



DEFENCE MANIA

EDUTECH PVT. LTD

Percentage

1. 62% population of a city is educated. If number of uneducated people in city is 24567, then what is the number of educated people?
(A) 41823 (B) 64650
(C) 35688 (D) 40083
2. What will be population of a city after 2 years, which is currently 1.2 million and rate of increase is 4%.
(A) 1297920 (B) 1207920
(C) 1300000 (D) 1297820
3. The population of a city is growing at a rate of 5% per annum. If current population of city is 1,85,220, then what was population of that city a year ago?
(A) 1,76,000 (B) 1,70,500
(C) 1,76,400 (D) 1,76,200
4. The population of a city is 8000. If number of males increases by 8% and number of females by 12%, So population will be 8680. Find the number of women in city.
(A) 2500 (B) 1500
(C) 2000 (D) 1000
5. The population of a colony increased to 54000 in 2018. Which is increasing at the rate of 5% per annum. Find the population of colony 2 years ago.
(A) 45980 (B) 48980
(C) 49500 (D) 50000
6. In a city, every year, the number of people increased by 3% at beginning of year. If current population of that city is 30,00,000, then what will be population after 3 years.
(A) 3277181 (B) 3217881
(C) 3278181 (D) 3281781
7. Pranjoy got 272 marks in an examination which was equivalent to getting 64% marks. What was the exam marks?
(A) 425 (B) 475
(C) 450 (D) 440
8. An examination was conducted for the students of class 10, 96% of students passed and 50 failed. How many students attended?
(A) 1600 (B) 1400
(C) 1200 (D) 1250
9. Diksha scored 58% in an exam, Whose maximum marks were 450. He received marks.
(A) 276 (B) 261
(C) 290 (D) 275.5
10. The percentage of marks to pass an exam should be 42%. If maximum number is 450, then how many marks must be obtained to pass the exam?
(A) 201 (B) 168
(C) 210 (D) 189
11. In an examination, Chitra got 58.5 marks, which was equivalent to getting 78% marks. What was exam marks?
(A) 85 (B) 65
(C) 75 (D) 80
12. In a class, someday 5% of student is absent. If number of students present is 38, then what is total number of students in the class on that day?
(A) 40 (B) 50
(C) 33 (D) 45
13. A student is required to marks 40% to pass. He got 40 marks in an exam and he failed by 40 marks. What is maximum marks that can be obtained for exam?
(A) 500 (B) 400
(C) 250 (D) 200
14. The following table shows the results of students who participating in exam. What is the percentage of passed students?

| result | number of students |
|--------|--------------------|
| Passed | 150 |
| fail | 100 |

(A) 40% (B) 60%
(C) 50% (D) 30%
15. A candidate gets 20% marks and fails by 35 marks, while the second candidate gets 50% marks which is 32 more than minimum marks required to pass. What is the integer for the exam?
(A) 250 (B) $\frac{670}{3}$
(C) 450 (D) 500

16. Durba got 70% marks in an examination. In another examination he got 20 out of 25 marks. If its total marks is 78% , then what were maximum marks in first exam?
(A) 7.6 (B) 6.25
(C) 7.25 (D) 6
17. A student probably got some of the maximum marks. It was 75% as a percentage. If another question of one mark had been added to question paper and he would have answered it correctly, the percentage of his score would have been 76%. What was initial maximum mark of exam?
(A) 24 (B) 25
(C) 20 (D) 19
18. The percentage of minimum marks required to pass an exam is 38%. If the maximum number is 750, then how many marks is required for a student to pass the exam?
(A) 285 (B) 304
(C) 323 (D) 266
19. If Santi spends 50 % of his monthly salary on food, 20 % on rent and saves Rs. 1500, then what is his monthly salary?
(A) rs.5500 (B) rs.5000
(C) rs.6000 (D) rs.4500
20. The annual income of Nathan is Rs. 15,00,000 and he pays an EMI of Rs 40,000 every month for his car. What percentage of his monthly salary goes to EMI?
(A) 28 % (B) 32 %
(C) 24 % (D) 20 %
21. Alok saves Rs.1,200 per month after spending 85% of his salary. What is his monthly salary?
(A) rs.8,000 (B) rs.8,500
(C) rs.10,000 (D) rs.12,000
22. The annual income of Somnath is Rs. 24,00,000. Per month, he pays an EMI of Rs. 40,000 for his vehicle. What percentage of his monthly income is spent in EMI?
(A) 20 (B) 18
(C) 10 (D) 24
23. On an average, Meenu uses 15% of her monthly salary for shopping, restaurants and malls. The remaining 40% is used towards household expenses and 45% goes to his savings. If in a month, she spends Rs. 40,000 on house, then what is his annual income.
(A) rs.1020000 (B) rs.1400000
(C) rs.1200000 (D) rs. 1000000
24. The annual income of limit is Rs. 15,00,000. Per month, he gets Rs. 30,000 EMI. What percentage of his monthly salary goes to EMI?
(A) 24 (B) 26
(C) 28 (D) 25
25. Sunaina works in a private company and his annual income is 3 lakhs. He has a new and an old car. 5% of his income is spent on maintenance of new car and old spends 2% more than the new. What is total annual expenditure on maintenance of both cars?
(A) rs.20,000 (B) rs.36,000
(C) rs.12,500 (D) rs.25,000
26. Per month, Kritika spends 30% of her income on house rent and 60% of remaining is spent on household expenditure. If she saves Rs. 6300 every month, then what is his total monthly income?
(A) rs.22,000 (B) rs. 20,500
(C) rs.22,500 (D) rs.25,000
27. Meenakshi spends an average of 10% of her monthly salary on shopping and visiting restaurants and malls. The remaining 80% is spent on his household expenses and saves 10%. If the monthly household expenditure is Rs. 48,000, then what is the monthly income?
(A) rs.60,000 (B) rs.80,000
(C) rs.1,20,000 (D) rs.54,000
28. On average, Pramod uses 10% of his monthly salary to fill petrol in his car. The remaining 80% is spent in domestic work and saves 10% of salary. If, on a monthly basis, he spends Rs. 24000 on housework, then what is his annual income?
(A) rs.360000 (B) rs.160000
(C) rs.80000 (D) rs.240000
29. Manoj spends 33% of his income on food. He received an increase of Rs.1,000 in his salary, But he did not increase spending on food. Due to which his expenditure on food was reduced to 27%. What was his initial salary?
(A) rs.4,500 (B) rs.6,500
(C) rs.5,500 (D) rs.5,000
30. Suman is the mistress of an agricultural land. He leased it to a third party for 5 years. In addition to income from this lease, She also gets a salary of Rs. 6,00,000 per year. In five years, the total income from agricultural land is 50% of his one year's salary. How much money does she earn each year?
(A) rs.3,00,000 (B) rs.6,60,000
(C) rs.6,00,000 (D) rs.6,30,000
31. 76% of a number is 95. number is :
(A) 124 (B) 125
(C) 120 (D) 130
32. Find that number, Which is 30% more than 240.
(A) 312 (B) 340
(C) 331 (D) 320
33. 108% of a number is 189. That number is -
(A) 200 (B) 175
(C) 190 (D) 180
34. What is the percentage of 6 hours a day?
(A) 30% (B) 40%
(C) 25% (D) 45%

