

- (A) PERCENTAGE
(B) SIMPLE INTEREST
(C) PROFIT & LOSS
(D) TIME & WORK
(E) RATIO & PROPORTION

(A) PERCENTAGE (1)

1. The population of a town is 176000. If it increase at the rate of 5% p.a; What will be its population 2 years hence?

- (a) 194000 (b) 194090 (c) 190490 (d) 194104

2. The length and breadth of a rectangle are increased by 20% and 30%. The area of the resulting rectangle exceeds the area of the Original rectangle?

- (a) 50% (b) 65% (c) 56% (d) 156%

3. In an election between 2 candidate Who gets 40% of the total Vote defeated by 15000. The no of Votes polled by Winner?

- (a) 10000 (b) 45000 (c) 30000 (d) 6000

4. Raj save 10% after 2 years. When his income is increased by 10% he could save the same percentage of money; then how much his expenditure increased?

- (a) 10% (b) 20% (c) 5% (d) 15%

5. The price of sugar is reduced by 3%. How many kg of sugar can now be bought for the money which was sufficient to buy 50kg of rice earlier?

- (a) 50kg (b) 55kg (c) 51.5kg (d) 56kg

PERCENTAGE (A)

(2)

6. In an examination, full mark is 500; A gets 25% more than B, B gets 40% more than C and C gets 60% more than D. If A got 320, What percentage of full marks did D get (approx)?
(a) 21 (b) 22 (c) 23 (d) 24

7. If Harish height is 30% less than that of Yakesh; How much percentage Yakesh height is more than that of Harish?
(a) 42.58% (b) 42.8% (c) 42.83% (d) 42.85%

8. 500 pencils were distributed equally among children in such a way that the number of pencil received by each child is 20% of the total number of children. How many pencil did each child receive?
(a) 45 (b) 10 (c) 50 (d) 25

9. In an examination there are 3 subjects Maths, Science and Social of 100 marks each. Ganesh scores 60% and 80% in Maths and Science. He scored 70% in aggregate. His percentage of mark in Social is:
(a) 50 (b) 60 (c) 70 (d) 80

10. A book consist of 45 pages; 30 lines on each page and 60 character on each line. If this content is written in another note book consisting of 40 lines and 32 character one line then the required no of pages will be how much percentage more than the previous no of pages?
(a) 20% (b) 30% (c) 40% (d) 50%

(Q) SIMPLE INTEREST (E) (3)

1. A sum of money amounts to £ 8400 after 3 years and £ 12,000 after 6 years at the same rate of simple interest. The rate of interest per annum is:
(a) 25% (b) 20% (c) 52% (d) 15%
2. What will be the ratio of simple interest earned by certain amount at the same rate for 4 years and 12 years?
(a) 1:4 (b) 1:2 (c) 3:1 (d) 1:3
3. Sankar borrowed some money at the rate of 4% p.a. for the first 4 years; 6% for the next 3 years and 7% for the next 10 years. If the total interest paid by him is £ 8528; how much money did he borrow?
(a) 8200 (b) 8328 (c) 16728 (d) 10,520
4. A sum of money trebles itself in 16 years. In how many years it would become double itself in how many years?
(a) 4 (b) 5 (c) 8 (d) 8.5
5. If annual rate of simple interest increases from 10% to 12.5% ; annual income increases from £ 2500 ; then the principal (in £).
(a) £ 1,00,000 (b) £ 10,000 (c) £ 1,25,000 (d) £ 1,02,500

[10] SIMPLE INTEREST (F)

(1)

6. A sum of ₹1500 is lent out into 2 parts; one at 10% and another one at 6%. If the total annual income is ₹100; find the money lent at 10% P.a.

- (a) ₹910 (b) ₹520 (c) ₹250 (d) ₹550

7. A certain amount was put at SI at R% for 3 yrs. Had it been put at 3% higher rate, it would have fetched ₹450 more. Find the sum.

- (a) ₹4000 (b) ₹4500 (c) ₹5000 (d) ₹5500

8. The difference between SI received from two different sources on ₹2500 for 2 years is ₹15. The difference between the rate of interest is

- (a) 0.1% (b) 0.2% (c) 0.3% (d) 0.4%

9. Vithya gave ₹20,000 to Priya for 5 years and ₹30,000 to Vijay for 2 years. If the rate of interest is same and she received ₹12800 as SI from both. What is the rate of interest?

