Quant Mega Quiz for SSC CGL Tier - 2

Q1. Total distance between Delhi to Lucknow is 480 km. A train starts running with an average speed of 60 km/hr from Delhi to Lucknow while another train starts Journey after 120 minutes of first train and reaches Lucknow 30 minutes before first train. If first train stops for 5 minutes on each station and second train did not stop at any station ,then find the ratio between speed of first train to speed of second train given that total number of station between Delhi and Lucknow are nine.?
(a) 25 : 33
(b) 25 : 32
(c) 35 : 25
(d) 25 : 31

Q2. Rinki invested 30% less than charu, who invested 20% less than Purvi in partnership for first eight months. If for next four months Rinki, Charu and Purvi withdraw 2/7, 2/5 and 1/5 of their initial capital respectively, and charu got Rs. 2800 more as profit than Rinki, find sum of profit share of Charu and Purvi?
(a) Rs. 29700
(b) Rs. 25800
(c) Rs. 26600
(d) Rs. 24400

Q3. In vessel A mixture , petrol and kerosene oil are in the ratio of 7 : 5 and in vessel B it is in the ratio of 8 : 5. P liter of mixture from vessel A and Q liter of mixture from vessel B are taken out and poured into vessel C. If vessel C contains total 150 liter mixture with 40% kerosene oil, then find value of P/Q?
(a) 12/19
(b) 12/17
(c) 11/13
(d) 12/13

Q4. A, B and C entered into a partnership with some investment for one year. After one-year A got 2/5 profit and B and C got equal part of remaining profit. If total profit after one year is 15% instead of 10% then A got 900 Rs. more. Find the investment of B.
(a) 12000
(b) 45000
(c) 27000
(d) 13500

Q5. A boat cover 60 km upstream and 60 km downstream in 22.5 hr with its usual speed. If boat double its speed then new upstream speed is 150% more than the usual upstream speed. Find the time taken by boat to cover 80 km in downstream with usual speed.
(a) 12 hr
(b) 20 hr
(c) 5 hr
(d) 10 hr

Q6. The daily work of 2 women is equal to that of 3 men or that of 4 children. By employing 14 women, 12 men, and 12 children a certain work can be finished in 24 days. If it is required to finish it in 14 days and as an additional labour, only women are available, how many of them will be required?
(a) 18
(b) 20
(c) 48
(d) 28

Q7. Equal amounts of each Rs. 43,892 is lend to two persons for 3 years. One at the rate of 30% S.I. and second at the rate of 30% C.I. annually. By how much percent the C.I. is greater than the simple interest received in this 3 years duration?
(a) 33%
(b) 36%
(c) 39%
(d) 30%

Q8. Mr. Giridhar spends 50% of his monthly income on household items and out of the remaining he spends 50% on transport, 25% on entertainment, 10% on sports and remaining amount of Rs. 900 is saved. What is Mr. Giridhar's monthly income?
(a) Rs. 6000
(b) Rs. 12000
(c) Rs. 9000
(d) Can't be determined

Q9. A manufacturer sells a pair of glasses to a wholesale dealer at a profit of 18%. The wholesaler sells the same to a retailer at a profit of 20%. The retailer in turn sells them to a customer for Rs. 30.09, thereby earning a profit of 25%. The cost price for the manufacturer is
(a) Rs. 16
(b) Rs. 20
(c) Rs. 17
(d) Rs. 24

Q10. HB produces very fine quality of sketching pencils. Company knows that on an average 10% of the produced pencils are always defective so are rejected before packing. Company promises to deliver 7200 pencils to its wholesaler at Rs. 10 each. It estimates the overall profit on all the manufactured pencils to be 25%. What is the manufacturing cost of each pencil?

(a) Rs. 6
(b) Rs. 7.2
(c) Rs. 5.6
(d) Rs. 8

Q11. A gave 40% of his monthly salary to B. B spent 20% of this amount on taxi fare. He spent the remaining amount in the respective ratio of 3 : 5 on tuition fees and library membership. If he spent Rs 1720 for membership, what is A's monthly salary?

