

# Practice Exercise

## Level - I

- In a public library there are 110,000 books, 40% of which are science books. It was decided to add 20,000 new books to the library. How many of the new books should be science books in order to bring the percentage of science books in the library up to 45%?  
(a) 15000 (b) 1500 (c) 1450 (d) 14500
- A batsman scored 110 runs which included 3 boundaries and 8 sixes. What percent of his total score did he make by running between the wickets ?  
(a) 45% (b)  $45\frac{5}{11}\%$   
(c)  $54\frac{6}{11}\%$  (d) 55%
- A student secures 90%, 60% and 54% marks in test papers with 100, 150 and 200 respectively as maximum marks. The percentage of his aggregate is:  
(a) 64 (b) 68  
(c) 70 (d) None of these
- If two numbers are respectively 20% and 50% of a third number, what is the percentage of the first number to the second ?  
(a) 10 (b) 20 (c) 30 (d) 40
- In an examination, 5% of the applicants were found ineligible and 85% of the eligible candidates belonged to the general category. If 4275 eligible candidates belonged to other categories, then how many candidates applied for the examination ?  
(a) 30,000 (b) 35,000  
(c) 37,000 (d) None of these
- Deepa decided to donate 8% of her salary to an orphanage. On the day of donation she changed her mind and donated ₹ 2240 which was 80% of what she had decided earlier. How much is Deepa's salary?  
(a) ₹ 36000 (b) ₹ 42000  
(c) ₹ 35000 (d) ₹ 45000
- When the price of a radio was reduced by 20%, its sale increased by 80%. What was the net effect on the sale?  
(a) 44% increase (b) 44% decrease  
(c) 66% increase (d) 75% increase
- If the price of sugar is increased by 7%, then by how much per cent should a housewife reduce her consumption of sugar, to have no extra expenditure?  
(a) 7 over 107% (b) 107 over 100%  
(c) 100 over 107% (d) 7%
- A salesman's terms were changed from a flat commission of 5% on all his sales to a fixed salary of ₹ 1,000 plus 2.5% commission on all sales exceeding ₹ 4,000. If his remuneration as per the new scheme was ₹ 600 more than by the first scheme, what were his sales worth?  
(a) 10,000/- (b) 11,000/- (c) 12,000/- (d) 14,000/-
- An inspector rejects 0.08% of the metres as defective. How many metres will he examine to reject 2 metres?  
(a) 200m (b) 250m  
(c) 2500m (d) 3000m
- A invested 10% more than B. B invested 10% less than C. If the total sum of their investment is ₹ 14450. how much did C get?  
(a) ₹ 5000 (b) ₹ 4800  
(c) ₹ 5100 (d) None of these
- A sum of ₹ 4558 is divided among A, B and C such that A receives 20% more than C, and C receives 25% less than B. What is A's share in the amount ?  
(a) ₹ 1548 (b) ₹ 1720  
(c) ₹ 1290 (d) ₹ 1345
- In an election between two candidates, 75% of the voters cast their votes, out of which 2% of the votes were declared invalid. A candidate got 9261 votes which were 75% of total valid votes. Find the total number of votes enrolled in that election.  
(a) 16080 (b) 16800  
(c) 18600 (d) 16008
- A spider climbed  $62\frac{1}{2}\%$  of the height of the pole in one hour and in the next hour it covered  $12\frac{1}{2}\%$  of the remaining height. If the height of the pole is 192 m, then distance climbed in second hour is:  
(a) 3 m (b) 5 m  
(c) 7 m (d) 9 m
- A number is increased by 10% and then reduced by 10%. After these operations, the number:  
(a) does not change (b) decreases by 1%  
(c) increases by 1% (d) increases by 0.1%
- The difference between the value of a number increased by 25% and the value of the original number decreased by 30% is 22. What is the original number ?  
(a) 70 (b) 65  
(c) 40 (d) 90
- A salesman is allowed  $5\frac{1}{2}\%$  discount on the total sales made by him plus a bonus of  $\frac{1}{2}\%$  on the sales over ₹ 10,000. If his total earnings were ₹ 1990, then his total sales (in ₹) were:  
(a) 30,000 (b) 32,000  
(c) 34,000 (d) 35,000
- If 12% of 75% is greater than 5% of a number by 75, the number is  
(a) 1875 (b) 1890  
(c) 1845 (d) 1860



19. Mr Yadav spends 60% of his monthly salary on consumable items and 50% of the remaining on clothes and transport. He saves the remaining amount. If his savings at the end of the year were ₹ 48456, how much amount per month would he have spent on clothes and transport?  
