

Accounting & Financial Analytics with Zoho Books Assignment - 2

Title: Excel Financial Functions - Understanding Payment and Other Functions

Assignment Description:

In this assignment, you will explore payment functions and other financial functions in Excel, including PMT, PPMT, IPMT, as well as EMI, CAGR, EFFECT, NOMINAL, and SLN functions. These functions are essential for financial analysis and planning.

The assignment contains a mix of basic to medium-level questions to test your understanding of these functions.

Instructions:

1. Open Microsoft Excel and create a new spreadsheet.
2. Use the given financial functions to solve each problem below.
3. Provide your answers in the designated cells and include any necessary formulas.
4. Save your Excel file with your name and submit it as instructed by your instructor.

Assignment Questions:

1. Calculate the monthly payment for a loan of ₹150,000 with an annual interest rate of 8% to be repaid over 3 years.
2. Determine the principal portion of the payment for the 12th month of the loan described in question 1.
3. Calculate the interest portion of the payment for the 6th month of the same loan described in question 1.
4. Calculate the EMI for a loan of ₹200,000 with an annual interest rate of 10% to be repaid over 5 years.
5. Calculate the CAGR for an investment that grows from ₹10,000 to ₹15,000 over 4 years.
6. Determine the effective annual interest rate for a nominal annual interest rate of 6% compounded quarterly.
7. Calculate the nominal annual interest rate for an effective annual interest rate of 9.5% compounded monthly.
8. Calculate the straight-line depreciation expense for an asset with an initial cost of ₹50,000, a salvage value of ₹10,000, and a useful life of 5 years.
9. Given a loan of ₹300,000 with an annual interest rate of 7% to be repaid over 10 years, calculate the total monthly payment, the principal portion of the payment for the 36th month, and the interest portion of the payment for the 60th month.
10. Design a financial model that calculates the monthly payment for a mortgage loan based on user inputs for loan amount, interest rate, and duration. Include separate cells to display the principal and interest portions of each payment using PPMT and IPMT functions.