Statement Sheet Test (2)

1. . The time taken by the boat to row 60 km along with stream is 1.5 hours and the time taken by same boat to cover the same distance against stream is 3 hours, then find the speed of the boat in still water.
(a) 30 kmph (b) 45 kmph (c) 50 kmph (d) 25 kmph (e) None

2. 200 liters of mixture contains milk and water in ratio 17:3, how much milk to be added so that the ratio becomes 7:1. (in liters)
a. 42 b. 45 c. 40 d. 50 e. None

3. Millet of 50 Rs./kg and 120Rs./kg is mixed to become 75 Rs./kg. Find the ratio in which two types of millet is mixed.
a. 9:5 b. 5:12 c. 3:2 d. 4:11 e. None

4. Average temperature of Monday, Tuesday and Wednesday was 38 degree and of Tuesday, Wednesday and Thursday was 35 degree. If the temperature of Monday and Thursday was in ratio 7:2, then find the temperature on Monday. (in degrees)
a. 10.6 b. 12 c. 11.6 d. 12.6 e. None

5. Average of 100 readings was 45, later it was found that actual number of readings was 90 and 16 and 43 was read as 61 and 34. Find real average.
a. 49.6 b. 48.6 c. 47.6 d. 50.8 e. None

6. 100Rs. is divided into 6 men, 12 women and 17 boys. 2 men get as much as 5 boys and 2 women get as much as 3 boys. Find the ratio in which money is divided among them.
a. 15:16:18 b. 30:34:36 c. 30:17:18 d. 16:17:15 e. None

7. A alone finishes the work in 12 days and B alone finishes the work in 36 days. After working together for 4 days, A left the job. In how many days will B finish the remaining work?
A. 18 days B. 26 days C. 20 days D. 21 days E. None

8. A certain number of men can do a piece of work in 30 days. Had there been 10 more men it would have been finished in 10 days less. How many men were there?
A. 60 B. 20 C. 30 D. 50 E. None

9. The average weight of 22 students in a class was 40kg. When 8 new students joined the class, the average increased by 3 kg. What is the average of the 8 new students who joined the class?
A. 47.5 kg B. 49.5 kg C. 43.5 kg D. 45 kg E. None

10. A 205m-long train travelling at the speed of 54 kmph can cross a platform in 22 seconds. If a man can cross the same platform in 2 minutes, then what is the speed of the man?(in m/s)
A. 1.51 B. 1.04 C. 1.07 D. 1.95 E. 1.05

11. In a village there are 3040 registered voters. 70% of the registered voters could cast the votes and none of the votes were declared invalid. If only two candidates were contesting the elections and the ratio of the votes received by them was 9: 5, what was the number of votes received by the winning candidate?
A. 1375 B. 1358 C. 1372 D. 1368 E. None

12. A bag contains 8 red and 3 blue balls. Two balls are drawn at random. What is the probability that they are of the same colour?
A. 33/54 B. 31/55 C. 29/52 D. 27/57 E. None

13. A shopkeeper allows 13% discount on the marked price. How much per cent more than the cost price must he mark on his goods to earn a profit of 20%?
A. 36.32% B. 39.25% C. 33.93% D. 37.93% E. None

14. In how many different ways can the letters of the word 'REPEAT be arranged so that both 'E's always come together?
A. 720 B. 96 C. 600 D. 120 E. None

15. The simple interest accrued on an amount of Rs.22600 at the end of two years is Rs.4520. What would be the compound interest accrued on the same amount at the same rate of interest for the same period?
A. 4645 B. 4746 C. 4505 D. 4795 E. None

16. An article was purchased for 50000. Its price was marked-up by 25%. It was sold at a discount of 15% on the marked-up price. What is the profit percentage on the cost price?
A. 8.05% B. 7.25% C. 6.25% D. 11.20% E. 12.25%

17. If twenty five per cent of two-fifths of fifteen times of a number is 243, then what is the number?
A. 165 B. 159 C. 162 D. 167 E. None

18. The length of a rectangular field is 50% more than its breadth. If the total cost of fencing the field at the rate of Rs.4 per metre was Rs.200, what is the area of the field?(in $m2$)
A. 93m² B. 95m² C. 99m² D. 96m² E. None

19. The distance travelled downstream by a boat in 3 hours is 12 km more than the distance travelled upstream by the boat in the same time. What is the speed of the current? (in kmph)
A. 2 B. 2.7 C. 2.5 D. 3 E. None

20. A and B can do a piece of work in 35 and 30 days respectively. They began to work together, but A left after some days and B finished the remaining work in 20 days. After how many days did A leave?
A. 2 1/13 days B. 5 5/13 days C. 4 2/13 days D. 7 2/13 days E. None

21. Two runners covered the same distance at the rate of 10 km and 12 km per hour respectively. Find the distance covered when one takes 10 minutes more than the other.
A. 12 km B. 14 km C. 18 km D. 10 km E. None