(a) Rs 8500
(b) Rs 8600
(c) Rs 7600
(d) Rs 7500

Q12. Muskaan gives 20% of her salary to Simran. Simran gives 40% of this money to her Mom and remaining money is invested for 2 years in a scheme which offer Compound Interest at the rate of 20% p.a. If Interest earned on amount invested is Rs6600 then, find the salary of Muskaan.

(a) 150000
(b) 175000
(c) 140000
(d) 125000

Q13. Difference between the compound interest and simple interest earned on a certain amount in 2 years at the rate of 12 % p.a. is Rs 144. If same amount is invested in scheme 'P' which offer simple interest at the rate of 15% p.a. for 4 years then, find the simple interest earned from scheme 'P'.

(a) 4000
(b) 6000
(c) 14400
(d) 4500

Q14. Raman is travelling with a speed of 15 km/hr and reached point 'X' at 12:00 pm. If he had travelled with a different speed he would reach 'X' at 3 : 00 pm but if he further increased its changed speed by 80% then, he reach 'X' at 11 : 00 am. Find the speed with which Raman reach 'X' at 11 : 00 am.

(a) 10
(b) 20
(c) 15
(d) 18

Q15. Rakesh lent Rs. P to Rahul on an agreement that for first two year, interest will be calculated on SI at 15% per annum and for next two years interest will be calculated on C.I at 5% additional rate. If Rahul paid total amount of Rs. 17971.2 at the end of four year, Find the amount borrowed by Rahul?
(a) 9000 Rs.
(b) 9800 Rs.
(c) 9900 Rs.
(d) 9600 Rs.

Q16. Marked price of two articles A and B are in the ratio of 7 : 9, at the time of selling shopkeeper gives discount of d% on article A and (d + 5) % on article B and made a profit of 25% on each article, if cost price of article A and B are in ratio 112 : 135. Then find percent of discount given by shopkeeper on both articles?
(a) 12.5%, 17.5%
(b) 25%, 30%
(c) 10%, 15%
(d) 20%, 25%

Q17. An alloy contains only zinc and copper. One such alloy weighing 15 gm contains zinc and copper in the ratio of 2 : 3 by weight. If 10 gm of zinc is added then find what amount of copper has to be removed from the alloy such that the final alloy has zinc and copper in the ratio of 4 : 1 by weight?
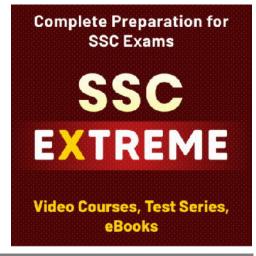(a) 5 gm
(b) 5.5 gm
(c) 6 gm
(d) 4.8 gm

Q18. Speed of train 'Y' is 100% more than speed of train 'X'. Length of train 'Y' is 150% of the length of train 'X'. If train 'X' can cross a pole in 2 seconds, then find in how much time train 'X' can cross train 'Y' when they travel in same direction?
(a) 4 seconds
(b) 5 seconds
(c) 6 seconds
(d) 8 seconds

Q19. There are total 30 students is in class 'A' and class 'B' together. Average marks of class 'A' is 30 while average marks of class 'B' is 36. If total marks of class 'B' is 80% more than that of class 'A' then find total number of student in class 'B'?
(a) 12
(b) 15
(c) 9
(d) 18

Q20. Anushka has certain amount with herself. She invested half of amount in scheme 'A' which offers compound interest at the rate of 10% p.a. and remaining half in scheme 'B' which offers compound interest at the rate of 20% p.a. If after 2 years she earns total interest of Rs5200, then find the amount Anushka has initially?