 (a) ₹ 4038 (b) ₹ 8076  
 (c) ₹ 9691.20 (d) ₹ 4845.60
20. In a certain year, the population of a certain town was 9000. If in the next year the population of males increases by 5% and that of the females by 8% and the total population increases to 9600, then what was the ratio of population of males and females in that given year?  
 (a) 4 : 5 (b) 5 : 4  
 (c) 2 : 3 (d) None of these
21. The salary of Raju and Ram is 20% and 30% less than the salary of Saroj respectively. By what % is the salary of Raju is more than the salary of Ram?  
 (a) 33.33 % (b) 50 %  
 (c) 15.18% (d) 14.28 %
22. Wheat is now being sold at ₹ 27 per kg. During last month its cost was ₹ 24 per kg. Find by how much per cent a family reduces its consumption so as to keep the expenditure fixed.  
 (a) 10.2% (b) 12.1%  
 (c) 12.3% (d) 11.1%
23.  $33\frac{1}{3}\%$  of a man's daily output is equal to 50% of a second man's daily output. If the second man turns out 1500 screws daily, then the first man's output in terms of making screws is:  
 (a) 500 (b) 1000  
 (c) 2000 (d) 2250
24. A fraction is such that if the double of the numerator and the triple of the denominator is changed by + 10% and -30% respectively then we get 11% of  $\frac{16}{21}$ . Find the fraction.  
 (a)  $\frac{4}{25}$  (b)  $\frac{2}{25}$   
 (c)  $\frac{3}{25}$  (d) None of these
25. The entry fee in an exhibition was ₹ 10. Later this was reduced by 25%, which increased the sale of tickets by 20%. Find the percentage increase in the number of visitors.  
 (a) 54 (b) 57  
 (c) 60 (d) 66
26. An inspector rejects 0.08% of the metres as defective. How many metres will he examine to reject 2 metres?  
 (a) 200m (b) 250m  
 (c) 2500m (d) 3000m
27. If the numerator of a fraction be increased by 15% and its denominator be diminished by 8%, the value of the fraction is  $\frac{15}{16}$ . Find the original fraction.  
 (a)  $\frac{1}{2}$  (b)  $\frac{1}{3}$   
 (c)  $\frac{1}{4}$  (d)  $\frac{3}{4}$
28. In a class, 65% of the students are boys. On a particular day 80% of girl students were present. What was the fraction of boys who were present that day if the total number of students present that day was 70%?  
 (a)  $\frac{2}{3}$  (b)  $\frac{28}{65}$   
 (c)  $\frac{5}{6}$  (d)  $\frac{42}{65}$
29. A's income is 60% of B's income, and A's expenditure is 70% of B's expenditure. If A's income is 75% of B's expenditure, find the ratio of A's saving to B's saving.  
 (a) 5 : 1 (b) 1 : 5  
 (c) 3.5 : 1 (d) 2 : 7
30. Due to fall in manpower, the production in a factory decreases by 25%. By what per cent should the working hour be increased to restore the original production?  
 (a)  $33\frac{1}{3}\%$  (b) 20%  
 (c) 25% (d) 4%
31. A number is increased by 20% and then again by 20%. By what percent should the increased number be reduced so as to get back the original number ?  
 (a)  $19\frac{11}{31}\%$  (b)  $30\frac{5}{9}\%$   
 (c) 40% (d) 44%
32. In the month of January, the Railway Police caught 4000 ticketless travellers. In February, the number rose by 5%. However, due to constant vigil by the Police and the total number of ticketless travellers caught in the month of April was :  
 (a) 3125 (b) 3255  
 (c) 3575 (d) 3591
33. In a mixture of milk and water the proportion of water by weight was 75%. If in the 60 gm mixture, 15 gm water was added, what would be the percentage of water ?  
 (a) 75% (b) 88%  
 (c) 90% (d) None of these
34. A shopkeeper employed a servant at a monthly salary of ₹ 1500. In addition to it, he agreed to pay him a commission of 15% on the monthly sale. How much sale in Rupees should the servant do if he wants his monthly income as ₹ 6000?  
