ZTE Aptitude Questions and Answers

Q1. A school has 30% students from Maharashtra. Out of these 20% are Bombay students. Find the total percentage of Bombay?

ANS: 6%

Q2. Each side of a rectangle is increased by 100%. By what percentage does the area increase?

ANS: 300%

Q3. 20% of a 6 litre solution and 60% of 4 litre solution are mixed. What percentage of the mixture of solution?

ANS: 36%

Q4. A 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 wont able to buy 3 paise stamps.

ANS: 9

Q5. Three types of tea the a, b, c costs Rs. 95/kg, 100/kg and 70/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 b and c are equal?

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

ANS: b

Q6. 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

Q7. Find (7x + 4y) / (x-2y) if x/2y = 3/2 ?

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

ANS: c

Q8. 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

Q9. A car travels a certain distance taking 7 hrs in forward journey, during the return journey increased speed 12km/hr takes the times 5 hrs. What is the distance travelled?

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

ANS: b

Q10. 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

Q11. 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

Q12. 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**

Q13. 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/(M2-3M)

ANS: **d**

Q14. 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**

Q15. 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/-

Q16. 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 candle?

ANS: 3 hours

Q17. 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/-

Q18. If the value of x lies between 0 & 1 which of the following is the largest?

a) x
b) x2
c) x
d) 1/x

ANS: d

Q19. If A/B = 3/5, then 15A =?

ANS: 9B

Q20. Instead of multiplying a number by 7, the number is divided by 7. What is the percentage of error obtained?

Q21. 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 not say

ANS: b

Q22. 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

Q23. 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

Q24. Which of the following fractions is less than 1/3?

a) 22/62
b) 15/46
c) 2/3
d) 1

ANS: b

Q25. If the operation, ^ is defined by the equation x ^ y = 2x + y, what is the value of a in 2 ^ a = a ^ 3?

a) 0
b) 1
c) -1
d) 4

ANS: b

Q26. 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

Q27. 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 >= a

ANS: a

Q28. If 13 = 13w/(1-w) ,then (2w)2 =

a) 1/4

b) 1/2
c) 1
d) 2

ANS: c

Q29. In June, a baseball team that played 60 games had won 30% of its game 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

Q30. 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

Q31. If 9x-3y=12 and 3x-5y=7 then 6x-2y =?

a) -5
b) 4
c) 2
d) 8

ANS: d

Q32. There are 5 red shoes, 4 green shoes. If one draw randomly a shoe what is the probability of getting a red shoe?

ANS: 5c1/ 9c1

Q33. 1/3 of girls, 1/2 of boys go to canteen. What factor and total number of classmates go to canteen?

ANS: Cannot be determined.

Q34. The price of a product is reduced by 30%. By what percentage should it be increased to make it 100%?

ANS: 42.857%

Q35. There is a square of side 6 cm. A circle is inscribed inside the square. Find the ratio of the area of circle to square.

ANS: 11/14

Q36. If M/N = 6/5, then 3M+2N = ?

Q37. If p/q = 5/4, then 2p+q= ?

Q38. If PQRST is a parallelogram, what it the ratio of triangle PQS & parallelogram PQRST?

ANS: 1:2

Q39. There are 6 red shoes & 4 green shoes. If two of red shoes are drawn what is the probability of getting red shoes?

ANS: 6c2/10c2

Q40. To 15 lts of water containing 20% alcohol, we add 5 lts of pure water. What is % alcohol?

ANS: 15%

Q41.A worker is paid Rs.20/- for a full day work. He works 1,1/3,2/3,1/8.3/4 days in a week. What is the total amount paid for that worker?

ANS: 57.50

Q42. If the total distance of a journey is 120 km. If one goes by 60 kmph and comes back at 40 kmph what is the average speed during the journey?

ANS: 48 kmph

Q43. 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

Q44. 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

Q45. 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

Q46. City 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

Q47. Two cars are 15 kms apart. One is turning at a speed of 50 kmph and the other at 40 kmph. How much time will it take for the two cars to meet?

ANS: 3/2 hours

Q48. There are 12 boys and 15 girls. How many different dancing groups can be formed with 2 boys and 3 girls?

Q49. There 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