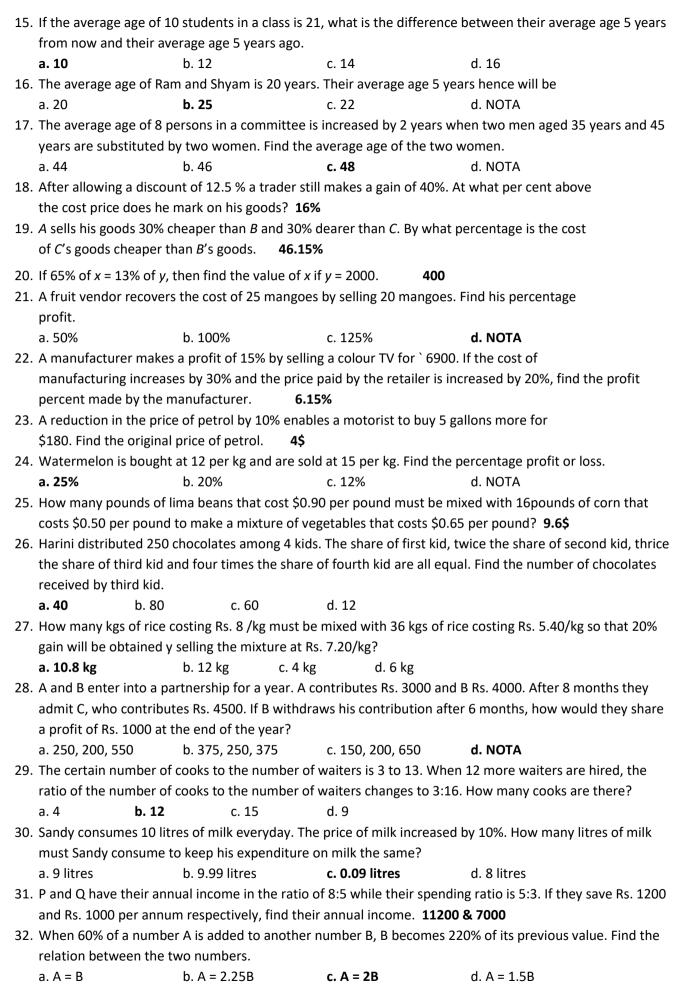1. Find the number of zeroes in the product $1^1 \times 2^2 \times 3^3 \times 4^4 \times 5^5 \times 6^6 \times \dots \times 49^{49}$ - **250**
2. Find the number of ending zeroes for the following?
    (a) 3200 + 1000 + 40000 + 32000 + 15000000 **- 2**
    (b) 3200 × 1000 × 40000 × 32000 × 16000000 **- 18**
3. A & B invested in the ratio 4:9 in a business. If 8 % of the total profit goes to charity and A's share in the business is Rs. 460, find the total profit.
    a. Rs. 2625   b. Rs. 2526   c. Rs. 1526   d. **Rs. 1625**
4. `2250 is divided among three friends Amar, Bijoy and Chandra in such a way that 1/6th of Amar's share, 1/4th of Bijoy's share and 2/5th of Chandra's share are equal. Find Amar's share.
    (a) `720          **(b) `1080**   (c) `450          (d) `1240
5. King Sheru had ordered the distribution of apples according to the following plan : for every 20 apples the elephant gets, the zebra should get 13 apples and the deer should get 8 apples. Now his servant Shambha jackal is in a fix. Can you help him by telling how much should he give to the elephant if there were 820 apples in total?
    (a) 140   (b) 160   (c) 200   **(d) 400**
6. If the ratio of the ages of A and B is 6 : 5 at present, and fifteen years from now, the ratio will get changed to 9 : 8, then find B's present age.
    a. 15   b. 20   **c. 25**   d. NOTA
7. A man receives `60 for the first week and `3 more each week than the preceding week. How much does he earn by the 20th week?   **Rs. 1770**
8. A, B and C enter into a partnership with a capital in which A's contribution is Rs.10,000. If out of a total profit of Rs.1000, A gets Rs.500 and B gets Rs.300 then C's capital is
    a) 4000   b) 5000   c) 6000   d) 9000
9. A naughty boy Amrit watches an innings of Sachin Tendulkar and acts according to the number of runs he sees Sachin scoring. The details of these are given below.
    1 run   Place an orange in the basket
    2 runs   Place a mango in the basket
    3 runs   Place a pear in the basket
    4 runs   Remove a pear and a mango from the basket
    One fine day, at the start of the match, the basket is empty. The sequence of runs scored by Sachin in that innings are given as 11232411234232341121314. At the end of the above innings, how many more oranges were there compared to mangoes inside the basket? (The Basket was empty initially).
    (a) 4   (b) 5   **(c) 6**   (d) 7
10. If P & Q are different prime numbers. Find the number of divisors of P x Q.
    a. 2   **b. 4**   c. 6   d. CBD
11. Find the remainder when 51^{203} is divided by 7.
    a. 4   b. 2   c. 1   d. 6
12. The average age of A, B, C and D five years ago was 45 years. By including X, the present average age of all the five is 49 years. The present age of X is
    (a) 64 years   (b) 48 years   **(c) 45 years**   (d) 40 years
13. The average of 13 papers is 40. The average of the first 7 papers is 42 and of the last seven papers is 35. Find the marks obtained in the 7th paper.
    a. 49   b. 35   c. 42   **d. NOTA**
14. The average age of 3 students *A*, *B* and *C* is 48 marks. Another student *D* joins the group and the new average becomes 44 marks. If another student *E*, who has 3 marks more than *D*, joins the group, the average of the 4 students *B*, *C*, *D* and *E* becomes 43 marks. Find how many marks *A* got in the exam.
    39