35. What is the percentage of $1\frac{1}{2}$ day is 15 minutes?
 (A) 10 % (B) $\frac{5}{6}$ %
 (C) $\frac{25}{36}$ % (D) $41\frac{2}{3}$ %
36. 48 out of 60%.
 (A) 72 (B) 75
 (C) 78 (D) 80
37. What will be 46% of 250?
 (A) 92 (B) 115
 (C) 126.5 (D) 103.5
38. By increasing a number by 45%, it becomes 725. Find that number.
 (A) 500 (B) 450
 (C) 600 (D) 525
39. The price of an item decreases by 25%. How much will new price have to be increased to maintain original price?
 (A) 108% (B) $\frac{105}{3}$ %
 (C) $\frac{50}{7}$ % (D) $\frac{100}{3}$ %
40. First salary of an employee increased by 10% and after that it was reduced by 10%. How much did his salary change?
 (A) 1% (B) 2.2%
 (C) -1% (D) 2.4%
41. If numerator of a fraction y/x increases by 12%, and its denominator decreases by 2%, the value of that fraction becomes $6/7$. Find the original fraction.
 (A) $3/4$ (B) $4/3$
 (C) $1/2$ (D) $1/5$
42. By reducing the price of an item by 20%, sales increase by 20%, what is impact on revenue earned?
 (A) Increases by 4%. (B) Increases by 5%.
 (C) 4% is less. (D) 5% is less.
43. Bought a car for Rs. 16,000. Its value is less than 10% per year. What will be the cost after 2 years?
 (A) rs.12,060 (B) rs.12,960
 (C) rs.12,000 (D) rs.12,900
44. It has been decided to provide electricity connection to all 1200 houses without electricity in the village. If the rate of electrification is 75% per year, then after 2 years, then what will be number of families living without electricity connection?
 (A) 45 (B) 75
 (C) 55 (D) 65
45. 10% increase in cost of an item in a shopping mall and then it was reduced by 10%. What is the total percentage increase or decrease?
 (A) 1.5% increase (B) 1% increase
 (C) 1% decrease (D) 1.5% decrease
46. If the price of tomato increases by 25% and Sudha wants to spend only 15% more on tomatoes. then what percentage will decrease in amount of tomato obtained by Sudha.
 (A) 10% (B) 12%
 (C) 8% (D) 12.5%
47. If a person's salary increases by 11% in first year and the second year is reduced by 11%, then what will be percentage change in his salary at beginning of third year relative to the starting salary?
 (A) -1.21 (B) -1.23
 (C) +1.21 (D) +1.22
48. A food retail chain has 30% of the sales from dairy products and the rest are fresh produce. If the chain has sales of about Rs 50,000 each month then what is the sale amount of dairy products.
 (A) rs. 15,000 (B) rs. 25,000
 (C) rs. 22,000 (D) rs. 30,000
49. An investor invests $1/2$ part of his fund at 5%, $1/4$ part at 10% and remainder at 8%. After 2 years his income is Rs. 2800, then Find the fund.
 (A) rs.10000 (B) rs.15000
 (C) rs.20000 (D) rs.12000
50. Sugar production in 2001 was 1584 million kg. which was 20% higher than in 1991. Find the production (in million kg) of sugar in 1991.
 (A) 1980 (B) 1280
 (C) 1900 (D) 1320
51. A medicine supervisor dismisses 0.05% of the medicine as defective medicine. How many medicines will be tested for 4 medicine to dismiss?
 (A) 5000 (B) 8000
 (C) 6000 (D) 8500
52. Achyutya opens a tea shop with an investment of Rs. 25,000. He spends 30% of this amount on furnishing of shop and 20% in buying other essential materials for shop. How much money does he have left to buy the materials for his shop?
 (A) rs. 12,500 (B) rs.5,000
 (C) rs.20,000 (D) rs.12,000
53. Mridula operates a small pet shop. The following is his expenditure distribution. 90% in procurement and 10% in paying rental and electricity bills. If she spends Rs. 15,000 on rental and electricity on a monthly basis, then how much does each month spend in procurement?
 (A) 1.35 lakh (B) 5 lakh
 (C) 4.5 lakh (D) 2 lakh
54. A grocery store purchases 600 bottles of packaged juice from two different sellers. 20% is taken from Stock seller -1 and 80% in Stock seller -2. The purchase price of a bottle is Rs. 25. After reviewing material of seller-2, the shopkeeper finds that 25% of the material can only be used for a period of one day. He decides to return the material. How much money will he get back from seller-2?
 (A) rs. 4,000 (B) rs.3,750
 (C) rs.3,000 (D) rs.3,500

