Quant Mega Quiz for SSC CGL Tier - 2

Q1. The HCF and LCM of 2 numbers are 44 and 264 respectively if the first number is divided by 2, the quotient is 44. The other no is. ?
(a) 147
(b) 528
(c) 132
(d) 264

Q2. The least number which when divided by 4, 6, 8, 12 and 16 leaves a remainder 2 in each case ?
(a) 46
(b) 48
(c) 50
(d) 56

Q3. Find the greatest number of 5 digits which when divided by 3, 5, 8, 12 have 2 as remainder ?
(a) 99999
(b) 99958
(c) 99960
(d) 99962

Q4. A, B, C start running at the same time and at the same point in the same direction in a circular stadium. A completes round is 252 sec, B in 308 sec & C in 198 seconds. After what time will they meet again at the starting point ?
(a) 26 minutes 18 sec
(b) 42 m 36 sec
(c) 45 m
(d) 46 m 12 sec

Q5. Find the largest number of 4 digits such that on dividing by 15, 18, 21 and 24 the remainders are 11, 14, 17 and 20 respectively ?
(a) 6557
(b) 7556
(c) 5675
(d) 7664

Q6. Which is the least number which when doubled will be exactly divisible by 12, 18, 21 and 30 ?
(a) 2520
(b) 1260
(c) 630
(d) 196

Q7. If the students of a class can be grouped exactly into 6 or 8 or 10, then the minimum number of students in the class must be ?
(a) 60
(b) 120
(c) 180
(d) 240

Q8. A number which when divided by 10 leaves remainder 9, when divided by 9 leaves a remainder of 8, and when divided by 8 leaves a remainder of 7 is ?
(a) 1539
(b) 539
(c) 359
(d) 1359

Q9. What least no. must be subtracted from 1936 so that the resulting number when divided by 9, 10 and 15 will leave in each case the same remainder 7 ?
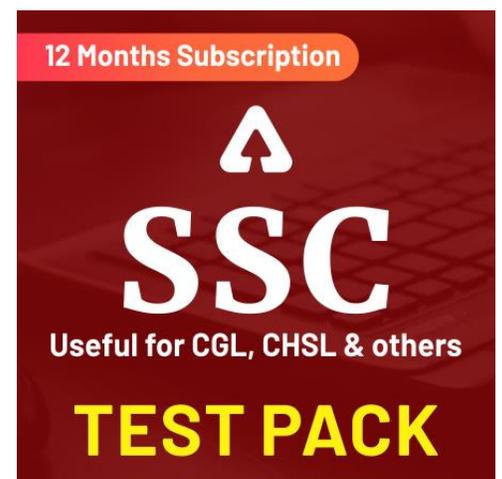(a) 37
(b) 36
(c) 39
(d) 30

Q10. Three bells ring simultaneously at 11 am. They ring at regular interval of 20 minutes, 30 min and 40 min respectively. The time when all three ring together next is ?
(a) 2 pm
(b) 1 pm
(c) 1.15 pm
(d) 1.30 pm

Q11. How many liters of water be added to 10.5 liters of mixture of alcohol and water containing alcohol and water in the ratio 1 : 2, such that the resultant mixture has 20% alcohol is it?
(a) 4.5 L
(b) 3.5 L
(c) 7 L
(d) 10.5 L

Q12. In what ratio sugar costing Rs. 450/kg be mixed with sugar costing 525/kg so that the cost of resulting mixture be Rs. 500/kg?
(a) 1 : 2
(b) 2 : 3
(c) 2 : 1
(d) 1 : 3

Q13. A started a business by investing Rs. 5 lakh. After 4 months B joined the business by investing Rs. 10 Lakh then, 2 months after B joined C too joined the business by investing Rs. 15 Lakhs. 1 year after A started the business they made a profit of Rs. 560000. What is C's share in the profit?
(a) 180000 Rs.
(b) 250000 Rs.
(c) 230000 Rs.
(d) None of these

