UNIT 2
EXERCISE ON CHAPTER 1, 2 & 3
(Percentage, Profit & Loss, Simple & Compound Interest)
CONTENT AS PER IBPS/SSC LEVEL

Q. 1. The difference between 78% of a number and 59% of the same number is 323. What is 62% of that number?
(a) 1071   (b) 1173   (c) 1037   (d) 1159   (e) None of these

Q. 2. Tanya obtained 95% marks in Physics, Chemistry and Maths together and she obtained 225 marks in Social Science, English and Hindi together. If the maximum marks one can obtain in each of the subjects is 100, what is Tanya's overall percentage in all the six subjects together?
(a) 80 (b)75 (c) 90   (d) 95 (e) None of these

Q. 3. 40% of 60% of $3/5^{th}$ of a number is 504. What is 25% of $2/5^{th}$ of that number?
(a) 180   (b) 175   (c) 360   (d) 350   (e) None of these

Q. 4. In a test consisting of 80 questions carrying one mark each, Arpita answers 65% of the first 40 questions correctly. What percent of the other 40 questions does she need to answer correctly to score 75% on the entire test?
(a) 60   (b) 80   (c) 75   (d) 40   (e) None of these

Q. 5. A sum of Rs.2236 is divided among A, B and C such that A receives 25% more than C and C receives 25% less than B, what is A's share in the amount?
(a) Rs. 460   (b) Rs. 890 (c) Rs. 780   (d) Rs.1280   (e) None of these

Q. 6. In a class of 65 students and 4 teachers, each student got sweets that are 20% of the total number of students and each teacher got sweets that are 40% of the total number of students. How many sweets were there?
(a) 845   (b) 897   (c) 949   (d) 104   (e) None of these

Q. 7. The difference between 54% of a number and 26% of the same number is 22526. Whaat is 66% of that number?
(a) 53097 (b) 48372 (c) 51218 (d) 49124   (e) None of these

Q. 8. Vaishali spent Rs.31897 on the air-conditioner for her home, Rs.38789 on buying plasma television and the remaining 23% of the total amount she had as cash with her. What was the total amount?
(a) Rs.74625   (b) Rs.86750   (c) Rs.91800   (d) Cannot be determined   (e) None of these

Q. 9. In an examination it is required to get 40% of the aggregate marks to pass. A student gets 265 marks and is declared fail by 55 marks. What is the maximum aggregate marks a student can get?
(a) 800 (b) 750   (c) 650   (d) Cannot be determined   (e) None of these

Q. 10. The difference between 75% of a number and 20% of the same number is 378.4. What is 40% of that number?
(a) 275.2   (b) 274   (c) 267.2   (d) 266   (e) None of these

Q. 11. The difference between 56% of a number and 39% of the same number is 425. What is 63% of that number?

(a) 1525 (b) 1650 (c) 1700 (d) 1575 (e) None of these

Q. 12. 60 per cent of first number is 40 per cent of the second number. What is the respective ratio of the first number to the second number?

(a) 2 : 3 (b) 21 : 31 (c) 7 : 10 (d) cannot be determined (e) None of these

Q. 13. Ramu gave 35% of the amount he had to Shakeel. Shakeel in turn gave two-thirds of what he received from Ramu to Joseph. After spending Rs.150 on lunch out of the amount he got from Shakeel, Joseph now has Rs.550 left with him. How much amount did Ramu have?

(a) Rs.2800 (b) Rs.2000 (c) Rs.3000 (d) Can't be determined (e) none of these

Q. 14. If the numerator of a fraction is increased by 200% and the denominator is increased by 300%, the resultant fraction is 15/26. What was the original fraction?

(a) 8/11 (b) 10/11 (c) 9/13 (d) 10/13 (e) None of these

Q. 15. In an examination it is required to get 380 of the aggregate marks to pass. A student gets 32% marks and is declared failed by 76 marks. What are the maximum aggregate marks a student can get?

