . How much time will it take for the two cars to meet?

Ans: 3/2 hours

46A person wants to buy 3 paise and 5 paise stamps costing exactly one rupee. If he buys which of the following number of stamps he won't able to buy 3 paise stamps.

Ans: 9

47There are 12 boys and 15 girls, How many different dancing groups can be formed with 2 boys and 3 girls.

48Which of the following fractions is less than $\frac{1}{3}$

- (a) $\frac{22}{62}$
- (b) $\frac{15}{46}$
- (c) $\frac{2}{3}$
- (d) 1

Ans: (b)

49There are two circles, one circle is inscribed and another circle is circumscribed over a square. What is the ratio of area of inner to outer circle?

Ans: 1 : 2

50Three types of tea the a,b,c costs Rs. 95/kg,100/kg and70/kg respectively.
How many kgs of each should be blended to produce 100 kg of mixture worth Rs.90/kg,
given that the quantities of band c are equal

- a)70,15,15
- b)50,25,25
- c)60,20,20
- d)40,30,30

Ans. (b)

51. In a class, except 18 all are above 50 years.
15 are below 50 years of age. How many people are there

- (a) 30
- (b) 33
- (c) 36
- (d) none of these.

Ans. (d)

52. If a boat is moving in upstream with velocity of 14 km/hr and goes downstream with a velocity of 40 km/hr, then what is the speed of the stream ?

- (a) 13 km/hr
- (b) 26 km/hr
- (c) 34 km/hr
- (d) none of these

Ans. A

53. Find the value of $(0.75 * 0.75 * 0.75 - 0.001) / (0.75 * 0.75 - 0.075 + 0.01)$

- (a) 0.845
- (b) 1.908
- (c) 2.312
- (d) 0.001

Ans. A

54. A can have a piece of work done in 8 days, B can work three times faster than the A, C can work five times faster than A. How many days will they take to do the work together ?

- (a) 3 days
- (b) 8/9 days
- (c) 4 days
- (d) can't say

Ans. B

55. A car travels a certain distance taking 7 hrs in forward journey, during the return journey increased speed 12km/hr takes the time 5 hrs. What is the distance travelled

- (a) 210 kms
- (b) 30 kms
- (c) 20 kms
- (d) none of these

Ans. B

56. Instead of multiplying a number by 7, the number is divided by 7. What is the percentage of error obtained ?

57. Find $(7x + 4y) / (x-2y)$ if $x/2y = 3/2$?

- (a) 6
- (b) 8
- (c) 7
- (d) data insufficient

Ans. C

58. A man buys 12 lts of liquid which contains 20% of the liquid and the rest is water. He then mixes it with 10 lts of another mixture with 30% of liquid. What is the % of water in the new mixture?

59. If a man buys 1 lt of milk for Rs.12 and mixes it with 20% water and sells it for Rs.15, then what is the percentage of gain?

60. Pipe A can fill a tank in 30 mins and Pipe B can fill it in 28 mins. If $3/4$ th of the tank is filled by Pipe B alone and both are opened, how much time is required by both the pipes to fill the tank completely ?

61. If on an item a company gives 25% discount, they earn 25% profit. If they now give 10% discount then what is the profit percentage.

- (a) 40%
- (b) 55%
- (c) 35%
- (d) 30%

Ans. D

62. A certain number of men can finish a piece of work in 10 days. If however there were 10 men less it will take 10 days more for the work to be finished. How many men were there originally?

- (a) 110 men
- (b) 130 men
- (c) 100 men
- (d) none of these

Ans. A

63. In simple interest what sum amounts of Rs.1120/- in 4 years and Rs.1200/- in 5 years ?

- (a) Rs. 500
- (b) Rs. 600
- (c) Rs. 800
- (d) Rs. 900

Ans. C

64. If a sum of money compound annually amounts of thrice itself in 3 years. In how many years will it become 9 times itself.

- (a) 6
- (b) 8
- (c) 10
- (d) 12

Ans A

65. Two trains move in the same direction at 50 kmph and 32 kmph respectively. A man in the slower train observes the 15 seconds elapse before the faster train completely passes by him. What is the length of faster train ?

- (a) 100m
- (b) 75m
- (c) 120m
- (d) 50m

Ans B

66. How many meshes are there in 1 square meter of wire gauge if each mesh is 8mm long and 5mm wide ?

- (a) 2500
- (b) 25000
- (c) 250
- (d) 250000

Ans B

67. $x\%$ of y is $y\%$ of ?

- (a) x/y
- (b) $2y$
- (c) x
- (d) can't be determined

Ans. C

68. The price of sugar increases by 20%, by what % should a housewife reduce the consumption of sugar so that expenditure on sugar can be same as before ?

- (a) 15%
- (b) 16.66%
- (c) 12%
- (d) 9%

Ans B

69. A man spends half of his salary on household expenses, $\frac{1}{4}$ th for rent, $\frac{1}{5}$ th for travel expenses, the man deposits the rest in a bank. If his monthly deposits in the bank amount 50, what is his monthly salary ?

- (a) Rs.500
- (b) Rs.1500
- (c) Rs.1000
- (d) Rs. 900

Ans C

70. The population of a city increases @ 4% p.a. There is an additional annual increase of 4% of the population due to the influx of job seekers, find the % increase in population after 2 years ?

71. The ratio of the number of boys and girls in a school is 3:2 Out of these 10% the boys and 25% of girls are scholarship holders. % of students who are not scholarship holders.?

72. 15 men take 21 days of 8 hrs. each to do a piece of work. How many days of 6 hrs. each would it take for 21 women if 3 women do as much work as 2 men?

