Q1. A takes 5 hours more time than that taken by B to complete a work. If working together they can complete the work in 6 hours, then the number of hours A takes to complete the work individually in:
(a) 10
(b) 15
(c) 5
(d) 7

Q2. A man sells an article at a loss of 10%. If he had received Rs. 9 more, he would have gained 12½%. The cost price of the article is:
(a) Rs. 40
(b) Rs. 36
(c) Rs. 32
(d) Rs. 48

Q3. The rate of interest p.a. increases from $8\frac{1}{3}\%$ to $9\frac{3}{8}\%$; a person's annual income from interest increases thereby Rs. 100. The amount invested was
(a) Rs. 9,600
(b) Rs. 10,200
(c) Rs. 8,400
(d) Rs. 12,000

Q4. The ratio in which Darjeeling Tea at Rs. 32 per kg is mixed with Assam Tea at Rs. 25 per kg so as to gain 20% by selling the mixture at Rs. 32.40 per kg is?
(a) 4 : 3
(b) 3 : 4
(c) 5 : 2
(d) 2 : 5

Q5. In a factory, the salary of each worker is increased in the ratio 22 : 25; but the number of workers is decreased by $26\frac{2}{3}\%$. Percentage increase or decrease in the total amount of total salary is:
(a) $21\frac{3}{4}\%$ increase
(b) $21\frac{3}{4}\%$ decrease
(c) $16\frac{2}{3}\%$ increase
(d) $16\frac{2}{3}\%$ decrease

Q6. If 15 men can build a wall 100 metres long, 4 metres high and 60 cm thick in 25 days, then the number of men required to build a wall 80 metres long, 3 metres high and 40 cm. thick in half the time is:
(a) 24
(b) 6
(c) 12
(d) 18

Q7. A student walking at 2½ km./hr. from the house, reaches the school 6 minutes later. In the next day he walks at 3½ km./hr., reaches the school 6 minutes earlier starting at the same time. The distance of the school from the house is?

(a) $1\frac{3}{4}$ km.

(b) 2 km.

(c) $2\frac{1}{2}$ km.

(d) $3\frac{1}{3}$ km.

Q8. By selling a house to B at Rs. 4,860, A suffered a loss of 19%. B sold the house to C at a price for which A could gain 17%. Percentage of profit gained by B is:

(a) $41\frac{1}{4}\%$

(b) $36\frac{3}{5}\%$

(c) $44\frac{4}{9}\%$

(d) $42\frac{2}{7}\%$

Q9. Rs. 33,630 is divided amongst A, B and C such that the amount of A : amount of B = 3 : 7 and the amount of B : amount of C = 6 : 5. The money received by B is:
(a) Rs. 18,762
(b) Rs. 6,372
(c) Rs. 12,390
(d) Rs. 14,868

Q10. The difference between 5/6 of Rs. 600 and 5/6% of Rs. 600 is ?
(a) Rs. 500
(b) Rs. 50
(c) Rs. 5
(d) Rs. 495

Q11. Two numbers are respectively 30% and 40% less than a third number. What percent is the first number of the second?
(a) 110.1%
(b) 119.9%
(c) 116.66%
(d) 101.2%

Q12. A pump can fill a tank with water in 2 hours. Because of a leak in the tank it was taking $2\frac{1}{3}$ hours to fill the tank. The leak can drain all the water off the tank in.

(a) 8 hours

(b) 7 hours

(c) $4\frac{1}{3}$ hours

(d) 14 hours

Q13. A can do a piece of work in 4 hours; B and C can do it in 3 hours; A and C can do it in 2 hours. How long will B along take to do it?

(a) 10 hours
(b) 12 hours
(c) 8 hours
(d) 24 hours

Q14. The difference between the simple and compound interest on a certain sum of money at 5% rate of interest per annum for 2 years is Rs. 15. Then the sum is:

(a) Rs. 6,500
(b) Rs. 5,500
(c) Rs. 6,000
(d) Rs. 7,000

Q15. A sum borrowed under compound interest doubles itself in 10 years. When will it become fourfold of itself at the same rate of interest?