(a) 945 (b) 975 (c) 950 (d) Cannot be determined (e) None of these

Q. 16. A cricketer has batted in 105 innings. He has scored 17 centuries, crossed the 50- run mark 28 times and crossed the 25-run mark 39 times. The no. of times he has scored below 25 is what percentage of the number of times he scored between 25 and 49 (both 25 and 49 included)?

(a) 450% (b) 600% (c) 500% (d) cannot be determined (e) None of these

Q. 17. Sunil scored 54 percent marks in a test. Ravi scored 450 marks in the same test which is 300 less than Sonu. Sunil's score is 60 more than Sonu. If Ram scored 900 marks in the test, what is Ram's percentage?

(a) 80 (b) 65 (c) 75 (d) 60 (e) None of these

Q. 18. In a school there are 800 students out of whom 45 percent are girls. Monthly fee of each boy is Rs.600 and monthly fee of each girl is 30 percent less than each boy. What is the total monthly fee of girls and boys together?

(a) Rs.425400 (b) Rs.414600 (c) Rs.419600 (d) Rs.423400 (e) None of these

Q. 19. In a class of 50 students and 5 teachers, each student got sweets that are 12% of the total number of students and each teacher got sweets that are 20% of the total number of students. How many sweets were there?

(a) 345   (b) 365   (c) 330   (d) 350   (e) None of these

Q. 20. In an election between two candidates, one got 52% of the total valid votes. 25% of the total votes were invalid. The total number of votes were 8400. How many valid votes did the other person get?

(a) 3276   (b) 3196   (c) 3024   (d) Cannot be determined   (e) None of these

Q. 21. In a school there are 250 students out of whom 12 per cent are girls. Each girl's monthly fee is Rs.450/- and each boy's monthly fee is 24 percent more than a girl. What is the total monthly fee of girls and boys together?

(a) Rs.136620/-   (b) Rs.136260/-   (c) Rs.132660/-   (d) Rs.132460/-   (e)None of these

Q. 22. If the height of a triangle is decreased by 40% and its base is increased by 40% and its base is increased by 40%, what will be the effect on its area?

(a) No change   (b) 16% increase   (c) 8% decrease   (d) 16% decrease   (e) None of these

Q. 23. An HR Company employs 4800 people, out of which 45 per cent are males and 60 per cent of the males are either 25 years or older. How many males are employed in HR Company who are younger than 25 years?

(a) 2640   (b) 2160   (c) 1296   (d) 864   (e) None of these

Q. 24. Six-eleventh of a number is equal to twenty two per cent 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?

(a) 109.8   (b) 111.7   (c) 117.6   (d) 123.4   (e) None of these

Q. 25. Raman scored 456 marks in an exam and Seeta got 54 percent marks in the same exam which is 24 marks less than Raman. If the minimum passing marks in the exam is 34 per cent, then how much more marks did Raman score than the minimum passing marks?

(a) 184   (b) 196   (c) 190   (d) 180   (e) None of these

Ans: (a) 184

Q. 26. Jasmine scored 52 marks in Science, 36 marks in Hindi, 47 marks in English and 73 marks in Sanskrit. The total marks of all the subjects together is 400. What is the overall percentage of marks she got?

(a) 56   (b) 48   (c)45   (d) 52   (e) None of these

Q.27. A shopkeeper labeled the price of his articles so as to earn a profit of 30% on the cost price. He then sold the articles by offering a discount of 10% on the labeled price. What is the actual percent profit earned in the deal?
(a) 18%   (b)15%   (c)20%   (d)Cannot be determined   (e)None of these

Q.28. Profit earned by an organization is distributed among officers and clerks in the ratio of 5:3 respectively. If the number of officers is 45 and the number of clerks is 80 and the amount received by each officer is Rs.25,000/-, what was the total amount of profit earned?
(a)Rs.22 lakhs   (b)Rs.18.25 lakhs   (c)Rs.18 lakhs   (d)Rs.23.25 lakhs   (e) None of these

Q.29. The cost of 8 gel pens and 12 ball pens is Rs.82. What would be the cost of 36 gel pens and 54 ball pens?
(a) Rs.366   (b)Rs.365   (c)Rs.369   (d)Rs.364   (e)None of these

