# LegalEdge Classroom Handout

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## QUANTATIVE TECHNIQUES

## DATA INTERPRETATION BASED
## SIMPLE & COMPOUND INTEREST

**Directions (Q.1-Q.5):** Study the following table chart carefully and answer the questions given beside. The table below shows details about invested by different persons:

| Person | Rate of interest | Time (Years) | Principal (Rs.) | Amount (Rs.) |
|--------|------------------|--------------|-----------------|--------------|
| Arun | 6% | | 18000 | |
| Sourav | 6% | | 30000 | |
| Amit | | 5 | | 29000 |
| Piku | | 3 | 45000 | |
| Ankit | 8% | | 20000 | |
| Anita | | 2 | 60000 | |

1. If the rate of interest received by Arun and Amit is in the ratio of 2 : 3 then find in how many years the money invested by Amit will be doubled with same rate of interest?
   (a) 14.80      (b) 13.45      (c) 11.11      (c) 15.50

2. If the difference between the interest received by Ankit and Sourav is Rs 4200 and Ankit invested his money for double the time period for which Sourav invested his money then find the amount received by Ankit ?
   (a) Rs. 30000      (b) Rs. 28600      (c) Rs. 29600      (d) Rs. 35400

3. If the amount received by Amit is twice the money invested by him then find amount he will receive after 2 years if he invests the same amount of money in compound interest for 2 years compounded half yearly?
   (a) Rs. 22199.45      (b) Rs. 21992.45
   (c) Rs. 21292.45      (d) Rs. 21229.45

4. If the interest received by Anita is 20% of the sum invested by her then find how much more money as interest she would have earned if she had invested the money in compound interest?
   (a) Rs. 600      (b) Rs. 130      (c) Rs. 200      (d) Rs. 1500

5. If the interest received by Anita is Rs 7575 more than interest received by Piku and the rate of interest received by Anita 2% more than the rate of interest received by Arun then find the interest rate received by Piku ?
   (a) 8%
   (b) 1.3%
   (c) 2.5%
   (d) 1.5%

**Directions (Q.6-Q.10):** Study the following bar graph carefully and answer the following questions.
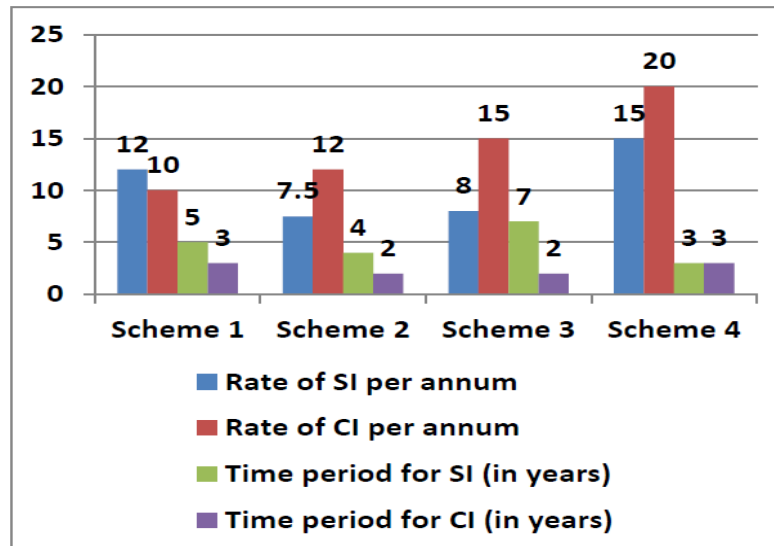


6. The amount deposited by a man in scheme 1, scheme 2, scheme 3 and scheme 4 on simple interest is in the ratio of 8 : 12 : 6 : 5, respectively. If the total amount deposited in all the schemes together by the man is Rs. 31000, then find the ratio of the simple interest earned from scheme 1 and scheme 2 together to the simple interest earned from scheme 3 and scheme 4 together.
   (a) 151 : 240     (b) 312 : 275     (c) 280 : 187     (d) 187 : 312

7. Find the difference between the compound interest obtained from scheme 1 and the compound interest obtained from scheme 4, if the total principal amount deposited by the man in the two schemes is Rs. 24000 and the principal amount deposited in scheme 1 is 2/3rd more than the principal amount deposited in scheme 4.
   (a) Rs. 1672     (b) Rs. 1735     (c) Rs. 1587     (d) Rs. 1473

8. A man deposited Rs. 30000 in scheme 3 at compound interest and the same amount is also deposited at simple interest in scheme 2. By what percentage compound interest obtained from scheme 3 is more/less than the simple interest obtained from schemes 2?
   (a) 9.5%     (b) 7.5%     (c) 11.25%     (d) 8.75%

9. Difference between the simple interest obtained from scheme 2 and simple interest obtained from scheme 3 on the same principal amount is Rs. 5460. If the same principal amount is deposited on scheme 4 on simple interest and compound interest in the ratio of 5 : 2, respectively then find the total interest earned from scheme 4.
   (a) Rs. 11118     (b) Rs. 12446     (c) Rs. 12466     (d) Rs. 14142

10. If a man deposited Rs. 20,000 in scheme 4 on simple interest and compound interest in the ratio of 3 : 2 respectively and another man deposited Rs. 14,000 in scheme 1 on simple interest and compound interest in the ratio of 5 : 2 respectively then find the difference between the total interest earned by them?
    (a) Rs. 3960     (b) Rs. 4240     (c) Rs. 3500     (d) Rs. 3900

