Statement Test 7

1.) The sum of the price of 3 pens and 2 pencils is Rs 120 and the difference between the price of 7 pens and 4 pencils is Rs20. Then the price of a pen and a pencil?
(A) 40 (B) 50 (C) 60 (D) 70 (E) None
2.) In 27 seconds a train closes a pole at a speed of 20m/s. If it crosses another train moving in opposite direction in 15sec , then find the length of the second train moving at a speed of 50m/s.
(a)510m (b)515m (c)520m (d)525m (e)None
3.) 3 men can complete a work in 14 days and 7 women can complete the same work in 9days. Find the time taken by a man and a woman?
(A) 25.2days (B) 16days (C) 24days (D) 21days (E) None
4.) The price of a bike increases by 16.66% every year. If the price of the bike today is Rs 21600, then find the price of the bike after 2 years?
(A) Rs 26470 (B) Rs 29400 (C) Rs 32460 (D) Rs 21400 (E) None
5.) The ratio of the cost price and the marked price is 4:7. The value of profit made and discount offered is same. Find the profit percentage?
(A) 12.5% (B) 37.5% (C) 20% (D) 18% (E) None
6.) The speed of two trains is 20Km/hr and 30km/hr. The length of trains are 240km and 160km. Find the time taken to cross each other when they travel in same direction and opposite direction?
(A) 40hours (B) 48 hours (C) 30hours (D) 28hours (E) None
7.) Cost price of tea A is Rs 40/kg and price of tea B is Rs70/kg. If the price of the mixture is Rs 50/kg, then find the ratio in which A and B are mixed?
(A) 1:2 (B) 3:5 C) 2:1 (D) 7:5 (E) None
8.) A vessel of 144 litres is filled with milk and water. 70% of milk and 30% of water is taken out of the vessel. It is found that the vessel is empty by 55%. Find the initial quantity of milk.
A. 80 litres B. 90 litres C. 95 litres D. 105 litres E. None of these
9.) A train, travelling at 36 kmph, crosses a platform in 25 seconds and a man standing on the same platform in 12 seconds. Find the length of the platform?
A. 130 m B. 150 m C. 120 m D. 160 m E. None of these
10.) A man can row 30 km/hr in still water and he find that it takes him thrice as much time to row up than as to row down the same distance in the river. The speed of the current (in km/hr) is:-
(a) 30 km/hr (b) 18 km/hr (c) 21 km/hr (d) 15 km/hr (e) None of these
11.) A certain sum of money amounts to ₹1260 in 2 years and to ₹1455 in 3 $1/2$ years at a certain rate of simple interest. What is the rate of interest per annum.
A. 15% B. 16% C. 13% D. 12% E. None of these
12.) A bag contains 5 red and 4 green balls and another bag contains 5 red and 5 black balls. If a ball is drawn from each bag, find the probability that both are of different colours.
A. $5/6$ B. $2/3$ C. $13/18$ D. $7/9$ E. $11/18$
13.) A man swimming in a stream finds that in a given time he can swim twice as far with the stream as he can against it. At what rate does he swim if the speed of the stream is 1.5 kmph?
A. 3.5 kmph B. 4 kmph C. 4.5 kmph D. 5 kmph E. None of these
14.) A invested ₹10,000 at 20% rate of interest per annum. The interest was compounded half-yearly for the first year and in the next year it was compounded yearly. What will be the total interest earned at the end of 2 years?
A. ₹3840 B. ₹4520 C. ₹4050 D. ₹3640 E. None of these
15.) The ratio of the present age of A to that of B is 16:7. After 12 years, A's age is twice of B's age. Then find the present age of A?
A. 64 years B. 80 years C. 96 years D. 102 years E. None of these
16.) 40% of A = 30% of B and B = 2x% of A, then find the value of x?
A. 66.66 B. 77.77 C. 88.88 D. 99.99 E. None of these
17.) A shopkeeper used to sell a product at a profit of 50%. If after a negotiation of Rs 250, a customer paid Rs 7250 for it, then find the cost price of the product for the shopkeeper?
(A) Rs 2450 (B) Rs 7500 (C) RS2500 (D) RS 5000 (E) None
18.) The total compound interest obtained at a rate of 12.5% per annum for 3years is Rs 1085. Find the amount invested?
(A) Rs 2120 (B) Rs 2560 (C) Rs 2240 (D) Rs 2640 (E) None
19.) The average of 15 numbers is 24. If the average of the first 8 numbers is 20 and the average of last 8 numbers is 28, then find the middle number?
(A) 21 (B) 24 (C) 22 (D) 25 (E) None
20.) The selling price of an article is 25% more than the cost price. If the article is marked 50% above the cost price, then how much discount was provided?
(A) 66.66% (B) 33.33% (C) 16.66% (D) 24% (E) None
21.) Ravi and Sumit started a business by investing Rs 2400 and Rs 4000 respectively. After 4 months, Jayant also joined them by investing Rs 8000. If the annual profit earned by all of them is Rs 3388, then find the profit share of Sumit.
(a) Rs 1144 (b) Rs 2255 (c) Rs 1155 (d) Rs 1980 (e) None of these
22.) 300 metres long train crosses a pole in 10 seconds and the same train crosses a bridge in 28 seconds. Find the length of the bridge.
(a) 570 metres (b) 600 metres (c) 630 metres (d) 540 metres (e) None of these
23.) The average age of M, N and O is 22 years. 4 years ago average age of M and O is 19 years. 3 years hence average age of N and O is 25 years. Find the present age of N.
(A) 40 (B) 30 (C)20 (D) 10 (E) None of these
24.) 28 men can build a wall in 18 days working 7 hours per day. In how many days 21 men working 6 hours per day will complete the work?
(A) 35 days (B) 20 days (C) 28 days (D) 30 days (E) None of these
25.) Two cards are drawn at random from a pack of cards. What is the probability that both cards are king?
(A) 40/262 (B) 3/258 (C) 2/245 (D) 1/221 (E) None of these
26.) The ratio of juice and water in a mixture is 3 : 7. If we add 40 liters of juice in the mixture, then ratio of juice and water becomes 19 : 21 respectively. Find the initial quantity of water in the mixture.
(A) 65 liters (B) 84 liters (C) 76 liters (D) 55 liters (E) None of these