55. Last year, Manish Corner invested 1,00,000 on Shop 1 and 1,50,000 on Shop 2 to replace furniture. Their expense recovered in over next three quarters: Quarter 1-20%, Quarter 2-55%, What was the amount (in rupees) received in quarter 3?
(A) rs. 60,500 (B) rs. 62,500
(C) rs. 62,600 (D) rs. 70,000
56. Last year, Mayank's money investment in a small business venture was Rs. 20,000. To provide services to new customers this year, he plans to increase money funding by 30% from the investment he made last year. How much does he plan to invest this year.
(A) rs.60,000 (B) rs.22,500
(C) rs.26,000 (D) rs.23,000
57. A sports showroom has different sporting goods. 50% of sales are from swimming goods in store. 40% of sales are from outdoor game accessories and 10% from indoor game accessories. If, in a particular month, the store sells swimming costume of Rs. 10,000, then what is estimated figure of outdoor game sales?
(A) rs.8000 (B) rs. 5000
(C) rs.3000 (D) rs. 4000
58. Suresh buys two books for Rs. 1,200, he sells one for 20% profit and sells other at a loss of 16%. If the selling price of both books is same. then find the approximate cost price of book.
(A) rs.550 and rs.650 (B) rs.600 and rs.600
(C) rs.500 and rs.700 (D) rs.400 and rs.800
59. A resort offers special discounts on weekends. They maintain a log of customers visiting over the weekend. On average this year, they see a 15% increase in their number of customers. Last year he had 1,500 customers. How many customers do they have this year?
(A) 1,825 (B) 1,700
(C) 1,650 (D) 1,725
60. A solution contains 320g water and 33 g of normal salt. Find the concentration of the solution in terms of mass by mass percent.
(A) 9.35 g (B) 9.35%
(C) 9.09% (D) 13.05%
61. A solution contains 320g water and 31 g of normal salt. Find the percentage of concentration of the solution in terms of mass by mass percent.
(A) 9.60 % (B) 9.60 %
(C) 8.83 % (D) 9.09 %
62. A solution contains 320g water and 45 g of normal salt. Calculate the concentration of the solution in terms of mass by mass percent.
(A) 12.33 % (B) 12.36 %
(C) 10.36 % (D) 12.43 %
63. A solution is prepared by mixing 45 grams of salt in 520 grams of water. Calculate the concentration in terms of mass percentage.
(A) 7.96 % (B) 8.86 %
(C) 8.1 % (D) 6.96 %
64. 8% salt in a solution contains. If volume of the solution is 550 ml, then what is the quantity of salt in it?
(A) 42.5 ml (B) 48 ml
(C) 38.5 ml (D) 44 ml
65. Shyam's marks is 25% more than Divya's marks. How much percentage Divya's marks are less than Shyam?
(A) 20 % (B) 15 %
(C) 10 % (D) 40 %
66. If the sides of a square are increased by 10%, So the area of square increases _____.
(A) 40 % (B) 10 %
(C) 20 % (D) 21 %
67. If one side of square is increased by 30%, Find percentage of increase in its area.
(A) 84 % (B) 112 %
(C) 69 % (D) 72 %
68. If the length of rectangle increases by 15% and breadth decreases by 20%, find percentage change in area of the rectangle.
(A) 0.8 % decrease (B) 0.8 % increase
(C) 8 % decrease (D) 8 % increase
69. A candidate received 62% vote in an election and he won election by 35640 votes. What was total number of votes in election, if none of the votes have been invalid?
(A) 356400 (B) 57484
(C) 93790 (D) 148500
70. 5% of population of a town dies in an epidemic, and 8% of the remaining population panicked and left the towns. If total population of town is 88274 right now, then in beginning, find the total population of town.
(A) 1,21,600 (B) 1,01,000
(C) 99,800 (D) 84,500
71. If Anju scores 68 out of 80 in Hindi, 46 out of 60 in Mathematics and 74 out of 90 in Science and 35 out of 45 in English. So in which subject did Anju get the maximum percentage marks?
(A) Math (B) Hindi
(C) English (D) Science
72. In an examination, 40 out of 85 students scored less than 50%. What is the ratio of number of students scoring less than 50% marks to number of students scoring 50% marks or above:
(A) 8 : 9 (B) 3 : 4
(C) 9 : 8 (D) 5 : 7
73. Morris used to spend 25% of his income on food. He got an increment of one thousand rupees, but he did not increase his spending on food items. As a result, his spending on food fell to 20%. What was his initial income?
(A) rs. 6500 (B) rs.6000
(C) rs.5000 (D) rs.4000

74. Arun's income is 150% of Bala's income. Chandru's income is 120% of Arun's income. If total income of Arun, Bala and Chandru is Rs. 86000, find the income of Chandru.
(A) rs.36000 (B) rs. 32000
(C) rs.30000 (D) rs. 34000
75. What is the percentage of 1 hour to 1 minute 12 seconds?
(A) 2 % (B) 12 %
(C) 11 % (D) 1.2 %
76. If 40% of 70 is x% more than 30% of 80, then find the value of 'x'.
(A) 40% (B) 16.67%
(C) 14.28% (D) 33.33%
77. The price of rice increases from Rs. 25 per kg. to Rs. 30 per kg. By what percentage should consumption be reduced in order to keep expenses the same?
(A) $16\frac{2}{3}\%$ (B) $8\frac{1}{3}\%$
(C) 10% (D) 16%
78. What is the percentage of single discount equivalent to two consecutive discounts 12% and 5%?
(A) 17% (B) 8.5%
(C) 16.4% (D) 15.2%
79. In new budget, the price of petrol has been increased by 10%. What percentage of a motor vehicle passenger can reduce petrol consumption, then that there is no increase in its total expenditure on petrol?
(A) 10% (B) $9\frac{1}{11}\%$
(C) 11 % (D) $11\frac{1}{9}\%$
80. The salary of a worker has increased by 25%. By what percentage should the new salary be reduced to restore the original salary?
(A) 12% (B) 15%
(C) 20% (D) 10%
81. Anita operates a fashion boutique. Following are the title of his expenditure- 30% in procurement and 40% in tailor payment and 30% in rent and electricity. If his total expenditure is Rs. 50,000 per month, then how much money has he spent in paying the tailor?
(A) rs.19,000 (B) rs.18,000
(C) rs.20,000 (D) rs.21,000
82. A small scale business has the following expenses, 25% on purchase, 25% on salary of employees and 50% on maintenance. If the business pays a total salary of Rs. 2,00,000, then what is its cost on maintenance?
(A) rs. 3,00,000 (B) rs. 4,00,000
(C) rs. 2,00,000 (D) rs. 2,50,000
83. If 90% of y is x, then what percentage of x will be y?
(A) 11.1 (B) 111.1
(C) 101.1 (D) 121.11
84. If the length and breadth of a rectangle are increased by 8% and 12% respectively, then what is percentage increase in the area of that rectangle?
(A) 20.96 % (B) 22 %
(C) 20 % (D) 24 %
85. In an election, a candidate won by 75% of valid votes. Out of a total 560000 votes, 15% votes were invalid. What is number of valid votes received by winning candidate?
(A) 350000 (B) 280000
(C) 275000 (D) 357000
86. Charan scored 54 marks in an exam. Which was equal to 72% of total marks. What was exam marks?
(A) 75 (B) 85
(C) 80 (D) 65
87. Tanya's salary was increased by 15%. His increased salary is Rs. 14,030. What was his basic salary?
(A) rs.12,400 (B) rs.12,000
(C) rs.12,300 (D) rs.12,200
88. Veer spends 15% of his monthly income on rent and the remaining 60% on home work. If he saves Rs. 2210, then what will be his monthly income?
(A) rs.6500 (B) rs.7500
(C) rs.8000 (D) rs.7000
89. 72% of a number is 90. What is the number?
(A) 120 (B) 125
(C) 130 (D) 124
90. What is 58% of 350?
(A) 217 (B) 203
(C) 210 (D) 196
91. 84% of a number is 105. What is the number?
(A) 120 (B) 112
(C) 125 (D) 115
92. Including VAT (Value-added tax), the price of a television is Rs. 14000. If the rate of VAT is 12%, then what is the original price of television?
(A) rs.12,000 (B) rs.13,000
(C) rs.12,500 (D) rs.13,500
93. The price of sugar increases by 30%. By what percentage should Sita reduce sugar consumption so that there is no increase in her expenditure?
(A) $23\frac{1}{13}\%$ (B) $22\frac{1}{13}\%$
(C) 23% (D) 22%
94. An alloy contains 15% silver. If there is 51 grams of silver in a alloy, then what is the quantity of other metal?
(A) 204 gram (B) 340 gram
(C) 300 gram (D) 289 gram

