

**Statement Sheet Test – (2)**

1. Simple interest on a certain sum of money at rate of 25% for 2 years is two times of the compound interest on rs.2500 for 2 years at the rate of 7% per annum. What is the sum on simple interest ?

- a. 1449      b. 2156      c. 1856      d. 2479      e. None

2. The sum of the age of mother and his daughter is 59 years. After 11 years, the age of mother will be 4 times that of the present age of daughter. What is the age of the daughter?

- a. 15      b. 14      c. 16      d. 12      e. None

3. A group of workers was supposed to finish the work in 15 days. But 10 of the total workers did not come to work and the work is finished in 30 days. Find how many workers worked in the group initially.

- a. 20      b. 25      c. 15      d. 30      e. None

4. Curved surface area of a cylinder is 1760 sq.cm and its height is 20cm. Find the volume of a cylinder.

- a. 15238      b. 15680.      c. 12320.      d. 14580      e. None

5. Sanju buys an old cycle for rs.15450 and spends rs.650 for its repair. After some days he sells his cycle at rs.14560, find loss percent of cycle?

- a. 11.5      b. 9.56      c. 16.5      d. 12.5      e. None

6. Pant and Rahul invested in a partnership in the ratio of 5:6 respectively. After 6 months, Pant increased his amount by Rs 4000 while Rahul increased by Rs 2000. If at the end of the year, the ratio of profit share of Pant to Rahul is 19:20, then find the initial investment of Rahul ?

- a. 12000      b. 18000      c. 10000      d. 8000      e. 9000

7. Difference between interest received when a sum is invested at 25% p.a. at CI compound annually for two years and that of when that sum is invested at 25% p.a. at S.I for two years is 125. Find the S.I when the same sum is invested for 3 years at 15% p.a. ?

- a. 900      b. 800      c. 1000      d. 1500      e. 1800

8. In a business, the respective ratio of investment of Dhoni, Gautam and Sachin is 2:3:4. If Gautam profit is 25% more than that of Sachin and Dhoni profit 25% less than that of Sachin, then find the respective ratio of time periods of investment of Dhoni, Gautam and Sachin ?

- a. 9:12:5      b. 7:6:5      c. 9:10:6      d. 3:5:7      e. Can't be determined

9. The income of Payal and Reena are in the ratio of 9:8, their expenditure are in the ratio of 11:9 and their savings are in the ratio of 1:1. What is the ratio of Payal's income to Reena's saving?

- a. 10:11      b. 13:9      c. 18:7      d. Can't be determined      e. None

10. The entry ticket price at a cricket stadium was increased in the ratio 3:4 due to which audience decreased in the ratio of 8:7. What is the collection if the collection before the price increased was Rs1800?

- a. 2100      b. 3500      c. 2800      d. 1900      e. 1300

11. Dhoni is as many years younger than Virat as he is older than Sehwag. The ratio of the ages of Dhoni after 5 years and that before 5 years is 19:14 respectively. Find the average of present age of Virat and Sehwag ?

- a. 40      b. 33      c. 36      d. Can't be determined      e. 30

12. How many 4-digit even numbers are there with distinct digits with each digit even? a. 120      b. 96      c. 100      d. 480      e. 120

13. The average weight of 6 players in a cricket match is 80 kg. A new young player replaces an old player, then the new average weight reduces by 2.5 kg. Find the weight of new player ?

- a. 65      b. 60      c. 80      d. 90      e. 30

14. A sum of certain amount was put on S.I at a certain rate for 6 years. Had it been put on 5% higher rate, it would have fetched Rs471 more. Find the sum ?

a. 1680      b. 1690      c. 1590      d. 1580      e. None of these

15. A truck covers a distance at 30 km/hr and another distance that is 2 times of the earlier distance at 40 km/hr. Find the average speed of truck ?

a. None of these      b. 30 km/hr      c. 25 km/hr      d. 40 km/hr      e. 36 km/hr

16. In an election contested by two candidates one candidate got 40% of total vote and still lost by 310 votes. Then find the total number of votes casted ?

a. 1850      b. 1150      c. 1250      d. 1550      e. Can't be determined

17. The ratio of the upstream speed and the downstream speed of the boat driven by Asit is 3:4. If Asit can cover 24 km downstream and 30 km upstream in 8 hours, find the speed of boat in still water.

