

UTC Aerospace Systems Placement Paper Questions

Q1. The L.C.M of two numbers is 2310 and their H.C.F is 30. If one number is 210, the other number is?

ANS: 330

Q2. Divide 50 in two parts so that the sum of reciprocals is $(1/12)$, the numbers are?

Q3. In a class of 20 students in an examination in Mathematics 2 students scored 100 Marks each, 3 get zero each and the average of the rest was 40. What is the average Of the whole class?

ANS: 40

Q4. Find the H.C.F of 777 and 1147?

ANS: 37

Q5. A batsman in his 18th innings makes a score of 150 runs and there by increasing his Average by 6. Find his average after 18th innings?

ANS: 42

Q6. 13 sheeps and 9 pigs were bought for Rs. 1291.85. If the average price of a sheep be Rs. 74. What is the average price of a pig?

ANS: 36.65

Q7. The greatest number, which can divide 432, 534 and 398 leaving the same remainder 7 in each. Required number is the H.C.F of?

ANS: 17

Q8. Five years ago the average age of a family of 3 members was 27 years. A child has been born, due to which the average age of the family is 25 years today. What is the present age of the child?

ANS: 4 years

Q9. A man traveled a certain distance at the rate of 15 miles an hour and came back at the rate of 10 miles an hour. What is his average speed?

ANS: 12 miles an hour

Q10. The average of 50 numbers is 38. If two numbers namely 45 and 55 are discarded, the average of remaining numbers is?

ANS: 37.5

Q11. A person's salary is getting reduced by 20%. What percentage should be added to get back his original salary?

ANS: 25%

Q12. A person starts walking at a speed of 5km/hr through half the distance, rests for the distance he covers with a speed of 4km/hr. Total time of travel is 9 hours. What is the maximum distance he can cover?

ANS: 40 km

Q13. Two persons start at the same point, walk in opposite directions with 5km/hr and 5.5km/hr respectively. What is the distance separated after 2 and half hours?

ANS: 26.25(approx)

Q14. Find the nth number in the series is 1, -3, 5, -7,___?

ANS: $(-1)^{(2n-1)}$

Q15. If a square is formed by the diagonal of the square as an edge, what is the ratio between the area?

ANS: 2

Q16. A persons salary is decreased by steps of 20%, 15% and 10%. What will be the percentage decrease, if the salary is decreased in a single shot?

Q17. The average ages of three persons is 27 years. Their ages are in the proportion of 1:3:5.What is the age in years of the youngest one among them?

ANS: 9

Q18. The smallest number which when divided by 20, 25, 35, 40 leaves the remainder 6. When divided by 14, 19, 23 and 34 respectively is the difference between divisor and The corresponding remainder is 6.

ANS: 1394

Q19. Sum of three even consecutive numbers is 48, and then least number is?

ANS: 14

Q20. The Value of $24 + \frac{3}{64} + \frac{4}{28}$ is?

ANS: 12

Q21. Of the two-digit numbers (those from 11 to 95, both inclusive) how many have a Second digit greater than the first digit?

ANS: 36

Q22. Find L.C.M of 852 and 1491?

ANS: 5964

Q23. 3 persons started placement papers with a capital of Rs.3000. B invest Rs.600 less than A, C invest Rs.300 less than B. Then what is the share amount of B in a profit of Rs.886?

Q24. In a rectangle the length is increased by of the original length. By what proportion should the width be reduced so that the area will be the same?

ANS: 33

Q25. A cubical rectangular bar has the dimensions with the ratio 5 : 4 : 3. Its volume is 7500. What is the surface area of the bar?

ANS: 2350

Q26. The average of 11 numbers is 50. If the average of first 6 numbers is 49 and that of last 6 is 52. Find the 6th number?

ANS: 56

Q27. It being given that $15 = 3.88$, the best approximation to a $5/3$ is

ANS: 1.29

Q28. The perimeter of a rhombus is 52 units. One of its diagonal is 24 units. What is its second diagonals length?

ANS: 10

Q29. The least multiple of 7 which leaves a remainder 4 when divided by 6,9,15 and 18 is L.C.M of 6,9,15 and 18 is 90.

ANS: 364

Q30. The age difference between two brothers is 3 years. After 6 years the ratio between the age is 9:8. What are their ages?

ANS: 21 and 18