 (a) ₹ 30000 (b) ₹ 415000  
 (c) ₹ 31500 (d) ₹ 50000
35. 720 sweets were distributed equally among children in such a way that number of sweets received by each child is 20% of the total number of children. How many sweets did each child receive ?  
 (a) 8 (b) 10  
 (c) 9 (d) 12
36. A company bought a total of 60 computers and 20 printers to modernise billing operations. If the price of each computer was three times the price of each printer then what per cent of the total cost of the purchase was the total cost of the printers ?  
 (a) 10% (b) 11%  
 (c) 15% (d) 20%



37. A city had a population of 30,00,000 in the beginning of 1999. Its average growth rate is 4% per year, but due to a massive earthquake in 2001, its population is reduced by 8% in that year. But it again maintained the same growth rate of 4% in following years. What will be the approx. population of the city at the end of 2003?  
 (a) 32,06,460 (b) 34,68,420  
 (c) 31,52,360 (d) 32,28,810
38. In a factory there are three types of machines  $M_1$ ,  $M_2$  and  $M_3$  which produces 25%, 35% and 40% of the total products respectively.  $M_1$ ,  $M_2$  and  $M_3$  produces 2%, 4% and 5% defective products, respectively. What is the percentage of non-defective products?  
 (a) 89% (b) 97.1% (c) 96.1% (d) 86.1%
39. A person saves 6% of his income. Two years later, his income shoots up by 15% but his savings remain the same. Find the hike in his expenditure.  
 (a) 15.95% (b) 15% (c) 14.8% (d) 15.5%
40. In the half yearly exam only 70% of the students were passed. Out of these (passed in half yearly) only 60% student are passed in annual exam. Out of those who did not pass the half yearly exam, 80% passed in annual exam. What percent of the students passed the annual exam?  
 (a) 42% (b) 56%  
 (c) 66% (d) None of these
41. Two vessels contain equal quantities of 40% alcohol. Anil changed the concentration of the first vessels to 50% by adding extra quantity of pure alcohol. Balu changed the concentration of the second vessels to 50% replacing a certain quantity of the solution with pure alcohol. By what percentage is the quantity of alcohol added by Anil more than that replaced by Balu?  
 (a) 20% (b) 25%  
 (c) 40% (d) Cannot be determined
42. Lagaan is levied on the 60% of the cultivated land. The revenue department collected total ₹ 3,84,4000 through the lagaan from the village of Sukhiya. Sukhiya, a very rich farmer, paid only ₹ 480 as lagaan. The percentage of total land of Sukhiya over the total taxable land of the village is:  
 (a) 0.15% (b) 15%  
 (c) 0.125% (d) None of these
43. In an election between 2 candidates, Bhiku gets 65% of the total valid votes. If the total votes were 6000, what is the number of valid votes that the other candidate Mhatre gets if 25% of the total votes were declared invalid?  
 (a) 1625 (b) 1575  
 (c) 1675 (d) 1525
44. A machine depreciates in value each year at the rate of 10% of its previous value. However, every second year there is some maintenance work so that in that particular year, depreciation is only 5% of its previous value. If at the end of the fourth year, the value of the machine stands at ₹ 1, 46, 205, then find the value of machine at the start of the first year.  
 (a) ₹ 1, 90, 000 (b) ₹ 2, 00, 000  
 (c) ₹ 1, 95, 000 (d) ₹ 2, 10, 000
45. After three successive equal percentage rise in the salary the sum of 100 rupees turned into 140 rupees and 49 paise. Find the percentage rise in the salary.  
 (a) 12% (b) 22%  
 (c) 66% (d) 82%
46. The salary of Anil and Vinit is 20% and 30% less than the salary of Dheeraj respectively. By what percentage is the salary of Anil more than the salary of Vinit?  
 (a) 33.33% (b) 50%  
 (c) 10% (d) 14.28%
47. In a certain town, at least 50% of the people read a newspaper. Among those who read a newspaper, at most 25% read more than one paper. Only one of the following statements follows from the statements given below. Which one is it?  