Q.30. A merchant sells his two cars – one at 15% loss and another at 12% profit. If the cost prices of the two cars are in the ratio of 1:2, what is his percent profit or loss?
(a)3% profit   (b)2% loss   (c)2% profit   (d)1.2%loss   (e)None of these

Q.31. The profit earned after selling an article for Rs.675 is twice the loss incurred after selling the article for Rs.435. What is the cost price of the article?
(a)Rs.450   (b)Rs.595   (c)Rs.400   (d)Rs.450   (e)None of these

Q.32. Mohan purchased 15 kgs of rice at the rate of Rs.26 per kg and 8 kgs of pulses at the rate of Rs.26 per kg. Whaat is the total amount that he paid to the shopkeeper?
(a)Rs.598   (b)Rs.594   (c)Rs.596   (d)Rs. 595   (e) None of these

Q.33. Suhas sold an item for Rs.7500 and incurred a loss of 25%. At what price, should he have sold the item to have gained a profit of 25%?
(a)Rs.13800   (b)Rs.12500   (c)Rs.11200   (d)Cannot be determined   (e) None of these

Q.34. A man purchases some eggs for Rs.500. 15% of the eggs break during transportation. What profit percentage should he take on the remaining to get an overall profit of 20%?
(a)37.5   (b)30   (c)42   (d)41.17   (e)45

Q.35. The owner of an electronics shop charges his customer 25% more than the cost price. If a customer paid Rs.11,500 for a television set, then what was the cost price of the television set?
(a)Rs.9200   (b)Rs.7200   (c)Rs.8600   (d)Rs.9800   (e)Rs.10000

Q.36. Gina invests Rs.48000/- to start a business, 4 months later Shrayon joins her by investing

Rs.62000/- and another two months later Deepika joins them both by investing Rs.80000/-. At the end of

one year the business earns a profit of Rs.20661/-. What is Deepika's share in the profit?

(a)Rs.7668/-   (b)Rs.6603/-   (c)Rs.7240/-   (d)Rs.6390/-   (e)None of these

Q.37. A person bought an old TV at Rs.4000 and spent 20% of its cost on repairing. If the person wants to make a net profit of Rs.520, to what percentage should he add, in the purchase price while determining the selling price?

(a)24%   (b)28%   (c)30% (d)33%   (e)None of these

Q.38. If the cost of 10 tables and 15 chairs is Rs.20000 what will be the cost of tables and 21 chairs?

(a)Rs.27500   (b)Rs.28000 (c)Rs.32000   (d)Rs.36000   (e)None of these

Q. 39. If the cost of 12 pencils is equal to selling price of 10 pencils, the profit per cent in the transaction is

(a) 16 2/3%   (b) 18% (c) 20% (d)25% (e) None of these

Q. 40. When a discount of 12% on the marked price of an article is allowed, the article is sold for Rs.264. The marked price of the article is

(a) Rs.300 (b) Rs.276 (c)Rs.312 (d)Rs.325 (e)None of these

Q. 41. Successive discounts of 20% and 15% are equivalent to a single discount of

(a)35%   (b)32% (c)17.5% (d)17% (e) None of these

Q. 42. A man sells two tables at the same price. On one he makes a profit of 10% and on the other he suffers a loss of 10%. His loss percent on the whole transaction is

(a) 0   (b) 1   (c) 2   (d) 5 (e) None of these

Q. 43. If the cost price of 50 oranges is equal to the selling price of 40 oranges, then the profit per cent is

(a) 5 (b) 10   (c) 20   (d) 25 (e) None of these

Q. 44. By selling an article at 80% of its marked price, a merchant makes a loss of 12%. What will be the percent profit made by the merchant if he sells the article at 95% of its marked price?