15. If the average age of 10 students in a class is 21, what is the difference between their average age 5 years from now and their average age 5 years ago.

    a. 10   b. 12   c. 14   d. 16

16. The average age of Ram and Shyam is 20 years. Their average age 5 years hence will be

    a. 20   **b. 25**   c. 22   d. NOTA

17. The average age of 8 persons in a committee is increased by 2 years when two men aged 35 years and 45 years are substituted by two women. Find the average age of the two women.

    a. 44   b. 46   **c. 48**   d. NOTA

18. After allowing a discount of 12.5 % a trader still makes a gain of 40%. At what per cent above the cost price does he mark on his goods? **16%**

19. *A* sells his goods 30% cheaper than *B* and 30% dearer than *C*. By what percentage is the cost of *C*'s goods cheaper than *B*'s goods.   **46.15%**

20. If 65% of *x* = 13% of *y*, then find the value of *x* if *y* = 2000.   **400**

21. A fruit vendor recovers the cost of 25 mangoes by selling 20 mangoes. Find his percentage profit.

    a. 50%   b. 100%   c. 125%   **d. NOTA**

22. A manufacturer makes a profit of 15% by selling a colour TV for ` 6900. If the cost of manufacturing increases by 30% and the price paid by the retailer is increased by 20%, find the profit percent made by the manufacturer.   **6.15%**

23. A reduction in the price of petrol by 10% enables a motorist to buy 5 gallons more for $180. Find the original price of petrol.   **4$**

24. Watermelon is bought at 12 per kg and are sold at 15 per kg. Find the percentage profit or loss.

    a. 25%   b. 20%   c. 12%   d. NOTA

25. How many pounds of lima beans that cost $0.90 per pound must be mixed with 16pounds of corn that costs $0.50 per pound to make a mixture of vegetables that costs $0.65 per pound? **9.6$**

26. Harini distributed 250 chocolates among 4 kids. The share of first kid, twice the share of second kid, thrice the share of third kid and four times the share of fourth kid are all equal. Find the number of chocolates received by third kid.

    a. 40   b. 80   c. 60   d. 12

27. How many kgs of rice costing Rs. 8 /kg must be mixed with 36 kgs of rice costing Rs. 5.40/kg so that 20% gain will be obtained y selling the mixture at Rs. 7.20/kg?

    a. 10.8 kg   b. 12 kg   c. 4 kg   d. 6 kg

28. A and B enter into a partnership for a year. A contributes Rs. 3000 and B Rs. 4000. After 8 months they admit C, who contributes Rs. 4500. If B withdraws his contribution after 6 months, how would they share a profit of Rs. 1000 at the end of the year?

    a. 250, 200, 550   b. 375, 250, 375   c. 150, 200, 650   **d. NOTA**

29. The certain number of cooks to the number of waiters is 3 to 13. When 12 more waiters are hired, the ratio of the number of cooks to the number of waiters changes to 3:16. How many cooks are there?

    a. 4   **b. 12**   c. 15   d. 9

30. Sandy consumes 10 litres of milk everyday. The price of milk increased by 10%. How many litres of milk must Sandy consume to keep his expenditure on milk the same?

    a. 9 litres   b. 9.99 litres   **c. 0.09 litres**   d. 8 litres

31. P and Q have their annual income in the ratio of 8:5 while their spending ratio is 5:3. If they save Rs. 1200 and Rs. 1000 per annum respectively, find their annual income. **11200 & 7000**

32. When 60% of a number A is added to another number B, B becomes 220% of its previous value. Find the relation between the two numbers.

    a. A = B   b. A = 2.25B   **c. A = 2B**   d. A = 1.5B

33. A's age 6 years back was half of the total of B and C's present ages. If C is 2 years older than B, what is A's age at present? **CBD**

34. M is thrice as old as J. G will be twice as old as M 6 years hence. Six years ago J was 5 years old. What is G's present age? **72 Years**

35. The ratio of milk and water in a mixture of 35 litres is 4:1. How much water must be added to the mixture so that the ratio of milk and water be 3:2. **35/3 litres**

36. A sum of Rs.45 is made of 100 coins, partly of 50 paise and 25 paise. What is the number of 50 paise coins?

    a. 60   b. 20   c. 40   **d. 80**

37. A box of 150 packets consists of 1kg packets and 2kg packets. Total weight of box is 264kg. How many 2kg packets are there ? **114**

38. What is the greatest number that will divide 461 & 688 leaving remainders 11 and 13 respectively?
    225

39. A trader earns a profit of 20% on 40% of his goods sold, while he earns a profit of 30% on 60% of his goods sold. Find his percentage profit on the whole. **26%**

40. If 5 kg of salt costing ` 5/kg and 3 kg of salt costing ` 4/kg are mixed, find the average cost of the mixture per kilogram.

    a. 3.85   **b. 4.625**   c. 5.5   b. NOTA