SECTION 1 : QUANTITATIVE APTITUDE

1. What is the minimum number of square marbles required to tile a floor of length 3 metres and width 3 metres 96 cm?
   A. 476
   B. 825
   C. 540
   D. 748
   Ans: B

2. The sum of the squares of three numbers is 420, while the sum of their products taken two at a time is 240. Their sum is:
   A. 20
   B. 30
   C. 40
   D. None of these
   Ans: B

3. If $6x^2 + 6y^2 = 15xy$, what is the ratio of $x$ to $y$? ($x>y$)
   A. 1:4
   B. 4:5
   C. 3:2
   D. 2:1
   Ans: D

4. A Stationery seller had some Scales, Geometry box, Parkers & Sketches. He sells 53% of the total units and still has 188 units. Originally, he had:
   A. 580 units
   B. 400 units
   C. 394 units
   D. 500 units
   Ans: B
5. Alex got 15 of the maximum marks in an examination and failed by 5 marks. However, Paul who took the same examination got 20 of the total marks and got 15 marks more than the passing marks. What were the passing marks in the examination?

A. 355  
B. 250  
C. 400  
D. 850  

Ans: C

6. The average score of a cricketer for ten matches is 40 runs. If the average for the first six matches is 44, then find the average for the last four matches.

A. 30  
B. 32  
C. 33.25  
D. 34  

Ans: D

7. A shopkeeper offers a discount of 15% on the selling price. On a special sale day, he offers an extra 10% off coupon after the first discount. If the article was sold for Rs. 4500, find the marked price of the article.

A. 5882.35  
B. 4985.32  
C. 5500  
D. 5783.87  

Ans: A

8. What profit percent is made by selling an article at a certain price if by selling at four-fifth of that price there may be a loss of 15%?

A. 10%  
B. 25%
9. One year ago, ratio of Chakri and Vishnu age’s was 3 : 4 respectively. After 4 years, this ratio becomes 6 : 7. How old is Chakri?

A. 10 years  
B. 8 years  
C. 5 years  
D. 7 years  

Ans: B

10. If 5 (A's capital) = 4 (B's capital) = 8 (C's capital). Then the ratio of their capitals is:

A. 3:4:15  
B. 8:10:5  
C. 20:15:12  
D. 16:8:10  

Ans: B

11. Two boys starts from the same place walking at the rate of 3 kmph and 5 kmph respectively in the same direction. What time will they take to be 15 km apart?

A. 7.5 hr  
B. 14 hr  
C. 3.45 hr  
D. 6 hr  

Ans: A

12. Fairoz is travelling on his cycle and has calculated to reach point A at 12 pm if he travels at 10 kmph. He will reach there at 10 am if he travels at 15 kmph. At what speed must he travel to reach A at 11 am?

A. 8 kmph
B. 10 kmph
C. 12 kmph
D. 14 kmph
Ans: C

13. The ratio between the speeds of two trains is 7:8. If the second train runs 600 km in 4 hours, what is the speed of the first train?

A. 85 km/hr
B. 87.5 km/hr
C. 131.25 km/hr
D. 92.5 km/hr
Ans: C

14. A boat takes 90 minutes less to travel 36 miles downstream than to travel the same distance upstream. If the speed of the boat in still water is 10 mph, the speed of the stream is:

A) 2 mph
B) 2.5 mph
C) 3 mph
D) 4 mph
Ans: A

15. A and B can do a piece of work in 15 days and 10 days respectively. They work together for 3 days and then A leaves. In how many days after that B will complete the work alone.

A. 2 days
B. 5 days
C. 3 days
D. 3 ½ days
Ans: B

16. 6 men or 8 women can do a piece of work in 20 days. In how many days will 3 men and 6 women do the same work?

A. 7/2
17. Two pipes function simultaneously the reservoir will be filled in 6 hours. One pipe fills reservoir 5 hours faster than the other. How many hours does the faster pipe take to fill the reservoir?

A. 10 hrs  
B. 8 hrs  
C. 12 hrs  
D. 9 hrs  
Ans: A

18. How many arrangements can be made out of the letters of the word 'PHARMACY'?

A. 92400  
B. 20160  
C. None of these  
D. 12000  
Ans: B

19. Find the number of triangles that can be formed using 12 points in a plane such that 4 points are collinear?

A. 216  
B. 360  
C. 240  
D. 120  
Ans: A

20. If A is chosen at random from the set \{1,2,3,4\} and B is to be chosen at random from the set \{5,6,7\}, what is the probability that AB will be even?
A. 5/6
B. 1/6
C. 1/2
D. 2/3
Ans: D

21. Two dice are thrown simultaneously. What is the probability of getting two numbers whose product is even?
A) 3/4
B) 3/8
C) 5/16
D) 2/7
Ans: A

22. A sum of money at simple interest amounts to Rs. 815 in 4 years and to Rs. 854 in 5 years. The sum is:
A. Rs. 659
B. Rs. 690
C. Rs. 650
D. Rs. 698
Ans: A

23. Simple interest on a certain sum of money for 6 years at 5% per annum is half the compound interest on Rs. 3000 for 2 years at 10% per annum. The sum placed on simple interest is:
A. Rs.1575
B. Rs. 2200
C. Rs. 1270
D. Rs. 1050
Ans: D
24. A vessel is filled with liquid, 2 parts of which are water and 3 parts syrup. What part of the mixture must be drawn off and replaced with water so that the mixture may be half water and half syrup?