- (a) 8% (b) 7% (c) 9% (d) 11%

10. A sum of money becomes $\frac{7}{4}$ th of itself in 5 years at a certain rate of interest. What is the rate of interest?

- (a) 15% (b) 18% (c) 20% (d) 22%

[9] PROFIT & LOSS (C)

(5)

1. The sale price of an article including the sale tax is ₹ 616. The rate of sale tax is 10%. If the shopkeeper has made a profit of 12%, the cost price of the article is.

- (a) ₹ 500 (b) ₹ 515 (c) ₹ 550 (d) ₹ 600

2. Jagdeep bought a refrigerator with 20% discount on the labeled price. Had he bought it with 30% discount; he would have saved ₹ 500 more. At what price did he buy the refrigerator?

- (a) ₹ 5000 (b) ₹ 10,000 (c) ₹ 12,500 (d) ₹ 15,000

3. A article is listed at ₹ 2000 and a discount of 20% is offered on the list price. What additional discount must be offered to the customer bring the net price to ₹ 1400?

- (a) 12.5% (b) 10% (c) 12% (d) 15%

4. A shopkeeper gives 12% additional discount on the discounted price; after giving an initial discount of 20% on the labeled price of a mobile. If the final sale price of the mobile is ₹ 704. Then what is the labelled price?

- (a) ₹ 844 (b) ₹ 920 (c) ₹ 1000 (d) ₹ 1100

5. A dealer sold a Radio at a loss of 2.5%. Had he sold it for ₹ 100 more; he would have gained 7.5%. To gain 12.5% he should sell it for:

- (a) ₹ 2200 (b) ₹ 1000 (c) ₹ 1100 (d) ₹ 1125

[Q] Profit & Loss (C)

(6)

6. A man sells two flats for ₹ 8000 each; neither losing nor gaining in the deal. If he sold one at a gain of 25%, the other commodity sold at a loss of:

- (a) $16\frac{2}{3}\%$ (b) 6% (c) 25% (d) 32%

7. A house and shop were sold for ₹ 1 lakh each. In this transaction the house sells at 20% loss.

Whereas the shop sells at 20% profit. The entire transaction resulted in:

- (a) no loss no gain (b) loss of $\frac{1}{12}$ lakh (c) loss of 4 lakh (d) gain of ₹ 6 lakh

8. Sanki purchased 20 dozen notebook at ₹ 48 per dozen. He sold 8 dozen at 10% profit and remaining 12 dozen with 20% profit. What is his profit percentage in the transaction?

- (a) 8% (b) 15% (c) 16% (d) 19%

9. A retailer buys 40 pens at the marked price of 36 pens from a wholesaler. If he sells these pens giving a discount of 1%, what is the profit percent?

- (a) 10% (b) 22% (c) 25% (d) 26%

10. Jimmy bought 25 apples for ₹ 10 and sold them at the rate of 24 apples for ₹ 12. What is the percentage of profit made by him?

- (a) 25% (b) 70% (c) 80% (d) 100%

[10] TIME & WORK (D)

<7>

1. Two boys can do a piece of work in ten days. Three girls can do the same work in five days. In how many days can a boy and girl together do the work?
(a) 1.6 days (b) $8\frac{2}{7}$ days (c) 12 days (d) $5\frac{1}{2}$ days

2. A and B can complete a work in 20 days and 30 days respectively. Both of them started doing the work and A left after 6 days. In how many more days B complete the remaining work?
(a) 20 (b) 10 (c) 15 (d) 12

3. Work done by P in one day is double the work done by Q in one day, and work done by Q in one day is thrice the work done by R in one day. If P, Q and R together can complete the work in 30 days; then in how many days P alone can do the work?
(a) 50 days (b) 42 days (c) 30 days (d) 45 days

1. A can do a job in 4 days and B can do the same job in 6 days. If A's efficiency increases to $\frac{4}{3}$ times; then by ~~how many~~ how many times B has to reduce his efficiency so that the work can be completed by both of them in two days?
(a) 2 (b) 3 (c) $\frac{1}{4}$ (d) NO reduced