95. What will be the amount of glucose required to prepare a solution of 250 grams containing 5% glucose?
(A) 125 gram (B) 12.5 gram
(C) 50 gram (D) 25 gram
96. 111 out of 200 persons in a village are literate. What is percentage of uneducated people in village?
(A) 45% (B) 44.5%
(C) 55.5% (D) 54%
97. In a classroom test, a student got 22 out of 25 marks. What is the percentage of student's marks.
(A) 88 (B) 80
(C) 90 (D) 75
98. If a student's mark is increased by 25%, then his marks becomes 75. What is his actual marks?
(A) 60 (B) 50
(C) 15 (D) 25
99. 60% students in a class of 60 students are boys. If 25 % girls go to school by bicycle then what is the number of girls who do not come to school by bicycle?
(A) 24 (B) 27
(C) 18 (D) 36
100. A student got 9 out of 25 marks in an examination conducted in a class. Express the marks obtained by student in percentage.
(A) 30 (B) 36
(C) 35 (D) 25



DEFENCE MANIA
2021

Percentage (Solution)

1. **Ans.(D)**
 Educated population of the city = 62%
 Uneducated population = $(100 - 62) = 38\%$
 If the total population of the city is x
 So number of Uneducated people =

$$24567 = \frac{x \times 38}{100}$$

$$x = \frac{24567 \times 100}{38} = 64650$$
 Total educated population of the city

$$= \frac{64650 \times 62}{100} = 40083$$
2. **Ans.(A)**
 Present the population of the city = 1,20,0000
 Percent growth rate = 4%
 Population after year = $1200000 \left(1 + \frac{4}{100}\right)$

$$= 1200000 \times \frac{26}{25} \times \frac{26}{25}$$

$$= \frac{1200000 \times 676}{625}$$

$$= 1297920$$
3. **Ans.(C)**
 Let, A year ago the population of the city is 100 x.
 Increasing by 5% per annum –
 Present population = 105 x
 According to Question
 $105x = 185220$
 $x = 1764$
 One year ago population = 100 x
 $= 100 \times 1764 = 176400$
4. **Ans.(D)**
 Let the number of men in the city = x
 Number of women in the city = $8000 - x$
 According to Question,

$$= x \times \frac{108}{100} + (8000 - x) \times \frac{112}{100} = 8680$$

$$= \frac{108x + 8000 \times 112 - 112x}{100} = 8680$$

$$= 896000 - 4x = 868000$$

$$4x = 896000 - 868000$$

$$4x = 28000$$

$$x = 7000$$
 Hence number of women
 $= 8000 - 7000 = 1000$
5. **Ans.(B)**
 Let the population of the colony be 2 years ago.
 \therefore 2 Year before population

$$54000 = P \left(1 + \frac{5}{100}\right)^2$$

$$54000 = P \times \frac{21}{20} \times \frac{21}{20}$$

$$\Rightarrow P = \frac{54000 \times 20 \times 20}{21 \times 21}$$

$$\Rightarrow P = \frac{21600000}{441}$$

$$P = 48980 \text{ (approximately)}$$
6. **Ans.(C)**
 Population of the city after n years,

$$= \text{Present Population} \left(1 + \frac{r}{100}\right)^n$$
 Where, $n = 3$ years, and $r = 3\%$
 Hence population after 3 years

$$= 30,00,000 \left(1 + \frac{3}{100}\right)^3$$

$$= 30,00,000 \times \frac{103 \times 103 \times 103}{100 \times 100 \times 100}$$

$$= 3 \times 103 \times 103 \times 103 = 3278181$$
7. **Ans.(A)**
 $64\% = 272$
 $1\% = \frac{272}{64}$
 $100\% = \frac{272}{64} \times 100 = 425 \text{ numbers}$
 Hence, the examination was of 425 marks.
8. **Ans.(D)**
 Number of students = 100%
 Passed student = 96%
 Failed student = 4%
 $\therefore 4\% = 50$
 $1\% = 50/4$
 \therefore Total number of students present = 100%

$$= \frac{50 \times 100}{4}$$

$$= 1250$$
9. **Ans.(B)**
 Marks obtained by Diksha = 58%
 Maximum marks = 450
 Marks obtained by Diksha = $\frac{58}{100} \times 450$

$$= \frac{58 \times 9}{2} = 261$$
10. **Ans.(D)**
 Maximum marks = 450
 Percent required to pass the exam = 42%
 Marks required for passing

$$= 450 \times \frac{42}{100} = 189$$
11. **Ans.(C)**
 If the exam was for N marks then –

$$58.5 = \frac{N \times 78}{100}$$

$$N = \frac{5850}{78} = 75$$
 Hence, the examination was of 75 marks.
12. **Ans.(A)**
 Let the total students in the class = 100%
 Percentage of students present in class = $100 - 5 = 95\%$
 Student present in class = 38
 Total number of students = $38 \times \frac{100}{95} = 40$
13. **Ans.(D)**
 Let the total maximum number be x .
 According to Question,

$$x \times \frac{40}{100} = 40 + 40$$

$$\frac{40x}{100} = 80$$

$$x = 200$$
14. **Ans.(B)**

$$\% \text{ of passed students} = \frac{\text{Passed Students}}{\text{Total students}} \times 100$$

$$= \frac{150}{250} \times 100$$

$$= 60\%$$

15. **Ans.(B)**

Let total marks of exam be x.
 20% of x + 35 = 50% of x - 32
 35 + 32 = 50% of x - 20% of x
 67 = 30% of x
 30% of x = 67

$$\frac{30}{100}x = 67$$

$$x = \frac{670}{3}$$

16. **Ans.(B)**

Let maximum marks of first exam = x
 And score = y

As first condition -

$$\frac{y}{x} = \frac{70}{100}, y = \frac{7x}{10}$$

Second condition:

$$\frac{y + 20}{x + 25} = \frac{78}{100}$$

$$\frac{7x + 200}{x + 25} = \frac{78}{100}$$

$$\frac{7x + 200}{x + 25} = \frac{78}{100}$$

$$\frac{7x + 200}{x + 25} = \frac{78}{100}$$

$$70x + 2000 = 78x + 1950$$

$$8x = 50$$

$$x = 6.25$$

Hence, maximum marks = 6.25

17. **Ans.(A)**

Let Maximum Marks = x

Marks = y

According to first condition -

$$\frac{y}{x} = \frac{75}{100}$$

$$y = \frac{3x}{4} \text{ --- (1)}$$

According to second condition:

$$\frac{y + 1}{x + 1} = \frac{76}{100}$$

$$\frac{y + 1}{x + 1} = \frac{76}{100}$$

$$\frac{\frac{3x}{4} + 1}{x + 1} = \frac{76}{100} \text{ {From equation (1)}}$$

$$\frac{3x + 4}{x + 1} = \frac{76}{25}$$

$$\frac{3x + 4}{x + 1} = \frac{76}{25}$$

$$75x + 100 = 76x + 76$$

$$x = 24$$

Thus, Maximum Marks = 24

18. **Ans.(A)**

Marks required to pass the exam

$$= 750 \times \frac{38}{100} = 285$$

19. **Ans.(B)**

Let monthly salary = Rs. X

total expense = 50% + 20% = 70%

And savings = 30%

Savings = Rs. 1500

$$\therefore x \times \frac{30}{100} = 1500$$

$$\frac{x \times 3}{10} = 1500$$

$$x = 5000$$

Total monthly salary = Rs.5000

20. **Ans.(B)**

Nathan's annual income = Rs. 15,00,00

Nathan's Monthly Income

$$= \frac{1500000}{12} = 125000$$

Hence the percentage of his monthly salary that goes into the EMI of the vehicle =

$$\frac{40000 \times 100}{125000} = \frac{4000}{125} = 32\%$$

21. **Ans.(A)**

Suppose monthly salary of Alok is Rs. x. According to Question -

$$1200 = x \times \frac{15}{100}$$

$$x = \text{Rs. } 8000$$

22. **Ans.(A)**

Annual income of somnath = 2400000

$$\text{Monthly income} = \frac{1}{12} \times 2400000 = 200000$$

EMI Monthly Payment = 40000

Spending percentage of EMI

$$= \frac{40000}{200000} \times 100 = 20\%$$

23. **Ans.(C)**

$$40\% = \text{Rs. } 40000$$

$$100\% = \frac{40000}{40} \times 100 = 100000$$

$$\text{annual salary} = 12 \times 100000$$

$$= \text{Rs. } 1200000$$

24. **Ans.(A)**

Annual income = Rs. 15,00,000

$$\text{monthly income} = \frac{15,00,000}{12}$$

$$= \text{Rs. } 1,25,000$$

EMI deposit every month = Rs. 30,000

Monthly EMI Installment Percentage.

$$= \frac{30,000}{125,000} \times 100$$

$$= \frac{3000}{125}$$

$$= 24\%$$

25. **Ans.(B)**

Sunaina's annual income = Rs.3,00,000

Expenditure on new car = 5% of income

$$= 300000 \times \frac{5}{100}$$

$$= \text{Rs. } 15000$$

Expenditure on old car 5 + 2 = 7%

$$= 300000 \times \frac{7}{100}$$

$$= \text{Rs. } 21000$$

Total annual expenditure on both cars

$$= 15000 + 21000$$

$$= \text{Rs. } 36000$$

26. **Ans.(C)**

Suppose his monthly income = Rs.100x

∴ Rent expense = Rs. 30 x

$$\therefore \text{Household expenditure} = \frac{70 \times 60}{100} = \text{Rs. } 42x$$

$$\therefore \text{Total expense} = 30x + 42x = 72x$$

$$\therefore \text{Savings} = 100x - 72x = 28x$$

∴ Kritika's total monthly income

$$= \frac{6300}{28} \times 100$$

$$= \text{Rs. } 22500$$

27. **Ans.(A)**

Let the monthly income = 100%

Expenditure on household expenses = 80%

Monthly Household Expenditure = Rs. 48,000

$$\begin{aligned}\therefore 80\% &= 48000 \\ 100\% &= \frac{48000}{80} \times 100 \\ &= 600 \times 100 \\ \text{monthly income} &= \text{Rs. } 60000\end{aligned}$$

28. **Ans.(A)**

Let monthly income = Rs x
Monthly expenses for household work 80%
= Rs. 24000

$$x \times \frac{80}{100} = 24000$$

$$x = 30000$$

$$\text{Annual Income} = 30000 \times 12 = 360000$$

29. **Ans.(A)**

Let the income of Manoj = Rs.x

$$\text{Food expenses} = x \times \frac{33}{100} = \frac{33x}{100}$$

$$\text{Manoj's new income} = x + 1000$$

$$\text{Reduction in expenditure} = (x + 1000) \times \frac{27}{100}$$

$$\text{Previous Expense} = \text{New Expense}$$

$$33x = 27x + 27000$$

$$\frac{33x}{100} = \frac{27x + 27000}{100}$$

$$33x = 27x + 27000$$

$$6x = 27000$$

$$x = 4500$$

30. **Ans.(B)**

Suman's salary per year = Rs.6,00,000

Income from agriculture in 5 year = Salary of one year $\times \frac{50}{100}$

Income from agriculture in 5 year

= Rs.30,0000

Income from agriculture in 1 year

$$= \frac{30,0000}{5} = 60000$$

$$\text{Total annual earning} = 600,000 + 60000$$

$$= \text{Rs.}660000$$

31. **Ans.(B)**

Let the number be x

According to Question –

$$x \times \frac{76}{100} = 95$$

$$x = \frac{95 \times 100}{76}$$

$$x = \frac{5 \times 100}{4}$$

$$x = 125$$

32. **Ans.(A)**

$$\frac{240 \times 130}{100} = 312$$

33. **Ans.(B)**

Let the number be x

$$x \times \frac{108}{100} = 189$$

$$x = \frac{189 \times 100}{108}$$

$$x = 175$$

34. **Ans.(C)**

One day = 24 hours

$$\therefore \frac{6}{24} \times 100 = 25\%$$

35. **Ans.(C)**

$$\begin{aligned}\text{Number of minutes in } 1\frac{1}{2} \text{ days} &= \frac{3}{2} \times 24 \times 60 \\ &= 36 \times 60 \text{ minutes}\end{aligned}$$

$$\therefore \text{Percentage} = \frac{15}{36 \times 60} \times 100$$

$$= \frac{25}{36}\%$$

36. **Ans.(D)**

$$\frac{48 \times 100}{60} = 80\%$$

37. **Ans.(B)**

$$\frac{250 \times 46}{100} = \frac{25 \times 46}{10}$$

$$= \frac{1150}{10} = 115$$

38. **Ans.(A)**

Let the number be x.