(a) 5% profit (b) 1% loss   (c) 10% profit   (d) 5.5% profit (e) 4.5% profit

Q. 45. A man bought some toys at the rate of 10 for Rs. 40 and sold them at 8 for Rs. 35. Find his gain or loss percent.
(a) 5% profit (b) 1% loss   (c) 15% profit   (d) 5.5% profit (e) none of these

Q. 46. A dishonest merchant sells his grocery using weights 15% less than the true weights and makes a profit of 20%. Find his total gain percentage.
(a) 35%   (b) 30%   (c) 41.17 %   (d) 50% (e) none of these

Q. 47. What is the maximum percentage discount that a merchant can offer on her Marked Price so that she ends up selling at no profit or loss, if she had initially marked her goods up by 50%?
a. 50% b. 20% c. 25% d. 16.67%   e. 33.33%

Q. 48. There are three successive discounts on a shirt 10 %, 8 % and 6 % . Find exact single discount to all these three discounts.

(a) 23.11 %   (b) 22.17 %   (c) 21.45 %   (d) 20.20 %

Q. 49. A printer manufacturer initially makes a profit of 12 % by selling a particular model of printer for Rs 6500. If the cost of manufacturing of that printer increases by 25 %, then price paid by customer is increased by 15 %. Find the % profit made by the manufacturer ?
(a) 4.5 %   (b) 5.7 %   (c) 6.2 %   (d) 3.5 %

Q. 50. Kartik calculates his profit percentage on the selling price whereas Shyam calculates his profit percentage on the cost price. They find that the difference of their profits is Rs 100 . If the selling price of both of them are the same and both of them get 25 % profit, find their selling price.
(a) 2400   (b) 2000   (c) 2100   (d) 2150

Q. 51. A fruit vendor fixed his selling price of mangoes at 40 % above the cost price. He sells half of the stock of mangoes at this price, now he offers a discount of 15 % on original selling price for one quater of stock and rest at a discount of 30 % on original selling price. Find the gain percentage altogether ?
(a) 20.30 %   (b) 21.22 %   (c) 25.45 %   (d) 24.25 %

Q. 52. A textile vendor sells shirts at Rs. 800 per shirt, however he forced to give two successive discounts of 10 % and 5 % respectively. However he charges sales tax on net sales price from the customer at 5 %. What price does customer has to pay to buy the shirt ?
(a) 690.20   (b) 700.80   (c) 718.20   (d) 722.34

Q. 53. By selling an article at 2/5 of the marked price, there is a loss of 25 % , The ratio of the marked price and the cost price of the article is :
(a) 2 : 5   (b) 8 : 15   (c) 15 : 8   (d) 5 : 2

Q. 54. Six mangoes were bought at Rs 5 and 5 mangoes sold for Rs 6. Then find out the gain percentage ?
(a) 39 %   (b) 42 %   (c) 44 %   (d) 45 %

Q. 55. Braun invested a certain sum of money at 8% p.a. simple interest for 'n' years. At the end of 'n' years, Braun got back 4 times his original investment. What is the value of n?
    a.   50 years   b. 25 years   c. 12 years 6 months   d. 37 years 6 months

e. 40 years

Q. 56. Shawn invested one half of his savings in a bond that paid simple interest for 2 years and received $ 550 as interest. He invested the remaining in a bond that paid compound interest, interest being compounded annually, for the same 2 years at the same rate of interest and received $605 as interest. What was the value of his total savings before investing in these two bonds?
   a. $ 5500   b. $ 11000   c. $ 22000   d. $ 2750   e. $ 44000

Q. 57. Ann invested a certain sum of money in a bank that paid simple interest. The amount grew to $240 at the end of 2 years. She waited for another 3 years and got a final amount of $300. What was the principal amount that she invested at the beginning?
   a. $ 200   b. $ 150c. $ 210d. $ 175e. Insufficient data

Q. 58. Peter invested a certain sum of money in a simple interest bond whose value grew to $300 at the end of 3 years and to $ 400 at the end of another 5 years. What was the rate of interest in which he invested his sum?
   a. 12%   b.12.5%   c. 6.67%   d. 6.25%   e. 8.33%
Q. 59. Find the compound interest on Rs. 9375 at 8% per annum for 2 yr.
a) Rs.1560 b) Rs.1512 c) Rs.1590 d) Rs.1548

Q. 60. The difference between compound Interest and simple interest on an amount of Rs. 15,000 for 2 years is Rs. 96. What is the rate of interest per annum?
a) 8   b) 11   c) 12   d) None of these