22. A train passes a pole in 10 seconds and passes a 120m long platform in 20 seconds. Find its length.
A. 120m B. 160m C. 125m D. 135m E. None

Q1 **Solution: A**
Downstream speed = 60 ÷ 1.5 = 40kmph
Upstream speed = 60 ÷ 3 = 20 kmph
Hence speed of boat = 30kmph

Q2.. Ans C
Qty of milk and water = 170 and 30 litersLet x unit is to be added.
So, (170 + x) / 30 = 7/1
X = 40 liters

Q3. Ans A
Let millet of first type is n1 kg and second type is n2 kg
So, 50 x n1 + 120 x n2 = 75 x (n1 + n2)
N1/n2 = 9/5

Q4. Ans D
Monday + Tuesday + Wednesday = 38 x 3
Tuesday + Wednesday + Thursday = 35 x 3
So, Monday – Thursday = 9
Ratio = 7:2
So, 5 unit -> 9
7 unit = 9/5 x 7 = 12.6

Q5. Ans A
Total = 45 x 100 = 4500
Actual average = 4500/90 = 50
But, 16 -> 61 => 45 extra added
43 -> 34 => 9 less added
So total 36 extra added so it has to be subtractedReal average = 50 – 36/90 = 50 - 0.4 = 49.6

Q6. Ans B
Ratio in which men, boy and women get money = 5 : 2 : 3
6 men will get = 6 x 5unit = 30 unit
17 boys will get = 17 x 2 unit = 34 unit
12 women will get = 12 x 3 unit = 36 unit
Total = (30 + 34 + 36) unit = 100Rs.
1 unit = 1 Rs.

Ratio = 30:34:36

7.
Work done by A in one day = 112
Work done by B in one day = 136
Both can finish the work in one day = 112+ 136 = 436 = 19
In 4 days both finish the work = 4 x 19 = 49
Now remaining work = 1 – 49 = 59
Hence the remaining work done by B in 36 x 59 = 20 days ans.
8.
Let initially there be x menThen x + 10 men can finish the work in 20 days
$M1$ x $D11$ = $M2$ x $D2$
X × 30 = (X+10) ×20
X = 20
9.
Required average = 43 x 30 – 40 x 228
1290 – 8808 = 4`108 = 51.25kg ans.
10.
Let the length of the platform be x
So, (x + 205) = 54 x 518 x 22
x = 330 – 205 = 125m
Nw speed of the man = 1252 x 60 = 2524 = 1.04m/s ans.
11.
Total votes cast = 3040 x 70100 = 2128The no. of votes received by winning candidate = 212814 x 9 = 152 x 9 = 1368 ans.

12.
Total no. of balls = 8 + 3 = 11
n(S) = 11$C2$ = 55
n€ = 8$C2$ + 3$C2$ = 28 + 3 = 31
P€ = (E)(S) = 31/55 ans.
13.
CP = 100
SP = 120
MP = 120 x 10089 = 137.93
He must mark 137.93 – 100 = 37.93% above the CP ans.
14.
In the word ‘REPEAT’ there are two E’s and they should always come together. Hence two E’s are considered as single letter. Hence required no. of ways = 5! = 120 ans.
15.
R = 4520 x 10022600 x 2 = 10%
CI = 22600 x 110100 x 110100 – 22600
27346 – 22600 = Rs.4746 ans.
16.
CP = Rs.50,000
MP = 50000 x 125100 = 62500
SP = 62500 x 85100 = 53125
Profit = 53125 – 50000 = 3125

% profit = $ProfitCP$ x 100
3125100 x 100 = 6.25% ans.

17.
Required no. = 243 x 10025 x 52 x 115 = 162 ans.
18.E
Perimeter of the field = 2004 = 50m
Ratio of length to breadth = 150 : 100 = 3 :2
Also, we have length + breadth = 502 = 25
Length = 255 x 3 = 15
Breadth = 10
Area = 15 x 10 = 150 sq m ans.
19.A
Downstream distance is 12 km more than the upstream distance in 3 hrs
Downstream speed is 12/3 = 4km/h more than upstream
Thus, we know that speed of the current = 12 x 4 = 2kmph ans.
20.B
LCM of 35 and 30 = 210
A's one day work = 210/35 = 6 units/day
B's one day work = 210/30 = 7 units/day
B's work in 20 days = 20 x 7 = 140 units
Remaining work = 210 – 140 = 70 units
70 units of work is done by A+B in 70/6+7 = 70/13 days = 5 5/13 days
21.
Distance = x
Time taken by first runner = x10 hrs
Time taken by second runner = x12 hrs
Now, x10 – x12= 1060
x = 10km ans.
22.
Let the length of the train be x
x10 = x + 120100
2x = x + 120
x = 120m ans.

23.
24.