TCS Smart Hiring Numerical Ability Placement Question Papers

1. What is the fourth proportional of 0.006, 1.2 & 6/25?

A.36
B.48
C.4.8
D.3.6

2. The index numbers of five commodities are 121, 123, 125, 126, 128 and the weights assigned to these are respectively 5, 11, 10, 8, 6. Then what is the weighted average index number?

A.123.8
B.124.2
C.124.6
D.125.2

3. A sum invested on simple interest grows to Rs 22500 and Rs 25500 in seven and nine years respectively. What is the rate percentage of the interest?

A.7.5
B.9.6
C.13.5
D.12.5

4. Which one among the following has the least value?

A.$\sqrt{75} - \sqrt{74}$
B.$\sqrt{74} - \sqrt{73}$
C.$\sqrt{77} - \sqrt{76}$
D.$\sqrt{76} - \sqrt{75}$

5. A sum was lent to Ravi for three years by an organization that fixed a yearly rate of 10% compound Interest for repayment along with the condition of recovery in equal installments of Rs.31944. What percentage (correct to two decimal places) above the borrowed amount Ravi had to pay the organization?

A.18.43
B.21.25
C.20.63
D.16.52

6. There is a conical tent that can accommodate ten people. Each person requires six square feet. 30 cubic meters of air to breathe in a meter-squared space. What is the height of the cone?

A:15 m
B:72 m
C:52 m
D:21.5 m

7. A sum of Rs.12500 is invested on 1st January 2016 at 4% simple interest p.a. How much interest in Rs. gets accrued on the end of the day on 1st July 2016?

A.240
B.250
C.400
D.500

8. Madhulika put a specific amount of money into ICICI Mutual Funds. What will the compound interest on 12000 at the same rate after two years if there is a 45 percent increase in the amount in three years at simple interest?

15600
1800
3600
38700

9. A man who has to walk 11Km finds that in 30 minutes he has travelled two-ninth of the remaining distance. What is his speed in Km/h?

A.4.8
B.4.2
C.4
D.4.5

10. X makes a 15% profit on a set of sketch pens he sells to K. K then sells it to M, generating a 20 percent profit. If M made a payment of Rs.690, What was the original cost of the sketch pen set?

A.700
B.690
C.575
D.500

11. If the HCF of 180 and 432 is expressed as (180m + 432n), where m and n are integers, then what is the difference between m and n?

A.3
B.9
C.7
D.8

12. What is the mean proportional (MP) between the MPs of (2/7 & 32/343) and (2 & 1/5000)?

A.3/35
B.4/35
C.2/175
D.2/35

13. 1.5 m wide path surrounds a rectangular ground 17 × 8 m. The path is 12 cm deep. The sand is filled, and the quantity of sand needed is determined.

A:6.05
B:7.05
C:10.08
D:5.5

14. What is the diameter in cm of a solid right circular cylinder whose height is 6 cm and the area of the curved surface is five times the combined area of the two flat surfaces?

A.3
B.1.2
C.2.4
D.0.9

15. Aishwarya rode the bus to her friend's house and then cycled back, discovering that it took 20 minutes longer than taking the bus, despite the fact that the distance traveled in both cases was the same, i.e. 5 km. If the average speed of a bus and a cycle is 3:1, what is the average speed of a cycle?

8 km/hr
10 km/hr
6 km/hr
15 km/hr

16. The sum of natural numbers was calculated by Mr A. He added a number twice and found that it was 1000. Find the repeated number.

A:20
B:15

C:10
D:18

17. There are precisely 12 envelopes for each letter. One letter is to be inserted randomly into each envelope. How likely is it that precisely one letter will be inserted in the wrong envelope?

A: 0
B:1
C:10!
D.None of these

18. Nabanita bought two copies of "Harry Potter" for her sister and resold them for 0.8 and 1.4 times their original cost. What was Nabanita's profit or loss as a percentage of her investment?

A.10% loss
B.5% Gain
C.10% Gain
D.5% Loss

19. Ranita put a particular amount of money into a LIC, and the interest compounded quarterly grew to Rs 140000 and Rs 157304 in 15 and 21 months, respectively. What is the annual percentage rate of interest?

A.24
B.6
C.15
D.12

20. Ramesh wants to combine two different kinds of fruit juice. In what proportion should he combine two varieties of fruit juice, each priced at Rs. 240 and Rs. 280, so that the total cost is Rs 254 per liter?

A.3:2
B.7:6
C.13:7
D.4:3

21. Alfred buys an old scooter for Rs. 4700 and repairs it for Rs. 800. What is his gain per cent if he sells the scooter for Rs. 5800?

A:4 4/7%
B:5 5/11%
C:10%
D:12%

22. For 3/16, 5/12, 7/8, what is the HCF?

A:1/48
B:5/48
C:2/47
D:3/47

23. Which of the following has the most negligible value?

A.$\sqrt{75} - \sqrt{74}$
B.$\sqrt{74} - \sqrt{73}$
C.$\sqrt{77} - \sqrt{76}$
D.$\sqrt{76} - \sqrt{75}$

24. In still water, a boat can travel at a speed of 13 km/hr. If the speed of the stream is 4 km/hr, find the time required for the boat to travel 68 km downstream.

A:4 hours
B:5 hours
C:3 hours
D:2 hours

25. Given, log(0.318) = 0.3364 and log(0.317) = 0.3332, find log(0.319)?

A.0.3393
B.0.0393
C.0.3396
D.0.3693

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B.124.6
C.124.2
D.125.2