(a) 7 kmph      (b) 5 kmph      (c) 9 kmph      (d) 8 kmph      (e) None of these

18. Vessel A, B and C contains the mixture of milk and water in the ratio of 3:2, 4:3 and 1:3 respectively. If all the vessel mixtures are mixed, then find the ratio of milk and water in the final mixture?

(a) 181:232      (b) 199:221      (c) None of these      (d) 189:215      (e) 91:99

19. Total number of students in the class is 600 and the ratio of the number of boys to girls in the class is 13:17. If the average weight of the boys and girls in the class is 55 kg and 40 kg respectively, then what is the average weight of the class? (a) 56.5 kg      (b) 42.5 kg      (c) 46.5 kg      (d) 38.5 kg      (e) None

20. A started the business with the investment of Rs.1500. After 4 months B and C joined with the investment of Rs.2000 and Rs.2400 respectively. At the end of the year, the total profit of the business is Rs.7980, then find the profit share of A?

(a) Rs.4500      (b) Rs.2700      (c) Rs.5400      (d) Rs.6300      (e) None

21. A sum triples in 7 years at simple interest rate. In how much time it will become 9/2 times of itself at simple interest rate?

(a) 13 years      (b) 12.25 years      (c) 13.5 years      (d) 17 years      (e) None

22. If the length of a rectangle is increased by 15% and breadth is decreased by 20%, then what is the percentage change in the area of rectangle?

(a) 11% increase      (b) 10% decrease      (c) 7% decrease      (d) 8% decrease      (e) None

23. In a bag, number of 1 rupee coin is 50 and the number of 50 paise and 25 paise are in the ratio of 5:12. If the total value of 50 paise coins is Rs 25. Find the total value of coins in the bag.

(a) Rs 100      (b) Rs 105      (c) Rs 110      (d) Rs 120      (e) None of these

24. The driver of an ambulance sees an auto 50 m ahead of him. After 30 seconds, the auto is 40 m behind. If the speed of the ambulance is 36 km/hr, what is the speed of the auto?

(a) 20 km/hr      (b) 30 km/hr      (c) 28.2 km/hr      (d) 25.2 km/hr      (e) None of these

**1.a**

$$P \times 50\% = 2 \times 2500 \times 14.49\%$$

$$P = 1449$$

**2.b**

Mother = 59 - daughter

$$59 - d + 11 = 4d$$

$$70 = 5d$$

$$D = 14$$

**3.a**

$$15x = (x - 10)30$$

$$300 = 15x$$

$$x = 20$$

**4.c**

$$C.S.A = 1760$$

$$2\pi rh = 1760$$

$$2 \times \frac{22}{7} \times r \times 20 = 1760$$

$$R = 14$$

$$\text{Volume} = \pi r^2 h = \frac{22}{7} \times 14 \times 14 \times 20 = 12320 \text{ cm}^3$$

**5.b**

$$C_p = 15450 + 650 = 16100$$

$$S_p = 14560 \text{ Loss \%} = \frac{1540}{16100} \times 100 = 9.56\%$$

**6.E**

P : R

$$12 \times 5 : 6 \times 12$$

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$$6 \times 4000 - 2000 \times 6$$