 (a) At the most 25% read exactly one newspaper  
 (b) At least 25% read all the newspaper  
 (c) At the most 37½% read exactly one newspaper  
 (d) At least 37½% read exactly one newspaper
48. Kajal spends 55% of her monthly income on grocery, clothes and education in the ratio of 4 : 2 : 5 respectively. If the amount spent on clothes is ₹ 5540/-, what is Kajal's monthly income ? [SBI Clerk-2012]  
 (a) ₹ 55,400/- (b) ₹ 54,500/-  
 (c) ₹ 55,450/- (d) ₹ 55,650/-  
 (e) None of these
49. 35 percent of a number is two times 75 percent of another number. What is the ratio between the first and the second number respectively ? [SBI Clerk-2012]  
 (a) 35 : 6 (b) 31 : 7  
 (c) 23 : 7 (d) 32 : 9  
 (e) None of these
50. Last year there were 610 boys in a school. The number decreased by 20 percent this year. How many girls are there in the school if the number of girls is 175 percent of the total number of boys in the school this year ? [SBI Clerk-2012]  
 (a) 854 (b) 848  
 (c) 798 (d) 782  
 (e) None of these
51. Aryan got 350 marks and Vidya scored 76 percent marks in the same test. If Vidya scored 296 marks more than Aryan, what were the maximum marks of the test ? [SBI Clerk-2012]  
 (a) 650 (b) 900  
 (c) 850 (d) 950  
 (e) None of these
52. A student was awarded certain marks in an examination. However, after re-evaluation, his marks were reduced by 40% of the marks that were originally awarded to him so that the new score now became 96. How many marks did the student lose after re-evaluation ? [SBI Clerk-2012]  
 (a) 58 (b) 68  
 (c) 63 (d) 56  
 (e) 64
53. 855 candidates applied for a job, out of which 80% of the candidates were rejected. How many candidates were selected for the job ? [SBI Clerk-2012]  
 (a) 684 (b) 151  
 (c) 676 (d) 179  
 (e) None of these



## 84 • Percentages

54. A shopkeeper purchased 200 bulbs for ₹ 10 each. However, 5 bulbs were fused and had to be thrown away. The remaining were sold at ₹ 12 each. What will be the percentage profit ? [SBI Clerk-2014]  
 (a) 25 (b) 15  
 (c) 13 (d) 17  
 (e) None of these
55. Ajay spends 25 per cent of his salary on house rent, 5 per cent on food, 15 per cent on travel, 10 per cent on clothes and the remaining amount of ₹ 27,000 is saved. What is Ajay's income ? [SBI Clerk-2014]  
 (a) ₹ 60,000 (b) ₹ 80,500  
 (c) ₹ 60,700 (d) ₹ 70,500  
 (e) None of these
56. The salary of an employee increases every year in the month of July by 10%. If his salary in May 2000 was ₹ 15,000, his salary in October 2001 was [SSC-Sub. Ins.-2012]  
 (a) ₹ 16,500 (b) ₹ 18,000  
 (c) ₹ 18,150 (d) ₹ 19,965
57. 72% of the students of a certain class took Biology and 44% took Mathematics. If each student took Biology or Mathematics and 40 took both, the total number of students in the class was [SSC-Sub. Ins.-2012]  
 (a) 200 (b) 230  
 (c) 250 (d) 320
58. In a big garden 60% of the trees are coconut trees, 25% of the number of coconut trees are mango trees and 20% of the number of mango trees are apple trees. If the number of apple trees are 1500, then the number of trees in the garden is : [SSC-Sub. Ins.-2013]  
 (a) 48000 (b) 50000  
 (c) 51000 (d) 45000
59. If 50% of  $(P - Q) = 30\%$  of  $(P + Q)$  and  $Q = x\%$  of  $P$ , then the value of  $x$  is: [SSC-Sub. Ins.-2013]  
 (a) 30 (b) 25  
 (c) 20 (d) 50
61. In an examination 75% candidates passed in English and 60% passed in Mathematics. 25% failed in both and 240 passed the examination. Find the total number of candidates. [SSC-Sub. Ins.-2014]  
 (a) 492 (b) 300  