According to Question,

$$x + \frac{45}{100}x = 725$$

$$\frac{100x + 45x}{100} = 725$$

$$145x = 725 \times 100$$

$$x = 500$$

39. **Ans.(D)**

Decrease / increase%

$$= \frac{100x}{(100 \pm x)}$$

$$\text{increase\%} = \frac{100 \times 25}{100 - 25}$$

$$= \frac{100 \times 25}{75} = \frac{100}{3}\%$$

40. **Ans.(C)**

formula

Increase/Decrease %

$$= x + y + \frac{x \times y}{100}$$

$$= 10 + (-10) + \frac{10 \times (-10)}{100}$$

$$= 10 - 10 - \frac{100}{100} = -1\%$$

41. **Ans.(A)**

Let fraction be y / x

According to Question,

$$\Rightarrow \frac{y \times 112}{x \times 98} = \frac{6}{7}$$

$$\Rightarrow \frac{y}{x} = \frac{6 \times 98}{7 \times 112} = \frac{6 \times 14}{112}$$

$$\Rightarrow \frac{y}{x} = \frac{3}{4}$$

Hence the fraction will be 3/4.

42. **Ans.(C)**

Formula,

$$\text{Change in percentage} = \pm x \pm y \pm \frac{xy}{100}$$

$$= -20 + 20 - \frac{20 \times 20}{100}$$

$$= -4\% \text{ or } 4\% \text{ Decrease}$$

43. **Ans.(B)**

Price after 2 years

$$= 16000 \left(1 - \frac{10}{100}\right)^2$$

$$= 16000 \times \frac{81}{100} = \text{Rs. } 12960$$

44. **Ans.(B)**

Number of households getting electricity connection in the first year

$$= 1200 \times \frac{75}{100} = 900$$

Number of remaining houses not getting electricity connection = $1200 - 900 = 300$
 Number of households getting electricity connection in the second year
 $= 300 \times \frac{75}{100} = 225$
 Number of remaining houses
 $= 300 - 225 = 75$
 Hence, after 2 years, the number of families living without electricity connection is 75.

45. **Ans.(C)**

There is always a loss when the cost of an item is increased once by x percent and then decrease by x percent.

$$\text{Loss percentage} = \frac{x^2}{100} \%$$

$$= \frac{10^2}{100} = \frac{100}{100} \%$$

$$= 1\% \text{ There will be decrease / loss.}$$

46. **Ans.(C)**

Let initial price of tomato = Rs. x / kg
 Price after 25% increase = $x \times \frac{125}{100} = \text{Rs. } \frac{5x}{4} / \text{kg}$
 Sudha spent on tomatoes = $x \times \frac{115}{100} = \frac{23x}{20}$
 \therefore Tomato's quantity = $\frac{\frac{23x}{20}}{\frac{5x}{4}} = \frac{23x \times 4}{20 \times 5x} = \frac{23}{25} \text{ kg}$
 Decrease in tomato's quantity $1 - \frac{23}{25} = \frac{2}{25} \text{ kg}$

$$\therefore \text{Decrease}\% = \frac{\frac{2}{25}}{1} \times 100 = 8\%$$

47. **Ans.(A)**

$$\text{Percentage change in salary} = \left(\frac{100 + 11}{100} \times \frac{100 - 11}{100} - 1 \right) \times 100$$

$$= \left(\frac{89}{100} \times \frac{111}{100} - 1 \right) \times 100$$

$$= \frac{-121}{10000} \times 100$$

$$= -1.21\%$$

48. **Ans.(A)**

Sale of dairy products = 30%
 Sale of fresh product = 70%
 Sales amount each month = Rs. 50,000
 Sale of dairy products = $50,000 \times \frac{30}{100}$
 = Rs. 15,000

49. **Ans.(C)**

Assuming investment capital is Rs. x .
 Remaining part = $x - \left(\frac{x}{2} + \frac{x}{4} \right) = \frac{x}{4}$

$$\therefore \frac{\frac{x}{2} \times 5 \times 2}{100} + \frac{\frac{x}{4} \times 10 \times 2}{100} + \frac{\frac{x}{4} \times 8 \times 2}{100} = 2800$$

$$\frac{x}{20} + \frac{x}{20} + \frac{x}{25} = 2800$$

$$\frac{5x + 5x + 4x}{100} = 2800$$

$$14x = 280000$$

$$\Rightarrow x = \text{Rs. } 20000$$

50. **Ans.(D)**

Sugar production in 1991

$$= \frac{1584}{100 + 20} \times 100$$

51.

$$= \frac{1584}{120} \times 100 = 1320 \text{ Million kg.}$$

Ans.(B)

\therefore To reject 0.05 drugs, 100 drugs to be checked.

\therefore To reject 1 drugs = $\frac{100}{0.05}$ drug to be checked

\therefore To reject 4 drugs = $\frac{100}{0.05} \times 4$

$$= \frac{100 \times 400}{5} = 20 \times 400 = 8000 \text{ drug to be checked}$$

52.

Ans.(A)

Achyutya have Amount = 25, 000

Amount spent in shop furnishing and other materials = 30% + 20% = 50%

Hence, remaining money = 50% of 25000 = Rs. 12500

53.

Ans.(A)

10% paid by Mridula on rent and electricity bill = 15000

So 90% (Procurement cost)

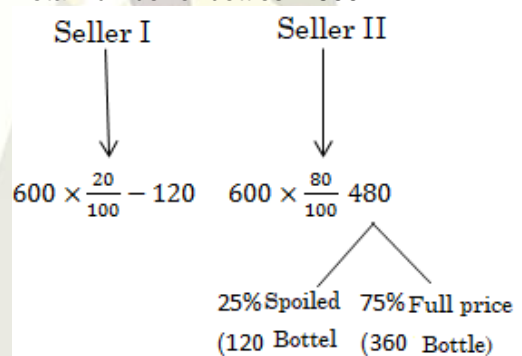
= 135000

= Rs. 1.35 Lakh

54.

Ans.(C)

Total number of bottles = 600



Hence the total money received for returning the spoiled bottles

$$= 120 \times 25 = \text{Rs. } 3000$$

55.

Ans.(B)

Total investment amount = 100000 + 150000 = Rs. 250000

Quarter 1 ----- 20%

Quarter 2 ----- 55%

Remaining in quarter 3 = $\{100 - (20 + 55)\} = 25\%$
 Hence 25% will be received in quarter 3.

$$= 250000 \times \frac{25}{100} = \text{Rs. } 62500$$

56.