(a) 8,000

(b) 12,000

(c) 16,000

(d) 20,000

Q21.Two trains A and B with their length difference 17 m cross each other in 2.6 seconds while running in opposite direction. Train A crosses train B in 13 seconds while they are running in same direction. If train A takes 2 seconds to cross a pole, then find the sum of speed of both the trains, assuming that train B is longer than train A.

(a) 34 m/s

(b) 51 m/s

(c) 68 m/s

(d) 85 m/s

Q22.Train X having length 130 m and train Y having length 145 m moving in opposite direction. They enter into a tunnel, simultaneously, which have length equal to the sum of length of both trains. Trains meet after 10 second of entering in the tunnel. What percent of train X part is leave out the tunnel when it meet train Y if they have speeds in the ratio of 5 :6.

(a) $2\frac{11}{13}\%$

(b) $3\frac{11}{13}\%$

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

(d) 5%

Q23. Two pipes A and B together can fill a tank in 20 hours. Ratio of efficiency A to B is 5 : 4. They together filled the tank for the first 4 hours and then B is closed and another pipe C is opened. Now if tank is filled in another 9 hours then find time taken by C to complete the work alone.

(a) 90/7 hour

(b) 80/5 hour

(c) 180/11 hour

(d) 180/7 hour

Q24.A person bought some mobiles and he sold 60% of them at the profit of 3.5% & sold rest of them at the rate of Rs. 6,660 each. In this transaction, he earned an overall profit% of 6.5%. Find the SP (in Rs.) of each mobile which were sold at 3.5% profit.

(a) Rs 6210

(b) Rs 7230

(c) Rs 5830

(d) Rs 5760

Q25. A tank is filled by three pipes with uniform flow. The first two pipes operating simultaneously fill the tank in the same time during which the tank is filled by the third pipe alone. The second pipe fills the tank 5 hrs faster than the first pipe and 4 hrs slower than the third pipe. The time required by the first pipe is:
(a) 6 hrs
(b) 10 hrs
(c) 15 hrs
(d) 30 hrs

Q26. Rihana had Rs. 4200. She invested some of it in scheme A for 4 years and rest of the money she invested in scheme B for two years. Scheme A offers simple interest at a rate of 22% p.a. and scheme B offers compound interest (compounded annually) at a rate of 10% p.a. If the interest received from scheme A is Rs. 1516 more than the interest received from Scheme B, what was the sum invested by her in scheme A?
(a) Rs. 2,600
(b) Rs. 2,000
(c) Rs. 2,200
(d) Rs. 2,400

Q27. Panchhi's age 8 years ago is equal to the sum of present ages of her son and her daughter. 5 years hence, the ratio between her daughter's age and her son's age will be 7 : 6 respectively. Panchhi's husband is 7 years elder than her. Her husband's present age is thrice the present age of his son. What is her daughter's present age?
(a) 23 years
(b) 24 years
(c) 28 years
(d) 25 years

Q28. Shobha and Saurabh have equal amount. Shobha invested on C.I. for two years at the rate of 10% p.a. and Saurabh invested 66⅔% of amount at the rate of R% p.a. on simple interest and remaining amount at the rate of 6.5% p.a. on simple interest. If interest received by both at the end of two years are equal, then find the value of 'R'?
(a) 10%
(b) 12.5%
(c) 15%
(d) 12%

Q29. Profit on selling 10 pencils equals selling price of 3 pen. While loss on selling 10 pen equals selling price of 4 pencils. Also profit percent-age equals to the loss percentage and cost of a pencil is half of the cost of a pen. What is the ratio of selling price of pencil to the selling price of a pen?
(a) 5 : 4
(b) 3 : 2
(c) 4 : 5
(d) 3 : 4

Q30. A train, an hour after starting, meets with an accident which detains it for half an hour, after which it proceeds at 3/4 of its former rate and arrives 3½ hrs late. Had the accident happened 90 Km farther along the line, it would have arrived only 3 hrs late. The length of the trip in kilometres was:

(a) 400
(b) 465
(c) 600
(d) 640