$$60x + 24000 - 72x + 12000 = 1920$$

$$X = 1500$$

$$\text{Rahul} = 6 \times 1500 = 9000$$

**7.A**

$$\text{CI for 2 year} = 56.25\%$$

$$\text{SI for 2 year} = 50\%$$

$$6.25\% \text{ of } x = 125$$

$$X = 2000$$

$$\text{SI} = \frac{2000 \times 15 \times 3}{100} = 900$$

**8.C D G S**

$$\text{Investment} = 2 \ 3 \ 4$$

$$\text{Profit} = 3 \ 5 \ 4$$

$$\text{Time} = \frac{3}{2} \ \frac{5}{3} \ 1$$

$$\text{Ratio} = 9:10:6$$

**9.C P R**

$$I \text{-----} 9x \ 8x$$

$$E \text{-----} 11y \ 9y$$

$$\frac{9x - 11y}{8x - 9y} = \frac{1}{1}$$

$$9x - 11y = 8x - 9y$$

$$X = 2y$$

$$I \text{-----} 18y \ 16y$$

$$E \text{-----} 11y \ 9y$$

$$S \text{-----} 7y \ 7y = 18:7$$

**10.A** Ratio of collection =  $(3 \times 8) : (4 \times 7)$

$$\text{Ratio} = 24:28$$

$$\frac{1800 \times 28}{24} = 2100$$

**11.B**  $(d - s) = (v - d)$

$$2d = v + s$$

$$D = \frac{v + s}{2}$$

$$\frac{D + 5}{D - 5} = \frac{19}{14}$$

$$14D + 70 = 19D - 95$$

$$165 = 5D$$

$$D = 33$$

**12.B**

$$\text{Number} = 0, 2, 4, 6, 8$$

$$\text{Possibilities} = 4 \times 4 \times 3 \times 2 = 96$$

### 13.A

$$\text{Weight of 6 player} = 6 \times 80 = 480$$

$$\text{New player replaces} = 6 \times 77.5 = 465$$

$$\text{Weight of new player} = 80 - 15 = 65$$

### 14..E +5%\*6

$$+30\% \text{-----} 471$$

$$100\% = 1570$$

### 15.E.

$$\text{Distance} = d$$

$$(d/30) + (2d/40)$$

$$10d/120$$

$$\text{Speed} = \text{distance}/\text{time}$$

$$= 3d / (10d/120)$$

$$= (3d \times 120) / 10d = 36 \text{ km}$$

### 16..d

$$(60x/100) - (40x/100) = 310$$

$$20x/100 = 310$$

$$X = (310 \times 100) / 20 = 1550$$

### 17. Solution: A

$$\text{Upstream speed} : \text{downstream speed} = 3 : 4$$

$$\text{Upstream distance} : \text{downstream distance} = 30 : 24$$

$$\text{By dividing we get ratio of time taken Up} : \text{Down} = 5 : 3$$

$$\text{Hence 5 hrs and 3 hrs respectively}$$

$$\text{Thus, Upstream speed \& downstream speed} = 6 \text{ kmph and } 8 \text{ kmph}$$

$$\text{Speed of the boat} = (6+8) \div 2 = 7 \text{ kmph}$$

### 18. Solution: B

$$A = 3 : 2 \text{ (5) (x28)}$$

$$B = 4 : 3 \text{ (7) Lcm} = 140 \text{ (x20)}$$

$$C = 1 : 3 \text{ (4) (x35)}$$

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$$A + B + C = 199 : 221$$

### 19. Solution: C

$$55 \text{ kg } 40 \text{ kg ?}$$

$$13 : 17$$

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$$15 \div 30 = 0.5$$

$$13 \times 0.5 = 6.5$$

$$\text{Hence ?} = 40 + 6.5 = 46.5 \text{ kg}$$

$$\text{Or } 17 \times 0.5 = 8.5; ? = 55 - 8.5 = 46.5 \text{ kg}$$

### 20. Solution: B

$$A : B : C$$

$$1500 : 2000 : 2400$$

$$x \times x$$

$$12 \ 8 \ 8$$

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$$45 : 40 : 48$$

$$\text{Share of A} = 45133 \times 7980 = \text{Rs. } 2700$$

### (21) B Rate of interest = 200/7%

$$SI = P \times R \times T / 100$$

$$7 = 2 \times (2/7) \times T$$

$$T = 49/4 = 12.25 \text{ years}$$

### (22) D Ratio of old length to new length = 20 : 23

$$\text{Ratio of old breadth to new breadth} = 5 : 4$$

$$\text{Ratio of old area to new area} = 100 : 92$$

$$\text{Change} = (8/100) \times 100\% = 8\% \text{ decrease}$$

### (23) B Let the number of coins of 50 paise and 25 paise be 5x and 12x.

$$(5/2) \times x = 25$$

$$x = 10$$

$$\text{Value of Rs 1 coin} = \text{Rs } 50$$

$$\text{Value of 50 paise coin} = \text{Rs } 25$$

$$\text{Value of 25 paise coin} = \text{Rs } 30$$

$$\text{Total value of coins} = \text{Rs } 105$$

### (24) D Let the speed of auto be x km/hr.

$$(30 - x) \times 5/18 = 100/20$$

$$x = 25.2 \text{ km/hr}$$