NAME:
REG NO:
YEAR:

AptiTrack

Time: 60 minutes

1. If 50% of $(x - y) = 30\%$ of $(x + y)$, then what percentage of x is y?

   (a) 20%

   (b) 25%

   (c) 30%

   (d) 35%

2. $X\%$ of $Y + Y\%$ of $X = ?$

   (a) 1% of XY

   (b) 2% of XY

   (c) 50% of XY

   (d) Invalid

3. If the age of Itadori is 15 yrs. If Satoru's age is 86.67% greater than that of Itadori, then how much % Itadori's age is less than Satoru's age. (up to two decimal points)

   Answer: _____

4. If the price of oil is increased by 30%, then by how much should a family reduce its consumption so that the expenditure would remain the same?

   (a) 13%

   (b) 23%

   (c) 33%

   (d) 43%

5. 25000 is invested at C.I 10% per annum. Find the amount after 2 years. If conversion period is
   (i) Annually

   (a) 30250

   (b) 31750

   (c) 30000

   (d) None of the above

   (ii) Half Yearly

   (a) 30387.65

   (b) 30487.65

(c) 30587.65

(d) 30687.65

(iii) Quarterly

(a) 30460.07

(b) 30560.08

(c) 30570.09

(d) 30670.10

6. A tradesman marks his goods at such a price that after allowing a discount of 15%, he earns a profit of 20%. Find the marked price of an article which cost him Rs 850.

(a) 1000

(b) 1200

(c) 1400

(d) 1600

7. Jenna can complete a piece of work in 15 days. Emma can complete the same work in 9 days. If both of them work together, in how many days can they complete the same piece of work?

(a) 3.525

(b) 5.625

(c) 7.000

(d) 7.125

8. Pipes A and B can fill a tank in 20 hrs and 30 hrs respectively, and pipe C can empty the full tank in 40 hrs. If all the pipes are open together. How much time will it take to fill the tank fully?

(a) $\frac{100}{7}$ hrs

(b) $\frac{105}{7}$ hrs

(c) $\frac{115}{7}$ hrs

(d) $\frac{120}{7}$ hrs

9. Sum of the first 21 terms of the series $(2, 6, 10, \ldots)$ is

Answer: _____

10. $\left(\frac{1}{3}\right) + \left(\frac{5}{9}\right) + \left(\frac{9}{27}\right) + \ldots + \infty$

(a) Infinity

(b) 1.5

(c) 2.5

(d) Greater than or equal to 3

11. How many 4 digits even numbers can be formed with the digits $1, 4, 5, 8, 9$ without any repetition.

(a) 48

(b) 128

(c) 36

(d) None of the above

12. In how many ways can the letters of the word TCE be arranged without repetition and with repetition?

Answer: _____

13. In how many ways can 6 girls and 5 boys stand in a row so that no two boys are together?

(a) 3000

(b) 4000

(c) 5000

(d) None of these

14. Find the highest power of 2 in 320!

(a) 218

(b) 318

(c) 418

(d) 518

15. Find the number of zeros at the end of $(2^{222}) \times (5^{555})$.

Answer: _____

16. Find the unit digit of 454^{999}.

(a) 2

(b) 6

(c) 4

(d) 8

17. Today is Monday. After 10000 days it will be

    (a) Tuesday

    (b) Wednesday

    (c) Thursday

    (d) Friday

18. All keyboard are scanner.
    No Scanner is printer.
    All printer are mouses.
    Conclusion
    1.No Keyboard is a mouse
    2.All Scanner being mouse is a possibility

    (a) 1 is True

    (b) 2 is True

    (c) Both are True

    (d) Both are False

19. Number of diagonals in a Decagon (10 sided polygon):

    (a) 15

    (b) 25

    (c) 35

    (d) 45

20. How many squares of all possible sizes are there on the chessboard?

    (a) 64

    (b) 132

    (c) 204

    (d) 512