Q14. The wages of three persons X, Y & Z are in the ratio 12 : 15 : 22. If X's wage is increased in the ratio 3 : 5, Y's wage is increased in the ratio 5 : 6 and Z's wage is increased in the ratio 11 : 13. The new ratio of the wages of X : Y : Z is?
(a) 10 : 11 : 13
(b) 10 : 9 : 13
(c) 13 : 9 : 10
(d) None of these

Q15. Sachin bought 1.5 kg fresh grapes. The ratio of water is to pulp was 4:1. When his naughty child crushed these grapes, then some water get wasted. Now the ratio of water is to pulp is 3 : 2. What is the total amount of the crushed grapes?
(a) 0.5 kg
(b) 1 kg
(c) 0.75 kg
(d) None of these

Q16. A naughty student breaks the pencil in such a way that the ratio of two broken parts is same as that of the original length of the pencil to one of the large part of the pencil. The ratio of the other part to the original length of pencil is:
(a) $1 : 2\sqrt{5}$
(b) $2 : (3 + \sqrt{5})$
(c) $2 : \sqrt{5}$
(d) Can't be determined

Q17. A container is filled with the mixture of milk and water. The ratio of milk and water is same. Bobby and Sunny increases the concentration to 60%. Bobby makes it by adding the milk and Sunny makes it by replacing the mixture with milk. What is the percentage of milk added by Bobby to that of milk replaced by Sunny:

(a) 100%

(b) 120%

(c) 133.33%

(d) None of these

Q18. The ratio of the density of 3 kinds of petrol P_1, P_2 and P_3 is 9 : 7 : 5. The density of P_1 is 18 gm/cc and P_1, P_2, P_3 are mixed in the ratio of 6 : 5 : 4 by weight. If a litre of P_3 cost of Rs. 40, then find the cost of P_3 in 450 kg of mixture of P_1, P_2 and P_3:

(a) Rs. 380

(b) Rs. 480

(c) Rs. 355

(d) Rs. 448

Q19. Pooja, Shipra and Monika are three sisters. Pooja and Shipra are twins. The ratio of sum of the ages of Pooja and Shipra is same as that of Monika alone. Three years earlier the ratio of age of Pooja and Monika was 2 : 7. What will be the age of Shipra 3 years hence?

(a) 21 years

(b) 16 years

(c) 8 years

(d) 12 years

Q20. Akbar and Birbal who purchased the shares for the cost of their basic salaries which are in the ratio of 5 : 6. Later on company gave them 40 additional shares to each, due to which the ratio changed to 7 : 8. If the worth of each share is Rs. 75, what is the basic salary of the person who got less shares?

(a) Rs. 10500

(b) Rs. 7500

(c) Rs. 8800

(d) Rs. 9000

Q21. Find the number of student who took the examination, if the ratio of those who passed the examination to those who failed is 13 : 2. If 20 more students took the examination and 20 less had failed, then the ratio of passed to failed students be 15 : 1?

(a) 200

(b) 300

(c) 400

(d) 500

Q22. If the ratio of bank balance of A : B : C is 9 : 14 : 5. If C transfers Rs. 90000 to B's account, then the ratio becomes 9 : 11 : 2. Find the bank balance of A?

(a) 270000 Rs.
(b) 300000 Rs.
(c) 250000 Rs.
(d) None of these

Q23. If (a + b) : (b + c) : (c + a) = 9 : 11 : 10 and a + b + c = 30. Find the ratio of $\frac{1}{a} : \frac{1}{b} : \frac{1}{c}$?

(a) 15 : 13 : 11
(b) 15 : 12 : 10
(c) 13 : 11 : 9
(d) 9 : 11 : 10

Q24. If x is added to 4, 7, 25 and 35, then the numbers obtained in this order are in proportion. Then find the mean proportion of (31 + x) (9 – x).

(a) 10
(b) 11
(c) 12
(d) 13

Q25. The ratio of copper to zinc in Alloy A & B are 3 : 4 and 5 : 9 respectively, A & B are mixed in the ratio 2 : 3 and melted to form the alloy C. What is the ratio of copper to zinc in C?

(a) 27 : 43
(b) 43 : 27
(c) 2 : 3
(d) 5 : 2