(a) 15 years
(b) 20 years
(c) 24 years
(d) 40 years

Q16. The value of 25 – 5 [2 + 3 {2 – 2(5 – 3) + 5} – 10] ÷ 4 is

(a) 5
(b) 23.25
(c) 23.75
(d) 25

Q17. The value of $(256)^{0.16} \times (16)^{0.18}$ is

(a) 4
(b) –4
(c) 16
(d) 256

Q18. If x : y = 3 : 2 then the ratio $2x^2 + 3y^2 : 3x^2 – 2y^2$ is equal to

(a) 12 : 5
(b) 6 : 5
(c) 30 : 19
(d) 5 : 3

Q19.

If A : B : C = 2 : 3 : 4,

then $\frac{A}{B} : \frac{B}{C} : \frac{C}{A}$ is equal to

(a) 8 : 9 : 16
(b) 8 : 9 : 12
(c) 8 : 9 : 24
(d) 4 : 9 : 16

Q20. X's income is 20% more than that of Y. What percent is Y's income less than X?

(a) $83\frac{1}{3}\%$

(b) $16\frac{2}{3}\%$

(c) $83\frac{2}{3}\%$

(d) $16\frac{1}{3}\%$

Q21. The incomes of A and B are in the ratio 3 : 2 and their expenditures are in the ratio 5 : 3. If each saves Rs. 1,000, the income of B is?
(a) Rs. 6,000
(b) Rs. 5,000
(c) Rs. 4,000
(d) Rs. 3,000

Q22. A man bought a horse and carriage for Rs. 5,000 and sold the horse at a gain of 20 percent and the carriage at a loss of 10 percent, thus gaining 2 percent on his whole outlay. For how much was the horse bought?
(a) Rs. 2,500
(b) Rs. 2,000
(c) Rs. 3,000
(d) Rs. 3,200

Q23. The rate of interest on a sum of money is 4% per annum for the first two years, 6% per annum for the next 4 years and 8% per annum for the period beyond 6 years. If the simple interest accrued by the sum for a total period of 9 years is Rs. 1,120, the sum of money was?
(a) Rs. 1,500
(b) Rs. 2,000
(c) Rs. 2,500
(d) Rs. 3,000

Q24. By selling four articles per rupee a man loses 4%. If he would sell three articles per rupee, then the profit percent is?
(a) 14%
(b) 21%
(c) 28%
(d) 35%

Q25. Two trains, one from Howrah to Patna and the other from Patna to Howrah start simultaneously. After they meet, the trains reach their destinations after 9 hours and 16 hours respectively. The ratio of their speeds per hour is?
(a) 2 : 3
(b) 4 : 3
(c) 6 : 7
(d) 9 : 16

Q26. The ratio of cost price and sale price of an article is 10 : 11. The percentage of profit is?
(a) 11.5%
(b) 10.5%
(c) 10%
(d) 11%

Q27. A person standing on a railway platform 180 metres long noticed that a train which passed him is 8 seconds passed completely through the station in 20 seconds. Length of the train is?
(a) 54 m
(b) 108 m
(c) 120 m
(d) 176 m

Q28. A man after giving away 1/4 of this money to one companion and 4/5 of the remainder to another, has Rs 9 left. The amount of money was?
(a) Rs. 45
(b) Rs. 60
(c) Rs. 36
(d) Rs. 120

Q29. The sum of two numbers is 45 and their difference is 1/9 of their sum. Their LCM is?
(a) 200
(b) 250
(c) 100
(d) 150

Q30. In an examination, A and B secured 6/7 and 5/6 respectively of full marks. If B secured 10 marks less than A, then the marks secured by B is:
(a) 360
(b) 350
(c) 370
(d) 340