 (c) 500 (d) 400
62. If 40% of  $\frac{4}{5}$  of  $\frac{3}{4}$  of a number is 48, then what is 1% of the same number ? [SSC-Sub. Ins.-2014]  
 (a) 20 (b) 2  
 (c) 10 (d) 1
63. Two persons contested an election of Parliament. The winning candidate secured 57% of the total votes polled and won by a majority of 42,000 votes. The number of total votes polled is [SSC-MT-2013]  
 (a) 4,00,000 (b) 5,00,000  
 (c) 6,00,000 (d) 3,00,000
64. A number when reduced by 10% gives 30. The number is [SSC-MT-2013]  
 (a) 35 (b)  $33\frac{1}{2}$   
 (c)  $33\frac{1}{3}$  (d) 40
65. A team played 40 games in a season and won in 24 of them. What percent of games played did the team win ? [SSC 10+2-2012]  
 (a) 70% (b) 40%  
 (c) 60% (d) 35%
66. If 125% of  $x$  is 100, then  $x$  is : [SSC 10+2-2012]  
 (a) 80 (b) 150  
 (c) 400 (d) 125
67. In the annual examination Mahuya got 10% less marks than Supriyo in Mathematics. Mahuya got 81 marks. The marks of Supriyo is [SSC 10+2-2013]  
 (a) 89 (b) 90  
 (c) 87 (d) 88
68. Ram's income is greater than Shyam's income by 20%. Then the percent by which Shyam's income is less than Ram's income is [SSC 10+2-2013]  
 (a)  $16\frac{2}{3}$  (b)  $18\frac{2}{5}$   
 (c)  $10\frac{1}{5}$  (d)  $12\frac{1}{3}$
69. 1% of 1% of 25% of 1000 is [SSC 10+2-2014]  
 (a) .025 (b) .0025  
 (c) .25 (d) .000025

## Level - II

1. A man buys a house for ₹ 100000 and rents it. He puts 12.5% of each month's rent aside for upkeep & repairs, pays ₹ 325 per year as taxes and realizes 5.5% annually on his investment. Find the monthly rent.  
 (a) 550 (b) 554.76  
 (c) 654.76 (d) 1620.45
2. When the cost of petroleum increases by 40%, a man reduces his annual consumption by 20%. Find the percentage change in his annual expenditure on petroleum.  
 (a) 20% (b) 16%  
 (c) 12% (d) 40%
3. A obtains  $33\frac{1}{3}\%$  of the marks in a paper for which the maximum was 300. B is ahead of A by 40% of A's marks, while C is ahead of B by two-ninths of his own marks. How many marks does C get?  
 (a) 180 (b) 140  
 (c) 150 (d) 210



4. In a city, 35% of the population is composed of migrants, 20% of whom are from rural areas. Of the local population, 48% is female while this figure for rural and urban migrants is 30% and 40% respectively. If the total population of the city is 728400, what is its female population ?  
 (a) 324138 (b) 349680  
 (c) 509940 (d) None of these
5. Madan pays income tax at the rate of 10%. If his income increased by 10% and his tax rate increases to 15%, his net income would increase by ₹ 350. What is Madan's income ?  
 (a) ₹ 8000 (b) ₹ 10,000  
 (c) ₹ 12,000 (d) ₹ 14,000
6. The digit at unit place of a two-digit number is increased by 100% and the digit at ten places of the same number is increased by 50%. The new number thus formed is 19 more than the original number. What is the original number?  
 (a) 22 (b) 63  
 (c) 24 (d) None of these
7. Chunilal invests 65% in machinery, 20% in raw material and still has ₹ 1,305 cash with him. Find his total investment.  
 (a) ₹ 6,500 (b) ₹ 7,225  
 (c) ₹ 8,500 (d) None of these
8. The price of oil is increased by 25%. If the expenditure is not allowed to increase, the ratio between the reduction in consumption and the original consumption is  
 (a) 1 : 3 (b) 1 : 4  
 (c) 1 : 5 (d) 1 : 6
9. A scooter costs ₹ 25,000 when it is brand new. At the end of each year, its value is only 80% of what it was at the beginning of the year. What is the value of the scooter at the end of 3 years?  