101 TIME & WORK (D) (8)

5. A can do a certain work in 24 days whereas B can do the same work in 32 days. They took the help of C and together completed the same work in 12 days. If they received £ 2112 for doing the work; What is C's share?
(a) £ 264 (b) £ 396 (c) £ 420 (d) £ 528

6. A is thrice as good a workman as B and therefore able to finish a job in 60 days less than B. Working together, they can do it in:
(a) 20 days (b) $22\frac{1}{2}$ days (c) 25 days (d) 30 days

7. A, B and C can do a piece of work in 20 days, 30 days and 60 days respectively. In how many days the work be completed, if A is assisted by B and C on every third day?
(a) 42 days (b) 15 days (c) 16 days (d) 18 days

8. A and B together can complete a work in 12 days. A alone can complete it in 20 days. If B does the work only for half a day daily; then in how many days A and B together will complete the work?
(a) 10 (b) 11 (c) 15 (d) 20

[9] TIME & WORK (D) (7)

9. X can do a piece of Work in 20 days and Y can do a piece of Work in 30 days. They Work together in 6 days; then how much Work left?

- (a) $\frac{1}{2}$ (b) $\frac{1}{4}$ (c) $\frac{1}{3}$ (d) $\frac{1}{6}$

10. 12 men Complete the Work in 9 days. After they Worked for 6 days; 6 more men joined; then how many days required to Complete the remaining Work?

- (a) 5 (b) 6 (c) 3 (d) 2

$$\begin{aligned} 1:2 &= 3:4 \\ 1:3 &= 4:6 \\ 1:4 &= 6:8 \\ \hline 1:5 &= 8:10 \end{aligned}$$

Time taken for 12 men to complete the work is 9 days.
 $12 \times 9 = 108$ man-days.
 In 6 days, 12 men complete $12 \times 6 = 72$ man-days.
 Remaining work = $108 - 72 = 36$ man-days.
 After 6 more men join, total men = 18.
 Days required = $\frac{36}{18} = 2$ days.

[9] RATIO & PROPORTION (E) <10>

1. The salaries of A, B and C are in the ratio 5:3:2. If the increments of 20%, 10% and 20% are allowed in their salaries; then what will be the new ratio of their salaries?

- (a) 22:11:9 (b) 22:10:8 (c) 20:11:8 (d) 20:10:9

2. A sum of money is to be distributed among P, Q, R and S in the proportion 2:5:6:7; if S gets £500 more than R. What is P's share?

- (a) £500 (b) £700 (c) £1000 (d) £200

3. The sum of the three numbers is 62. If the ratio of the first to second is 3:2 and that of the second to the third is 5:3; then the second number is

- (a) 20 (b) 22 (c) 23 (d) 24

4. The ratio of prices of 2 dresses is 10:15. If the price of the first dress is increased by 10% and that of the second dress by £400; then the ratio of their prices is 4:7. What are the initial prices of the 1st dress?

- (a) £910 (b) £920 (c) £930 (d) £940

[9] RATIO & PROPORTION (E) (11)

5. A zoo has 66 fishes; Some white and rest orange; Which of the following could be the ratio of white to orange fishes in the zoo?
 (a) 1:7 (b) 2:9 (c) 3:7 (d) 2:5

6. In a bag there are coins of 25p, 10p and 5p in the ratio 1:2:3. If there are £45 in all; then find how many 25p coins are there?
 (a) 60 (b) 65 (c) 70 (d) 75

7. Find out the third proportion of the term 12 and 24.
 (a) 38 (b) 44 (c) 48 (d) 42

8. The ratio of monthly income of A and B in the ratio is 6:5 and the ratio of their expenditure is 9:7. If each saves £1500. Then the sum of their salary is
 (a) £11,000 (b) £9,000 (c) £10,000 (d) £12,000

9. A horse takes 8 steps for every 5 steps of a fox, but 6 steps of a fox are equal to the 3 steps of the horse. What is the ratio of the speed of horse to fox?
 (a) 16:5 (b) 20:19 (c) 18:23 (d) 17:21

10. The ratio of age of Krish and her mother is 5:12 and difference of their ages is 21. What will be the ratio of their ages after 3 years?
 (a) 7:15 (b) 11:5 (c) 13:7 (d) 6:13