Q. 61. The difference between the simple interest the compound interest on Rs. 8000 at 10% per annum 3 yr is
a) Rs. 260   b) Rs. 352   c) Rs.248   d) Rs. 310

Q. 62. A sum of Rs. 12,000 deposited at compound interest becomes double after 5 years. After 20 years, it will become:
a) Rs. 1,10,000   b) Rs. 1,30,000   c) Rs. 1,24,000   d) Rs. 1,92,000

Q. 63. The least number of complete years in which a sum of money put out at 20% compound interest will be more than doubled is:
a) 7   b) 4   c) 5   d) 8

Q. 64. Sum of money becomes Rs.13,380 after3 years and Rs. 20,070 after 6 years on compound interest. The sum iS
a) Rs. 9200   b) Rs. 9000   c) Rs. 8920   d) Rs. 9040

Q. 65. A sum of money invested at compound interest amounts to Rs. 800 in 3 years and to Rs. 840 in 4 years. The rate of interest per annum is:
a) 4%   b) 8%   c) 5%   d) 6%

Q. 66. The compound interest on a sum of money for 2 years is Rs. 832 and the simple interest on the same sum for the same period is Rs. 800. The difference between the compound interest and the simple interest for 3 years will be:
a) Rs. 50   b) Rs. 6 7   c) Rs. 98.56   d) Rs. 75.45

Q. 67. The difference between the simple Interest on a certain sum at the rate of 10% per annum for 2 years and compound interest which is compounded every 6 months is Rs. 124.05. What is the principal sum?

a) Rs. 9000   b) Rs.8000   c) Rs.10,000   d) Rs. 13,000

Q. 68. A man deposited a total sum of Rs.88400 in the name of his two sons aged 19 and 17 yr, so that at the age of 21 ,both will get equal amounts. If the money is invested at the rate of 10% compound interest per annum. What are the shares of his two sons?

a) Rs. 48800, Rs. 40000 b) Rs. 48400, Rs. 48000 c) Rs. 48400, Rs.40000 d) Rs. 48000, Rs. 40000

Q. 69. A sum of money at simple interest amounts to Rs.1012 in 2 ½ years and to Rs.1067.20 in 4 years. The rate of interest per annum is

(a) 2.5%   (b) 3%   (c) 4%   (d) 5%   (e) None of these

Q. 70. If the compound interest on a sum for 2 years at 12 ½% per annum is Rs.510, the simple interest on the same sum at the same rate for the same period of time is

(a) Rs.400 (b) Rs.480 (c) Rs.450   (d) Rs.460 (e) None of these

Q. 71. In 4 years, the simple interest on a certain sum of money is 9/25 of the principal. The annual rate of interest is

(a) 4%   (b) 4 ½% (c) 9% (d) 10%   (e) None of these

Q. 72. A sum of money invested at compound interest amounts to Rs.800 in 3 years and to Rs.840 in 4 years. The rate of interest per annum is

(a) 2 ½% (b) 4%   (c) 5%   (d) 6 2/3%   (e) None of these

Q. 73. The difference between simple and compound interest on a certain sum of money for 2 years at 4 per cent per annum is Re.1. The sum of money is

(a) Rs.600   (b) Rs.625 (c) Rs.560 (d) Rs.650 (e) None of these

Q. 74. What sum of money will become Rs.1352 in 2 years at 4 per cent per annum compound interest?

(a) Rs.1200 (b) Rs.1225   (c) Rs.1250   (d) Rs.1300 (e) None of these

Q. 75. A certain sum of money amounts to Rs.756 in 2 years and to Rs.873 in 3 ½ years at a certain rate of simple interest. The rate of interest per annum is

(a) 10% (b) 11%   (c) 12%   (d) 13 %   (e) None of these

Q. 76. A certain part of an amount of Rs.7200 was lent at 8% p.a. and the remaining at 12% p.a. If the total simple interest from both the parts in four years was Rs.2944, what is the amount which was lent at 8% p.a. interest?