Ans.(C)

Investment by Mayank last year = Rs. 20000

Plan to increase capital = 30%

$$\text{Capital Increased} = 20000 \times \frac{30}{100} = \text{Rs. } 6000$$

Hence the amount of capital planned to invest this year = 20000 + 6000 = Rs. 26000

57.

Ans.(A)

Sale of swimming cast in a particular month

= Rs. 10000

\therefore 50% of the sales in the store are swimming goods.

According to Question -

50% = 10000

\therefore Total Sale Price of Sports Goods

= Rs. 20000

\therefore Sale Price of Outdoor Game Accessories

$$= 20000 \times \frac{40}{100} = \text{Rs. } 8000$$

58. **Ans.(C)**

Let the cost price of an item be Rs. is x.

Cost price of second item = Rs. (1200 - x)

According to Question,

$$\frac{x \times 120}{100} = (1200 - x) \times \frac{84}{100}$$

$$\Rightarrow 120x + 84x = 1200 \times 84$$

$$\Rightarrow 204x = 1200 \times 84$$

$$\Rightarrow x = \frac{1200 \times 84}{204}$$

$$\Rightarrow x = \text{Rs. } 494.11 \approx \text{Rs. } 500$$

Hence the cost price of the second item = 1200 - 500 = Rs. 700

59. **Ans.(D)**

Increase = 15%

Number of subscribers last year = 1500

Number of subscribers presently

$$= 1500 \times \frac{115}{100}$$

$$= 15 \times 115$$

$$= 1725$$

60. **Ans.(B)**

Concentration% of the solution

$$= \frac{33}{320 + 33} \times 100$$

$$= \frac{353}{3300}$$

$$= 9.348 \approx 9.35\%$$

61. **Ans.(C)**

Concentration% of the solution

$$= \frac{31}{320 + 31} \times 100$$

$$= \frac{31}{351} \times 100 = 8.83\%$$

62. **Ans.(A)**

Concentration of the solution

$$= \frac{45}{320 + 45} \times 100$$

$$= \frac{4500}{365}$$

$$= 12.33\%$$

63. **Ans.(A)**

$$\text{Required concentration\%} = \frac{45}{565} \times 100$$

$$= \frac{4500}{565} = 7.96\%$$

64. **Ans.(D)**

Volume of mixture = 550 ml

Salt = 8 %

$$\text{So the quantity of salt} = 550 \times \frac{8}{100} = 44 \text{ ml}$$

65. **Ans.(A)**

Let marks of Divya = 100

$$\text{So Shyam's mark} = 100 \times \frac{125}{100} = 125$$

Shyam's marks - Divya's marks

$$= 125 - 100 = 25$$

$$\text{percentage difference} = \frac{25}{125} \times 100$$

$$= \frac{100}{5}$$

$$= 20\%$$

Hence, Divya's marks are 20% less than Shyam.

66. **Ans.(D)**

$$\text{Percentage change} = x + y + \frac{xy}{100}$$

Changing the area of the square by increasing the side of the square by 10% = $10 + 10 + \frac{10 \times 10}{100} = 21\%$ 67. **Ans.(C)**Area of the square = side²

Formula -

$$\text{Increase \%} = x + y + \left(\frac{xy}{100}\right)$$

$$\text{Increase \%} = 30 + 30 + \left(\frac{30 \times 30}{100}\right)$$

$$\text{Increase \%} = 69\%$$

68. **Ans.(C)**

Increase in length = 15% = x

Increase in Width = 20% = y

$$\text{Area effects} = x - y - \frac{x \times y}{100}$$

$$= 15 - 20 - \frac{15 \times 20}{100} = -5 - \frac{300}{100}$$

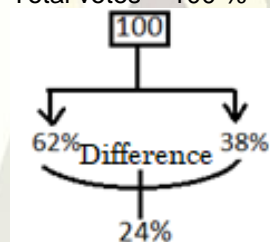
$$= -5 - 3$$

$$= -8\%$$

That is, there will be a decrease of 8%.

69. **Ans.(D)**

Total votes = 100 %



$$24\% = 35640$$

$$100\% = \frac{35640 \times 100}{24}$$

$$= 5940 \times 25$$

$$= 148500$$

70. **Ans.(B)**

Considered town population = 100%

Remaining population after epidemic = 95%

Number of nervous people = 8%

$$\text{Remaining people} = \frac{95 \times 92}{100} = 87.40\%$$

Given that -

$$87.40\% = 88274$$

$$100\% = \frac{88274 \times 100}{87.40} = 1,01,000$$

71. **Ans.(B)**

$$\text{Hindi \%} = \frac{68}{80} \times 100 = \frac{68}{4} \times 5 = 85\%$$

$$\text{Maths \%} = \frac{46}{60} \times 100 = \frac{230}{3} = 76.67\%$$

$$\text{Science \%} = \frac{74}{90} \times 100 = \frac{740}{9} = 82.22\%$$

$$\text{English \%} = \frac{35}{45} \times 100 = \frac{35}{9} \times 20 = \frac{700}{9}$$

$$= 77.78\%$$

Hence Anju got maximum percentage marks in Hindi.

72. **Ans.(C)**

Students scoring 50% or more than 50% marks:

Students scoring less than 50%

$$= (85 - 40) : 40$$

$$= 45 : 40$$

$$= 9 : 8$$

73. **Ans.(D)**

Assumed initial income = Rs. y

According to Question -

$$y \times \frac{25}{100} = (y + 1000) \frac{20}{100}$$

$$25y - 20y = 20000$$

$$5y = 20000$$

$$y = \text{Rs. } 4000$$

Hence the initial income was Rs.4000.

74. **Ans.(A)**

Let, Bala's income = x

$$\text{Arun's income} = x \times \frac{150}{100} = \frac{3x}{2}$$

$$\text{Chandu's income} = \frac{3x}{2} \times \frac{120}{100} = \frac{9x}{5}$$

According to Question –

$$x + \frac{3x}{2} + \frac{9x}{5} = 86000$$

$$\frac{10x + 15x + 18x}{10} = 86000$$

$$43x = 10 \times 86000$$

$$x = 20000$$

Hence Chandu's income

$$= \frac{9 \times 20000}{5} = \text{Rs. } 36000$$

75. **Ans.(A)**

$$\text{Required \%} = \frac{(60 \text{ sec} + 12 \text{ sec})}{60 \times 60} \times 100$$

$$= \frac{72}{60 \times 60} \times 100 = 2\%$$

76. **Ans.(B)**

$$40\% \text{ of } 70 = 70 \times \frac{40}{100} = 28$$

$$30\% \text{ of } 80 = 80 \times \frac{30}{100} = 24$$

$$\text{difference} = 28 - 24 = 4$$

According to Question

28 is $x\%$ more than 24

$$\therefore x = \frac{4}{24} \times 100$$

$$x = 16.66 \approx 16.67\%$$

77. **Ans.(A)**

Initial price of rice = Rs. 25 per kg,

Now the price of rice = Rs. 30 per kg.