A. $\frac{7}{11}$
B. $\frac{1}{6}$
C. $\frac{1}{5}$
D. $\frac{2}{7}$

Ans: B

25. The value of $\left(\frac{1}{\log_{10}80}\right) + \left(\frac{1}{\log_{10}80}\right) + \left(\frac{1}{\log_{5}80}\right)$ is

A) 0
B) 1
C) 5
D) 60

Ans: B

SECTION 2 : LOGICAL REASONING

1. In a family, there are six members P, Q, R, S, T and U. P and Q are a married couple, P being the male member. S is the only son of R, who is the brother of P. T is the sister of S. Q is the daughter-in-law of U, whose husband has died. How is T related to R?

A. Sister
B. Daughter
C. Cousin
D. Mother

Ans: B

2. A starts and walks towards south, he then turns to his right and walks 5 km, then again turn left and walks 3 km and then again turn left and walks 5 km. In which direction is he from the starting point?

A. East
B. West
C. South
D. North

Ans: C

3. Find the odd man out: 396, 462, 572, 427, 671, 264
   A. 396
   B. 671
   C. 427
   D. 264

Ans: C

4. At what time between 10 and 11 will the minute and hour hand be at right angles?
   A. 38 2/11 min
   B. 22 1/12 min
   C. 13 2/11 min
   D. 34 3/11 min

Ans: A

5. Statements:
   Some Apples and Balls.
   All Balls are Cats.
   No Cats are Dogs.
   All Dogs are Elephants.

Conclusions:
I. Some Cats are Elephants is a possibility.
II. Some Balls are Dogs is a possibility.
   A. only I follows
   B. only II follows
   C. either I or II follows
   D. neither I nor II follow
   E. both I and II follow

Ans: A

6. Find the next number in the given series 4, 5, 9, 18, 34, ?
   A. 59
   B. 22
C. 33
D. 44
Ans: A

7. Physician : Treatment :: Judge : ?
   A. Punishment
   B. Judgement
   C. Lawyer
   D. Court
Ans: B

8. In a certain code, '342' means 'run around circle'; '351' means 'red one circle' and '304' means 'one around circle'. Which digit in that code means 'Red'?
   A. 2
   B. 3
   C. 5
   D. 6
Ans: C

9. If air is called green, green is called blue, blue is called sky, sky is called yellow, yellow is called water and water is called pink, then what is the color of clear sky?
   A. Blue
   B. Sky
   C. Yellow
   D. Green
   Ans: B

10. How many days are there in x weeks x days?
    A. 7x^2
    B. 8x
    C. 14x
11. 21, 25, 33, 49, 81,
   A. 145
   B. 118
   C. 101
   D. 122
   Ans: A

12. One morning Rekha and Rama were talking to each other face to face at a crossing. If Rama’s shadow was exactly to the left of Rekha, which direction was Rekha facing?
   A. East
   B. West
   C. North
   D. South
   Ans: C

13. 2, 3, 8, 63,
   A. 2723
   B. 3968
   C. 4513
   D. 5445
   Ans: B

14. If wall is called window, window is called door, door is called floor, floor is called roof and roof is called ventilator, what will a person stand on?
   A. Window
   B. Roof
   C. Wall
   D. Floor
   Ans: B
15. Meenam is fourteenth from the right end in a row of 40 girls. What is her position from the left end?

A. 27  
B. 26  
C. 33  
D. 24  

Ans: A

Ajay, Arya, Anand, Anjali, Amruta, Anusha and Akash are sitting in a row facing North:

Anusha is to the immediate right of Amruta.

Amruta is 4th to the right of Akash.

Anand is the neighbour of Arya and Anjali.

Person who is third to the left of Anjali is at one of ends.

16. Who are to the left of Anand?

A. Only Arya  
B. Akash, Anjali and Arya  
C. Arya and Akash  
D. Anjali, Amruta, Anusha and Ajay  

Ans: C

17. Which of the following statement is not true?

A. Amruta is to the immediate left of Anjali  
B. Ajay is at one of the ends  
C. Akash is to the immediate left of Arya  
D. Anusha is second to the right of Anjali
18. Who are the neighbours of Araya?
   A. Anand and Anjali
   B. Anand and Akash
   C. Ajay and Anjali
   D. Amruta and Anusha
   Ans: B

19. What is the position of Ajay?
   A. Between Amruta and Anjali
   B. Extreme left
   C. Centre
   D. Extreme right
   Ans: D

20. What is the position of Akash?
   A. Between Anjali and Anand
   B. Extreme left
   C. Centre
   D. Extreme right
   Ans: B

21. Ram walks 10 m South from his house, turns left and walks 25 m, again turns left and walks 40 m, then turns right and walks 5 m to reach the school. In which direction is the school from his house?
   A. South west
   B. East
   C. West
   D. North-East
22. Who is taller among P, Q, R, S & T?

I. S is shorter than Q. P is shorter than only T.

II. Q is taller than only S. T is taller than P and R.

A. If the data in statement I alone are sufficient to answer the question
B. If the data in statement II alone are sufficient answer the question
C. If the data either in I or II alone are sufficient to answer the question;
D. If the data even in both the statements together are not sufficient to answer the question

Ans: C

23. 4, 10, 82, 244, 730

A. 128
B. 28
C. 192
D. 72

Ans: B

24. Mark the odd man out of the series? 10, 16, 18, 21, 24

A. 10
B. 21
C. 16
D. 24

Ans: B

25. College : Student :: Hospital : ?

A. Nurse
B. Patient
C. Doctor
D. Treatment

Ans: B