- (a) 30
- (b) 20
- (c) 19
- (d) 29

Ans. A

73. A cylinder is 6 cms in diameter and 6 cms in height. If spheres of the same size are made from the material obtained, what is the diameter of each sphere?

- (a) 5 cms
- (b) 2 cms
- (c) 3 cms
- (d) 4 cms

Ans C

74. A rectangular plank $(2)^{1/2}$ meters wide can be placed so that it is on either side of the diagonal of a square shown below. (Figure is not available) What is the area of the plank?

Ans : $7 \cdot (2)^{1/2}$

75. The difference b/w the compound interest payable half yearly and the simple interest on a certain sum lent out at 10% p.a for 1 year is Rs 25. What is the sum?

- (a) Rs. 15000
- (b) Rs. 12000
- (c) Rs. 10000
- (d) none of these

Ans C

76. What is the smallest number by which 2880 must be divided in order to make it into a perfect square ?

- (a) 3
- (b) 4
- (c) 5
- (d) 6

Ans. C

77. A father is 30 years older than his son however he will be only thrice as old as the son after 5 years
what is father's present age ?

- (a) 40 yrs
- (b) 30 yrs
- (c) 50 yrs
- (d) none of these

Ans. A

78. An article sold at a profit of 20% if both the cost price and selling price would be Rs.20/- the profit would be 10% more. What is the cost price of that article?

29. If an item costs Rs.3 in '99 and Rs.203 in '00.What is the % increase in price?

- (a) $200/3$ %
- (b) $200/6$ %
- (c) 100%
- (d) none of these

Ans. A

80. 5 men or 8 women do equal amount of work in a day. a job requires 3 men and 5 women to finish the job in 10 days how many woman are required to finish the job in 14 days.

- a) 10
- b) 7
- c) 6
- d) 12

Ans 7

81. A simple interest amount of rs 5000 for six month is rs 200. what is the anual rate of interest?

- a) 10%
- b) 6%

- c) 8%
- d) 9%

Ans 8%

82. In objective test a correct ans score 4 marks and on a wrong ans 2 marks are ---. a student score 480 marks from 150 question. how many ans were correct?

- a) 120
- b) 130
- c) 110
- d) 150

Ans130.

83. An artical sold at amount of 50% the net sale price is rs 425 .what is the list price of the artical?

- a) 500
- b) 488
- c) 480
- d) 510

Ans 500

84. A man leaves office daily at 7pm A driver with car comes from his home to pick him from office and bring back home

One day he gets free at 5:30 and instead of waiting for driver he starts walking towards home.

In the way he meets the car and returns home on car He reaches home 20 minutes earlier than usual.

In how much time does the man reach home usually??

Ans. 1hr 20min

85. A works thrice as much as B. If A takes 60 days less than B to do a work then find the number of days it would take to complete the work if both work together?

Ans. 22½days

86. How many 1's are there in the binary form of $8 \times 1024 + 3 \times 64 + 3$

Ans. 4

87. In a digital circuit which was to implement $(A \oplus B) + (A \oplus B) \cdot (A \oplus B)$, the designer implements $(A \oplus B) \cdot (A \oplus B)$

What is the probability of error in it ?

88. A boy has Rs 2. He wins or loses Re 1 at a time. If he wins he gets Re 1 and if he loses the game he loses Re 1.

He can lose only 5 times. He is out of the game if he earns Rs 5.

Find the number of ways in which this is possible?

Ans. 16

89. If there are 1024×1280 pixels on a screen and each pixel can have around 16 million colors

Find the memory required for this?

Ans. 4MB

90. On a particular day A and B decide that they would either speak the truth or will lie.

C asks A whether he is speaking truth or lying?

He answers and B listens to what he said. C then asks B what A has said. B says "A says that he is a liar"

What is B speaking ?

(a) Truth

(b) Lie

(c) Truth when A lies

(d) Cannot be determined

Ans. (b)

91. What is the angle between the two hands of a clock when time is 8:30

Ans. 75(approx)

92. A student is ranked 13th from right and 8th from left. How many students are there in totality ?

93. A man walks east and turns right and then from there to his left and then 45 degrees to

his right. In which direction did he go

Ans. North west

94. A student gets 70% in one subject, 80% in the other. To get an overall of 75% how much should get in third subject.

95. A man shows his friend a woman sitting in a park and says that she the daughter of my grandmother's only son.

What is the relation between the two

Ans. Daughter

96. How many squares with sides $\frac{1}{2}$ inch long are needed to cover a rectangle that is 4 ft long and 6 ft wide

- (a) 24
- (b) 96
- (c) 3456
- (d) 13824
- (e) 14266

97. If $a = \frac{2}{3}b$, $b = \frac{2}{3}c$, and $c = \frac{2}{3}d$ what part of d is b ?

- (a) $\frac{8}{27}$
- (b) $\frac{4}{9}$
- (c) $\frac{2}{3}$
- (d) 75%
- (e) $\frac{4}{3}$

Ans. (b)

2598 Successive discounts of 20% and 15% are equal to a single discount of

- (a) 30%
- (b) 32%
- (c) 34%
- (d) 35%
- (e) 36

Ans. (b)

99. The petrol tank of an automobile can hold g liters. If a liters was removed when the tank was full, what part of the full tank was removed?

- (a) $g-a$
- (b) $\frac{g}{a}$
- (c) $\frac{a}{g}$
- (d) $\frac{(g-a)}{a}$
- (e) $\frac{(g-a)}{g}$

Ans. (c)

100. If $\frac{x}{y} = 4$ and y is not '0' what % of x is $2x-y$

- (a) 150%
- (b) 175%
- (c) 200%
- (d) 250%

Ans. (b)