 (a) ₹ 10,000 (b) ₹ 12,500  
 (c) ₹ 12,800 (d) ₹ 12,000
10. If the price of sugar rises from ₹ 6 per kg to ₹ 7.50 per kg, a person, to have no increase in his expenditure on sugar, will have to reduce his consumption of sugar by  
 (a) 15% (b) 20%  
 (c) 25% (d) 30%
11. The sum of two numbers is  $\frac{28}{25}$  of the first number. The second number is what percent of the first?  
 (a) 12% (b) 14%  
 (c) 16% (d) 18%
12. A positive number is by mistake divided by 6 instead of being multiplied by 6. What is the % error on the basis of correct answer?  
 (a) 3 (b) 97  
 (c) 17 (d) 83
13.  $p$  is six times as large as  $q$ . The percent that  $q$  is less than  $p$ , is :  
 (a)  $16\frac{2}{3}$  (b) 60  
 (c)  $83\frac{1}{3}$  (d) 90
14. 5% of income of A is equal to 15% of income of B and 10% of income of B is equal to 20% of income of C. If C's income is ₹ 2000, then the total income of A, B and C is :  
 (a) ₹ 6000 (b) ₹ 14,000  
 (c) ₹ 18,000 (d) ₹ 20,000
15. By reduction of 20% in the price of oranges, one can purchase 5 oranges more for ₹ 2.50. Find the reduced price of the oranges per dozen. Find also the original price.  
 (a) 120 paise, 140 paise (b) ₹ 0.8, ₹ 1.5  
 (c) ₹ 1.0, ₹ 1.5 (d) ₹ 1.2, ₹ 1.5
16. In a factory, producing parts of an automobile, the parts manufactured on the shop floor are required to go through quality checks, each conducted after a specific part of the processing on the raw material is completed. Only parts that are not rejected at one stage are put through subsequent stages of production and testing. If average rejection rates at these three testing stages during a month are 10%, 5% and 2% respectively, then what is the effective rejection rate for the whole plant ?  
 (a) 17% (b) 15.20%  
 (c) 84.80% (d) 16.21%
17. In some quantity of ghee, 60% is pure ghee and 40% is vanaspati. If 10 kg of pure ghee is added, then the strength of vanaspati ghee becomes 20%. The original quantity was :  
 (a) 10 kg (b) 15 kg  
 (c) 20 kg (d) 25 kg
18. The strength of a school increases and decreases every alternate year. It starts with increase by 10% and there-after the percentage of increase/decrease is the same. Which of the following is definitely true about the strength of the school in 2001 as compared to that in 1996?  
 (a) Increase approximately by 8%  
 (b) Decrease approximately by 8%  
 (c) Increase approximately by 20%  
 (d) Decrease approximately by 20%
19.  $A = 10\%$  of  $x$ ,  $B = 10\%$  of  $y$ ,  $C = 10\%$  of  $x + 10\%$  of  $y$ . On the basis of the above equalities, what is true in the following?  
 (a)  $A$  is equal to  $B$   
 (b)  $A$  is greater than  $B$   
 (c)  $B$  is greater than  $A$   
 (d) Relation cannot be established between  $A$  and  $B$
20. Sumitra has an average of 56% on her first 7 examinations. How much should she make on her eighth examination to obtain an average of 60% on 8 examinations?  
 (a) 88% (b) 78%  
 (c) 98% (d) Cannot be determined
21. Due to an increase of 30% in the price of eggs, 3 eggs less are available for ₹ 7.80. The present rate of eggs per dozen is :  
 (a) ₹ 8.64 (b) ₹ 8.88  
 (c) ₹ 9.36 (d) ₹ 10.40
22. A speaks truth in 75% and B in 80% cases. In what percentage of cases are they likely to contradict each other when narrating the same incident?  
 (a) 35 (b) 30  
 (c) 25 (d) 20



## 86 ● Percentages

23. A's income is 60% of B's income, and A's expenditure is 70% of B's expenditure. If A's income is 75% of B's expenditure, find the ratio of A's savings to B's savings.  
 (a) 5 : 1 (b) 1 : 5  
 (c) 3.5 : 1 (d) 2 : 7
24. In a market survey, 20% opted for product A whereas 60% opted for product B. The remaining individuals were not certain. If the difference between those who opted for product B and those who were uncertain was 720, how many individuals were covered in the survey?  
 (a) 1440 (b) 1800  
 (c) 3600 (d) Data inadequate
25. The income of A is 150% of the income of B and the income of C is 120% of the income of A. If the total income of A, B and C together is ₹ 86000, what is C's income?  