(a) Rs.3200   (b) Rs.3500 (c) Rs. 3600 (d) Rs.4000   (e) Rs.4800

Q. 77. A person lent a certain sum of money at 8% simple interest and in 8 years the interest amounted to Rs.216 less than the sum lent. What is the sum that the person lent?

(a) Rs.1800   (b) Rs.1200   (c) Rs.800   (d) Rs.600   (e) None of these

Q. 78. Equal amounts are deposited in two banks each at 3.5% p.a. for 12 years and 8.5 years respectively. If the difference between their interests is Rs.189.875 then what is the amount?

(a) Rs.1550   (b) Rs.1650   (c)Rs.1750   (d) Rs.1850   (e) Rs.1950

Q. 79. A certain amount becomes Rs.627200 in two years and Rs.702464 in three years. If the interest is compounded yearly what is the rate of interest?
(a) 11%   (b) 12%   (c) 13%   (d) 14%   (e) 15%

Q. 80. A man gets a simple interest of Rs.1000 on a certain principal at the rate of 5 p.c.p.a. in 4 years. What compound interest will the man get on twice the principal in two years at the same rate?
(a) Rs.1050   (b) Rs.1005   (c) Rs.11025   (d) Rs.10125   (e) none of these

Q. 81. A person lent some amount @ 12% p.a. simple interest, and after 8 years he interest amounted to Rs.312 less than the amount lent. What is the amount that person lent?
(a) Rs.7000   (b) Rs.7200   (c) Rs.7400   (d) Rs.7600   (e) Rs.7800

Q. 82. Rs. 7800 becomes Rs.12480 in five years when the interest is simple. If the rate of interest is increased by 6% then what will be the total amount after five years?
(a) Rs. 14820   (b) Rs.14920   (c) Rs.15820   (d) Rs.16820   (e) Rs.17820

Q. 83. The simple interest accrued on a certain principal in 5 years at the rate of 12 p.c.pa. is Rs.1536. What amount of the simple interest would one get if one invests Rs.1000 more than the previous principal for 2 years and at the same rate pc.p.a.?
(a) Rs.845.40   (b) Rs.614.40   (c) Rs.2136   (d) Rs.1536   (e) None of these

Q. 84. A person lent a certain sum of money at 8% simple interest and in eight years, the interest amounted to Rs.635.40 less than the amount lent. What is the amount the person lent?
(a) Rs.1725   (b) Rs.1735   (c) Rs.1745   (d) Rs.1755   (e) Rs.1765

Q. 85. A sum of money invested at compound interest amounts to Rs.800 in 3 years and to Rs.840 in 4 years. The rate of interest per annum is
(a) 2 ½%   (b) 4%   (c) 5%   (d) 6 2/3%   (e) None of these

Q. 86. The difference between simple and compound interest on a certain sum of money for 2 years at 4 per cent per annum is Re.1. The sum of money is
(a) Rs.600   (b) Rs.625   (c) Rs.560   (d) Rs.650   (e) None of these

Q. 87. What sum of money will become Rs.1352 in 2 years at 4 per cent per annum compound interest?
(a) Rs.1200   (b) Rs.1225   (c) Rs.1250   (d) Rs.1300   (e) None of these

Q. 88. A certain sum of money amounts to Rs.756 in 2 years and to Rs.873 in 3 ½ years at a certain rate of simple interest. The rate of interest per annum is
(a) 10%   (b) 11%   (c) 12%   (d) 13 %   (e) None of these

Q. 89. A certain part of an amount of Rs.7200 was lent at 8% p.a. and the remaining at 12% p.a. If the total simple interest from both the parts in four years was Rs.2944, what is the amount which was lent at 8% p.a. interest?
(a) Rs.3200   (b) Rs.3500   (c) Rs. 3600   (d) Rs.4000   (e) Rs.4800

Q. 90. A person lent a certain sum of money at 8% simple interest and in 8 years the interest amounted to Rs.216 less than the sum lent. What is the sum that the person lent?
(a) Rs.1800   (b) Rs.1200   (c) Rs.800   (d) Rs.600   (e) None of these