

### CA Technologies Aptitude Questions

Q1. A man buys 200 shares (par value of Rs.10) of a company, which pays 12% per annum as dividend, at such a price he gets 15% on his money. Find the market value (app.) of a share.

- a) Rs. 9
- b) Rs. 12
- c) Rs. 8
- d) Rs. 7.50

Q2. Find the next term in the series: 1, 3, 5, 7, \_\_

ANS: 9

Q3. The ratio of Boys to Girls is 6:4. 60% of the boys and 40% of girls take lunch in the canteen. What % of class takes lunch in canteen?

ANS: 52%  $(60/100)*60 + (40/100)*40$

Q4. A postal truck leaves its station and heads for Chicago, averaging 40 mph. An error in the mailing schedule is spotted and 24 minutes after the truck leaves, a car is sent to overtake the truck. If the car averages 50mph, how long will it take to catch the postal truck?

- a) 1.6 hours
- b) 3 hours
- c) 2 hours
- d) 1.5 hours

Q5. When x is real what is the least value of  $(x^2 - 6x + 5) / (x^2 + 2x + 1)$ ?

Q6. Mr. Smith drove at an average speed of 50 mph for the first two hours of his trip. For the next three hours, he averaged 20 mph. What was Mr. Smith's average speed for the five-hour trip?

- a) 20 mph
- b) 32 mph
- c) 35 mph

d) 38 mph

Q7.  $xy - x + 2y = 6$  equation is shifted to form equation  $xy = c$ , what is  $c$  ?

Q8. An Automobile covers the distance between two cities at a speed of 60km. per hour and on the return journey it covers at a speed of 40 km. per hour. Find the average speed.

a) 60

b) 50

c) 48

d) 55

Q9. Every day a cyclist meets a train at a particular crossing. The road is straight before the crossing and both are traveling in the same direction. The cyclist travels with a speed of 10 Kmph. One day the cyclist comes late by 25 min. and meets the train 5km before the crossing. What is the speed of the train?

ANS: 60 kmph

Q10. When an object like cube or sphere is seen along  $x$ ,  $y$ ,  $z$  axis we get the same. Apart from these suggest another object which has similar characteristics as that mentioned above?

ANS: Triangular prism

Q11. 0, 7, 26, 63, 124, \_\_

ANS: 215 ( hint:  $n^3 - 1$  )

Q12. If  $x$  &  $y$  are integers below 100 then, Is  $(x > y)$ ?

I.  $x + y = 130$

II.  $x + y + z = 270$ .

Q13. 5, 5, 13, 13, 21, 21, \_\_

ANS: 29

Q14. In a soap company, a soap is manufactured with 11 parts. For making one soap you will get 1 part as scrap. At the end of the day u have 251 such scraps. From that how many soaps can be manufactured?

ANS: 25.

Q15. What is Eulers formula?

ANS:  $F+V-E=2$ ; where  $F \Rightarrow$  faces;  $V \Rightarrow$  vertices;  $E \Rightarrow$  number of edges

Directions for questions 16 to 19:

Two equal (in size) cubes are divided into 216 (each) equal parts. And arranged as to form their original cubes & these cubes (i.e; each 216 parts are put to form their original cube form) are kept horizontally one after the other to form a cuboid. Now those pieces which are in columns 1, 3, 5, 8, 10, 12 (from left to right) are removed from both opposite rectangular sides and now the remaining structure of cuboid is painted black.

5 Questions based on this information.

Q16. How many those pieces get coloured 3 faces?

Q17. How many those pieces get coloured 2 faces?

Q18. How many those pieces get coloured 1 face?

Q19. How many those pieces get coloured on more than 3 faces?

Q20. If two cards are taken one after another without replacing from a pack of 52 cards, what is the probability for the two cards be queen?

ANS:  $(4/52) * (3/51) = (1/17) * (1/13)$

Q21. There is six letter word VGANDA. How many ways you can arrange the letters in the word in such a way that both the As are together?

ANS: 120  $(5 \times 4!)$

Directions for questions 22, 23:

Data Sufficiency:

- a) only statement A is sufficient , B is not
- b) only statement B is sufficient , A is not
- c) both are necessary

d) both are not sufficient.

Q22. Is Anna the tallest in the class?

A) Anna is the tallest girl.

B) Anna is taller than all boys.

ANS: c

Q23. X is an integer. Is X divisible by 5?

A)  $2X$  is divisible by 5.

B)  $10X$  is divisible by 5.

ANS: a

Q24. If  $|x-a|=a-x$ , then what is the relation between x, a?

ANS:  $x \leq a$

Q25. The length breadth and height of a cuboid are in the ratio 1: 2: 3. The length, breadth and height of the cuboid are increased by 100%, 200% and 200% respectively. Then the increase in the volume of the cuboid is

a) 5 times

b) 6 times

c) 12 times

d) 17 times