 (a) ₹ 30000 (b) ₹ 32000  
 (c) ₹ 20000 (d) ₹ 36000
26. Of the 1000 inhabitants of a town, 60% are males of whom 20% are literate. If, of all the inhabitants, 25% are literate, then what percent of the females of the town are literate?  
 (a) 22.5 (b) 27.5  
 (c) 32.5 (d) 37.5
27. When 60% of a number A is added to another number B, B becomes 175% of its previous value. Then which of the following is true regarding the values of A and B?  
 (a)  $A > B$   
 (b)  $B > A$   
 (c)  $B \geq A$   
 (d) Either (a) or (b) can be true depending upon the values of A and B
28. In the month of January, the Railway Police caught 4000 ticketless travellers. In February, the number rose by 5%. However, due to constant vigil by the Police and the Railway staff, the number reduced by 5% and in April it further reduced by 10%. The total number of ticketless travellers caught in the month of April was:  
 (a) 3125 (b) 3255  
 (c) 3575 (d) 3591
29. The ratio of Jim's salary for October to his salary for November was 1.5 : 1.333 and the ratio of the salary for November to that for December was 2 : 2.6666. The worker got 40 rupees more for December than for October and received a bonus constituting 40 per cent of the salary for three months. Find the bonus. (Assume that the number of workdays is the same in every month.)  
 (a) 368.888 rupees (b) 152.5555 rupees  
 (c) 222.22 rupees (d) 265.6 rupees
30. King Dashratha, at his eleventh hour, called his three queens and distributed his gold in the following way: He gave 50% of his wealth to his first wife, 50% of the rest to his second wife and again 50% of the rest to his third wife. If their combined share is worth 1,30,900 kilograms of gold, find the quantity of gold King Dashratha was having initially?  
 (a) 1,50,000 kg (b) 1,49,600 kg  
 (c) 1,51,600 kg (d) 1,52,600 kg
31. After three successive raises, Aftab's salary became equal to  $\frac{378}{125}$  of his initial salary. By what percentage was the salary raised the first time if the third rise was twice as high (in percentage) as the second rise was twice as high (in percentage) as the first rise?  
 (a) 10% (b) 15%  
 (c) 20% (d) 25%
32. In an assembly election at Surat, the total turnout was 80% out of which 16% of the total voters on the voting list were declared invalid. Find which of the following can be the percentage votes got by the winner of the election if the candidate who came second got 20% of the total voters on the voting list. (There were only three contestants, only one winner and the total number of voters on the voters' list was 20000.)  
 (a) 44.8% (b) 46.6%  
 (c) 48% (d) None of these
33. In the university examination last year, Rajesh scored 65% in English and 82% in History. What is the minimum percent he should score in Sociology. Which is out of 50 marks (if English and History were for 100 marks each), if he aims at getting 78% overall?  
 (a) 94% (b) 92%  
 (c) 98% (d) 96%
34. In an election of 3 candidates A, B and C, A gets 50% more votes than B. A also beats C by 1,80,00 votes. If it is known that B gets 5 percentage more votes than C, find the number of voters on the voting list (given 90% of the voters on the voting list voted and no votes were illegal)  
 (a) 72,000 (b) 81,000  
 (c) 90,000 (d) 1,00,000
35. A number is mistakenly divided by 5 instead of being multiplied by 5. Find the percentage change in the result due to this mistake.  
 (a) 96% (b) 95%  
 (c) 2400% (d) 200%
36. Ambani, a businessman, started off a business with very little capital. In the first year, he earned a profit of 50% and donated 50% of the total capital (initial capital + profit) to a charitable organisation. The same course was followed in the 2nd and 3rd years also. If at the end of three years he is left with ₹ 16, 875, then find the amount donated by him at the end of the 2nd year.  
 (a) ₹ 45, 000 (b) ₹ 12, 500  
 (c) ₹ 22, 500 (d) ₹ 20, 000
37. Arushi's project report consists of 25 pages each of 60 lines with 75 characters on each line. In case the number of lines is reduced to 55 but the number of characters is increased to 90 per lines, what is the percentage change in the number of pages. (Assume the number of pages to be a whole number.)  