Increase in price = $30 - 25 = \text{Rs. } 5$ per kg

$$\% \text{ decrease of rice} = \frac{5}{30} \times 100$$

$$= \frac{50}{3} = 16\frac{2}{3}\%$$

78. **Ans.(C)**

If two consecutive discounts are $a\%$ and $b\%$, then

equivalent discount = $a + b - \frac{ab}{100}$

$\therefore 12\% \text{ and } 5\% \text{ equivalent discount}$

$$= 12 + 5 - \frac{12 \times 5}{100}$$

$$= 17 - 0.6 = 16.4\%$$

79. **Ans.(B)**

Formula – When the price has been increased by $x\%$ and consumption has been reduced so that expenditure remain same,

Then –

$$\text{Decrease \%} = \left(\frac{x}{100 + x} \right) \times 100$$

Given – Increase = 10%

$$\text{Consumption Reduction} = \left(\frac{10}{100 + 10} \right) \times 100$$

$$= \frac{1}{11} \times 100 = 9\frac{1}{11}\%$$

80. **Ans.(C)**

From the formula –

$$\text{Percentage decrease} = \frac{x}{100 + x} \times 100$$

\therefore Percentage decrease in salary

$$= \frac{25}{100 + 25} \times 100$$

$$= \frac{25}{125} \times 100$$

$$= \frac{100}{5} = 20\%$$

81. **Ans.(C)**

Purchase + Tailor + Rent & Electricity = Total expenditure (in%)

$$30\% + 40\% + 30\% = 100\%$$

But,

$$100\% = 50000$$

$$1\% = 500$$

Percentage spent on tailor = 40%

$$= 40 \times 500 = \text{Rs. } 20000$$

82. **Ans.(B)**

Amount spent on salary = 25%

$$= \text{Rs. } 2,00,000$$

Hence the amount spent on maintenance

= 50%

$$\Rightarrow 50\% = \frac{2,00,000 \times 50}{25} = \text{Rs. } 400000$$

83. **Ans.(B)**

According to Question,

$$y \times 90\% = x$$

$$\frac{x}{y} = \frac{90}{100}$$

$$x:y = 9:10$$

What percentage of x is y

Let $k\%$ of x be y .

$$x \times \frac{k}{100} = y,$$

$$9 \times \frac{k}{100} = 10$$

$$\therefore k = \frac{10}{9} \times 100 = 111.1$$

84. **Ans.(A)**

Percentage increase

$$= x + y + \frac{xy}{100}$$

Percent increase in area of rectangle

$$= 8 + 12 + \frac{8 \times 12}{100}$$

$$= 20 + \frac{24}{25}$$

$$= 20 + 0.96$$

$$= 20.96\%$$

85. **Ans.(D)**

Let the winning candidate get the total number of valid votes = x

Total votes = 560000

According to Question,

$$x = 560000 \times \frac{75}{100} \times \frac{85}{100}$$

$$x = 560000 \times \frac{3}{4} \times \frac{17}{20}$$

$$x = 7000 \times 51$$

$$x = 357000$$

86. **Ans.(A)**

The marks obtained in the exam by Charan = 54 , which is 72% of the total marks.

If the total marks in the exam is x , then

$$54 = \frac{x \times 72}{100}$$

$$x = \frac{100 \times 54}{72}$$

$$x = 75 \text{ marks}$$

87. **Ans.(D)**

Let basic salary = Rs. x

According to Question

$$x \times \frac{115}{100} = 14030,$$

$$x = \text{Rs. } 12,200$$

88. **Ans.(A)**

Let the monthly income of Veer = Rs. x

According to Question,

$$\frac{(100 - 15)}{100} \text{ of } x \times \frac{(100 - 60)}{100} \text{ of } x = 2210$$

$$x \times \frac{100}{85} \times \frac{40}{100} = 2210$$

$$x = \frac{2210 \times 100 \times 100}{85 \times 40}$$

$$= \text{Rs. } 6500$$

89. **Ans.(B)**

If the value of the number is x then –

$$90 = \frac{x \times 72}{100}$$

$$\text{or, } 10 = \frac{x \times 8}{100}$$

$$\text{or, } x = \frac{1000}{8}$$

$$x = 125$$

90. **Ans.(B)**

58% of 350

$$= 350 \times \frac{58}{100} = 7 \times \frac{58}{2} = 7 \times 29 = 203$$

91. **Ans.(C)**

Let the number be x

According to Question

$$x \times \frac{84}{100} = 105,$$

$$x = \frac{105 \times 100}{84}$$

$$x = 125$$

92. **Ans.(C)**

Let, original price of the television be Rs. x.

According to Question,

$$x \times \frac{112}{100} = 14000$$

$$x = \text{Rs. } 12,500$$

93. **Ans.(A)**

$$\text{Consumption reduction\%} = \frac{x}{100 + x} \times 100$$

$$= \frac{30 \times 100}{100 + 30} = \frac{3000}{130} = 23\frac{1}{13}\%$$

94. **Ans.(D)**

$$\therefore \text{Quantity of second alloys} = \frac{51 \times 85}{15}$$

$$= \frac{17 \times 85}{5}$$

$$= 17 \times 17$$

$$= 289 \text{ gram}$$

95. **Ans.(B)**

Mass of solution = 250 g

Total amount of glucose in the solution = 5%

Therefore, the amount of glucose in the solution in grams

$$= 250 \times \frac{5}{100} = 12.5 \text{ gram}$$

96. **Ans.(B)**

Illiterate person = 200 – 111 = 89

$$\% = \frac{89}{200} \times 100 = 44.5\%$$

97. **Ans.(A)**

$$\text{Percentage of students' marks} = \frac{22}{25} \times 100$$

$$= 22 \times 4 = 88\%$$

98. **Ans.(A)**

Let his actual score be x,

Then according to the question,

$$\Rightarrow x \times \frac{125}{100} = 75 \Rightarrow x = \frac{75 \times 100}{125} = 60$$

99. **Ans.(C)**

$$\text{Number of boys in 60 students} = \frac{60 \times 60}{100} = 36$$

$$\text{Then, number of girls} = 60 - 36 = 24$$

Number of girls going to school by bicycle

$$= \frac{24 \times 25}{100} = 6$$

$$\text{Required number} = 24 - 6 = 18$$

100. **Ans.(B)**

Percentage of marks obtained by the student =

$$\frac{9}{25} \times 100 = 36$$