**Directions (Q.11-Q.15):** The line graph below shows the principal amount of loan taken by five persons from a bank. The Bar graph shows the interest rate and the number of years for which the loan is taken by these five persons. Study the data carefully and answer the questions.
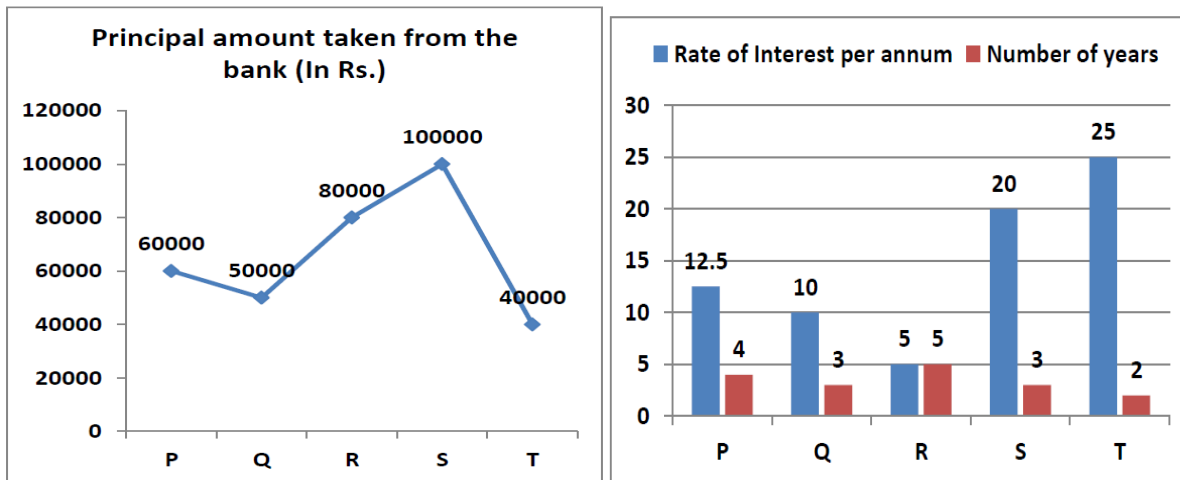


11. Find the difference of interests paid by R and T if R took the loan at simple interest and T took the loan at compound interest.
    (a) Rs. 2000      (b) Rs. 2100      (c) Rs. 1750      (d) Rs. 2500

12. P paid Rs. 17500, Rs. 16250 and Rs. 15000 at the end of 1st, 2nd and 3rd year. Find the amount of money that P needs to pay at the end of 4th year to clear his due. (Simple interest rate is applied on the sum.)
    (a) Rs. 32500      (b) Rs. 30000      (c) Rs. 33750      (d) Rs. 33000

13. Q paid the borrowed amount in 3 equal instalments (interest is compounded annually). Find the value of each instalment.
    (a) Rs. 20504      (b) Rs. 20106      (c) Rs. 21406      (d) Rs. 19850

14. Find the difference of compound interest and simple interest on the sum borrowed by S.
    (a) Rs. 12000      (b) Rs. 11200      (c) Rs. 13200      (d) Rs. 12800

15. If the interest charged from everyone is at simple rate then who will pay the equal amount of interest on the sum borrowed?
    (a) P & S      (b) Q & R      (c) R & T      (d) S & P

**Directions (Q.16-Q.19):** Study the following information and answer the questions followed:
Mr. Bhargav has 3 sons A, B and C. He distributed his money which is 225000 among 3 of them in ratio 4 : 5 : 6. They invested the money in three different schemes. Scheme 1 offers 8% simple interest and the minimum period of investment in this scheme is 2 years. Scheme 2 offers 10% simple interest but the minimum period of investment is 4 years. Scheme 3 offers 7% simple interest with no minimum period of investment. A invested 50% of his money in scheme 2 while B and C invested 30% and 40% of their money respectively in scheme 1.

16. B invest his remaining money in scheme 2 for 4 years and then invest the total money in scheme 3 for next 1 year. What is the total amount he has at the end of 5 years?
    (a) Rs. 110424      (b) Rs. 103200      (c) Rs. 108450      (d) Rs. 105245

17. If A invest half of the remaining money he has in scheme 1 and remaining half in scheme 3 for 4 years, what is the total interest he earns at the end of 4 years?
    (a) Rs. 30000      (b) Rs. 21000      (c) Rs. 25000      (d) Rs. 28000

18. What is the total amount of money with C after 4 years if he invests remaining money in scheme 3?
    (a) Rs. 116140          (b) Rs. 111640          (c) Rs. 116640          (d) Rs. 116440

19. What is the average amount with B and C at the end of 2 years if they invest their whole amount in scheme 1?
    (a) Rs. 101400          (b) Rs. 104400          (c) Rs. 87000          (d) Rs. 95700

## ANSWER KEY

| 1. | c | 2. | c | 3. | d | 4. | a | 5. | d | 6. | c | 7. | c | 8. | b | 9. | a | 10. | d |
|----|---|----|---|----|---|----|---|----|---|----|---|----|---|----|---|----|---|-----|---|
| 11. | d | 12. | c | 13. | b | 14. | d | 15. | c | 16. | a | 17. | b | 18. | c | 19. | d | 20. | |