

QUESTION

1. A company is considering a new investment project. The project requires an initial investment of \$100,000 and is expected to generate cash flows of \$30,000 per year for 5 years. The company's cost of capital is 10%. Calculate the Net Present Value (NPV) of the project.

2. A company is considering a new investment project. The project requires an initial investment of \$100,000 and is expected to generate cash flows of \$30,000 per year for 5 years. The company's cost of capital is 10%. Calculate the Internal Rate of Return (IRR) of the project.

ANSWER

1. NPV = Present Value of Cash Flows - Initial Investment

$$NPV = \frac{\$30,000}{1 + 0.10} + \frac{\$30,000}{(1 + 0.10)^2} + \frac{\$30,000}{(1 + 0.10)^3} + \frac{\$30,000}{(1 + 0.10)^4} + \frac{\$30,000}{(1 + 0.10)^5} - \$100,000$$

2. IRR is the discount rate that makes the NPV of the project equal to zero. It is the rate at which the present value of the cash flows equals the initial investment.

3. Payback Period is the time it takes for the project to recover its initial investment.



4. The payback period is the time it takes for the cumulative cash flows to equal the initial investment.