1. If you deposit Rs. 100 in your bank account today at an interest rate of 10% , what amount you will withdraw from the bank after two years
2. If you want to have Rs. 121 in your bank account after two years at 10 interest rate, what amount you will deposit today
3. You want to have Rs. 50,000 in your bank account after five years, If the prevailing interest rate is 10 percent compounded annually what amount you will deposit at the end of each year?
4. You decided today to make a deposit of Rs. 8190 in a bank at the end of each year for coming 5 years. If the prevailing interest rate is 10 % compounded annually, what amount you will withdraw at the end of the 5^{th} Year?
5. A company has borrowed Rs.200,000 to purchase equipment. The loan carries an interest rate of 5% per year and is to be repaid in equal installments over the next 7 years. What is the amount of the annual installment?
6. A working woman is planning for her retired life. She has 20 more years of service. She would like to have an annual equivalent amount of Rs. 3, 00,000 starting from the end of the first year of her retirement. Find the single amount that should be deposited now so that she receives the above mentioned annual equivalent amount at the end of every year for 20 years after her retirement. Assume i = 15 %, compounded annually.
7. A person is planning for his retired life. He has 10 more years of service. He would like to deposit 20% of his salary, which is Rs. 10,000 at the end of the first year and thereafter he wishes to deposit the same amount (Rs.10,000) with an annual increase of Rs. 2,000 for the next 9 years with an interest rate of 20%. Find what equivalent annual series of income it will create and also find the total amount at the end of the 10th year of the above series.
8. At what interest rate Rs. 10,000 invested today will be equivalent to Rs. 30,000 after 10 years.
9. With interest rate of 10 percent, what is the worth on December 31, 2020, of a series of year-end payments of Rs 50,000 made from the years 2023 through 2027?
10. In 2020 Mr. X decided to make three payments of Rs. 20,000 each in every two years. The prevailing interest rate is 7 percent per year. How large the will the bank account be in 2028.
11. Initial cost = 1,00,00

    Annual revenue = 30,000

    Annual expenses = 5000

    Salvage value= 40,000

    i = 10%

    N= 5

    Find present worth and future worth

12. The net income from a newly purchased piece of construction equipment is expected to be Rs 12,000 in the first year and to decrease by Rs. 1500 each year as maintenance cost

increase. The equipment will be used for four years. What annual annuity will produce an equivalent income, when the interest rate is 8 percent?

13. The rights to patent have been sold under an agreement in which annual year-end of payments of Rs. 10,000 are to be made for the next ten years. What is the current worth of the annuity at an interest rate of 7 percent?
14. A company deposits Rs. 20,000 in a bank at the end of every year for 10 years. The company makes no deposit during the subsequent 5 years. If the bank pays 8 percent interest, how much would be in the account at the end of 15 years.
15. A company buys a machine for Rs. 1,20, 000 which it agrees to pay for in 5 equal annual payments, beginning one year after the date of purchases, at an interest rate of 4 percent per annum. Immediately after the second payment, the terms of agreement are changed to allow the balance due to be paid off in a single payment the next year. What is the final single payment?
16. You estimate you will need Rs. 1, 00,000 per year for thirty years starting on your 65^{th} birthday to live on during your retirement. Today is your 50^{th} birthday and you want to make equal deposits to an account paying 7 percent per year, the first deposit today and the last deposit on your 64^{th} birthday. How much each deposit be?
17. An engineer borrowed Rs. 3000 from the bank, payable in 6 equal end-of year payments at 8 percent. The bank agreed to reduce the interest on the loan if interest rates declined before the loan was fully repaid. At the end of 3 years, at the time of third payment, the bank agreed to reduce the interest rate from 8 percent to 7 percent on the remaining debt. What was the amount of the equal annual end of year payments for each of the first 3 years? What was the amount of the equal annual end-of –year payments for each of the last 3 years?
18. A building site for new gasoline station was purchased 10 years ago for Rs. 50,000.The site has been recently sold for Rs.1,20,000. Disregarding any taxes, determine the rate of interest obtained on the initial investment.
19. A person needs a sum of Rs. 2,00,000 for his daughter's marriage which will take place 15 years from now. Find the amount of money that he should deposit now in a bank if the bank gives 18 percent interest, compounded annually.
20. A sinking fund is created for the redemption of a loan of Rs. 50,000 at the end of 10 years. How much money should be provided out of profits each year of the sinking fund, if the interest rate is 5% p.a?