 (a) +10% (b) +5%  
 (c) -8% (d) -10%



38. Recently I had gone to a locality called Shadigarh for conducting a survey about the number of married persons in the locality. The population of the locality is 7,200 and  $\frac{11}{18}$ th of those are males and the rest females. If 40% of the males are married, find percentage of married females in the locality
- (a)  $48\frac{1}{7}\%$  (b)  $52\frac{4}{7}\%$   
(c)  $62\frac{6}{7}\%$  (d)  $71\frac{1}{7}\%$
39. Chintu is given a quadratic equation  $ax^2 + bx + c = 0$  and is asked to make another quadratic equation from this with  $a = 1$ . Also one root of the second quadratic equation is same as one of the roots of the first equation but opposite in sign and the other root of the second equation is two times the second root of the first equation. Find the percentage change in the constant term of the second equation as compared to the first equation?
- (a) 200% increase (b) 300% decrease  
(c) 400% increase (d) 100% decrease
40. A salesgirl's terms were changed from a flat commission of 5% on all her sales to a fixed salary of ₹ 1000 plus 2.5% commission on all sales exceeding ₹4000. If her remuneration as per the new scheme was ₹600 more than that by the previous scheme, her total sales was [SBI PO-2011]
- (a) ₹10000 (b) ₹5000  
(c) ₹2000 (d) ₹12000  
(e) None of these
41. Six-eleventh of a number is equal to twenty-two percent of second number. Second number is equal to the one-fourth of third number. The value of the third number is 2400. What is the 45% of first number? [IBPS-PO-2011]
- (a) 109.8 (b) 111.7  
(c) 117.6 (d) 123.4  
(e) None of these
42. An HR Company employs 4800 people, out of which 45 percent are males and 60 percent of the males are either 25 years or older. How many males are employed in that HR Company who are younger than 25 years? [IBPS-PO-2011]
- (a) 2640 (b) 2160  
(c) 1296 (d) 864  
(e) None of these
43. In a test, a candidate secured 468 marks out of maximum marks 'A'. If the maximum marks 'A' were converted to 700 marks, he would have secured 336 marks. What were the maximum marks of the test? [IBPS-PO-2011]
- (a) 775 (b) 875  
(c) 975 (d) 1075  
(e) None of these
44. Sum of three consecutive numbers is 2262. What is 41 % of the highest number? [IBPS-PO-2012]
- (a) 301.51 (b) 303.14  
(c) 308.73 (d) 306.35  
(e) 309.55
45. Akash scored 73 marks in subject A. He scored 56% marks in subject B and X marks in subject C. Maximum marks in each subject were 150. The overall percentage marks obtained by Akash in all the three subjects together were 54%. How many marks did he score in subject C? [IBPS-PO-2012]
- (a) 84 (b) 86  
(c) 79 (d) 73  
(e) None of these
46. In an examination, Raman scored 25 marks less than Rohit. Rohit scored 45 more marks than Sonia. Rohan scored 75 marks which is 10 more than Sonia. Ravi's score is 50 less than, maximum marks of the test. What approximate percentage of marks did Ravi score in the examination, if he gets 34 marks more than Raman? [IBPS-PO-2013]
- (a) 90 (b) 70  
(c) 80 (d) 60  
(e) 85
47. 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 the remaining amount of ₹ 900 is saved. What is Mr Giridhar's monthly income? [IBPS-PO-2013]
- (a) ₹ 6000 (b) ₹ 12000  
(c) ₹ 9000 (d) Cannot be determined  
(e) None of these
48. Rakesh got 273 marks in an examination and scored 5% more than the pass %. If Lokesh got 312 marks, then by what % above the pass mark did he pass the examination? [SSC CGL-2013]
- (a) 20% (b) 27%  
(c) 25% (d) 15%
49. The monthly salaries of A and B together amount to ₹ 40,000. A spends 85% of his salary and B, 95% of his salary. If now their savings are the same, then the salary (in ₹) of A is [SSC CGL-2014]
- (a) 10,000 (b) 12,000  
(c) 16,000 (d) 18,000
50. One litre of water is evaporated from 6 litres of a solution containing 5% salt. The percentage of salt in the remaining solution is [SSC CGL-2014]
- (a)  $4\frac{4}{9}\%$  (b)  $5\frac{5}{7}\%$   
(c) 5% (d) 6%