1. B
let the prices be x and y
$3x+2y=120$ & $7x-4y=20$
$x=20$ *and* $y=30$
Sum=50
2. A
20. Solution:A
Length of first train = 20 x 27 = 540m
Relative speed = 20 + 50 = 70m/s
Length of both trains = 70 x 15 = 1050m
Length os second train = 1050 - 540 = 510m
3. A
$3(men)14=7(women)9$
Men:women=3:2
Time taken by 1man and 1 woman= $(3\times3\times14)/5=25.2days$
4. B
$21600\times(7/6)\times(7/6)=Rs\ 29400$
5. B
CP:MP=4:7= 4x:7x
Let the profit and discount be y
4x+y=7x-y=selling price
2y=3x
$y:x=3/2$
Cost price= 4*2=8
Selling price=8+3=11
Profit percent=$3/8\times100=37.5\%$
6. B
time=$400/50+400/10=48hours$
7. C
Ratio= 40 70
50
20 10
2 1
2 : 1
(283)
8. B
Milk Water
70% 30%
55%
25% 15%
Ratio of milk to water = 5:3
Quantity of milk = 144 x $5/8$ = 90 ans.
9. A
Length of platform = x
Speed of train = 36 x $5/18$ = 10m/s
Train takes 12 sec. To cross a man on the platform, So, train length = 12 x 10 = 120m
Time taken by train to coss the platform = 25 sec
Length of platform = 25 x 10 - 120 = 130m ans.
10) d

11. C
Interest paid in $(3\ 1/2-2)$ = 1 $1/2$ years
= 1455 - 1260 = 195
So, interest in 1 year = $195/3$ x 2 = 130
Interest in 2 years = 2 x 130 = 260
Principal = 1260 - 260 = 1000
Rate = $(260\ x\ 100)/(2\ x\ 1000)$ = 13% ans.
12. C
No. of balls in the first bag = 5red and 4 green = 9 balls
No. of balls in the second bag = 5 red and 5 black = 10 balls
The no. of ways in which two different coloured balls can be drawn are (R+B), (G+R), (G+B)
So, probability = $(5/9\ x\ 5/10) + (4/9\ x\ 5/10) + (4/9\ x\ 5/10)$
= $25/90 + 20/90 + 20/90 = 65/90 = 13/18$ ans.
13. C
Speed of swimmer = x
Up speed = (x - 1.5)
Dw speed = (x + 1.5)
According to ques.
2(x - 1.5) = (x + 1.5)
2x - 3 = x + 1.5
x = 4.5 kmph ans.
14. B
Rate = $20/2$ = 10%
Time = 2 $1/2$ years
CI half yearly at the rate 20% is equivalent to
10 + 10 + $(10\ x\ 10)/100$ = 21% and next year 20% per annum
Total CI = 21% of 10000 + 20% of (10000 + 21% of 10000)
= 2100 + 20% of 12100
= 2100 + 2420
= 4520 ans.
15. C
A B
Present age 16x 7x
After 12 years 16x + 12 7x + 12
16x + 12 = 2(7x +12)
x = 6
Hence the present age of A = 16 x 6 = 96 years
16. A
40% of A = 30% of B
$40/100$A = $30/100$B
B = $4/3$A
B = 2x% of A
B = $2x/100$ x A
43A = $2x/100$ x A
x = $(4\ x\ 100)/(3\ x\ 2)$ = 66.66 ans.
17. D
Selling price=7250+250=7500
Cost price= $7500\times100/150=Rs\ 5000$

18. B
Let the amount invested be Rs 512
Interest received= $512/8\times3+64/8\times3+1=217$
217------RS 1085
Amount invested= $1085/217\times512=Rs\ 2560$
19. B
Middle number= $8\times20+8\times28-15\times24=24$
20. C
Ratio of selling price and the cost price=5:4
Marked price=$4\times150100=6$
Discount =$1/6\times100=16.66\%$
21. c
Ratio of profit = 2400*12 : 4000*12 : 8000*8 = 9 : 15 : 20
44 units – Rs 3388
15 units – Rs 1155
Profit earned by Sumit = Rs 1155
22. d
Time taken by train to cross the length of bridge only = 18 seconds
Speed of train = 300/10 = 30 m/s
Required length of bridge = 30*18 = 540 metres
23. Ans. (C)
Present Age of N
= 3 × 22 – 2 × (19 + 4)
= 66 – 46 = 20 years
24. Ans. (C)
Wall will be completed in
= (28 × 18 × 7)/(21 × 6) = 28 days
25. Ans. (D)
Probability of getting 2 Kings
= 4C2/52C2 = 6/1326 = 1/221
26. Ans. (B)
Initial Quantity of Water = x L
x × 19/21 – x × 3/7 = 40
x × 10/21 = 40
x = 84 L