

### Question No.01

Net Profit	180
Depreciation expense	100
	280
+ cash inflow/ outflow	
Cash	100
Securities	(400)
A/R	100
Inventory	300
Capital Expenditure	(420)
Account payable	200
Notes Payable	(100)
Assets	(100)
Long term Debt	200
	(220)

$$FCF = 280 - 220$$

$$= 60$$

### Question No.02

#### **Risk:**

Risk is the degree of uncertainty.

It may be negative or positive. commonly, as investment risks occur, investors strive for higher returns to pay off themselves for taking such risks.

**Return on investment (ROI)** is the ratio of a profit or loss made in a fiscal year expressed in terms of an investment. It is expressed in terms of a percentage of increase or decrease in the value of the investment during the year in question. For example, if you invested \$100 in a share of stock and its value rises to \$110 by the end of the fiscal year, the return on the investment is a healthy 10%, assuming no dividends were paid.

The basic ROI formula is:  $\text{Net Profit} / \text{Total Investment} * 100 = \text{ROI}$ . Let's apply the formula with the help of an example.

You are a house flipper. You purchased a house at the courthouse auction for \$75,000 and spent \$35,000 in renovations. After sales, expenses, and commission, you netted \$160,000 on the sale of the renovated house. What is the ROI?

Your net profit is going to be what you netted (\$160,000) minus what you spent (\$75,000 + \$35,000), so it is \$50,000. Your total investment is also what you spent (\$75,000 + \$35,000), which is \$110,000.

$$\text{ROI} = \text{Net Profit} / \text{Total Investment} * 100$$

$$\text{ROI} = 50,000 / 110,000 * 100$$

$$\text{ROI} = .45 * 100$$

$$\text{ROI} = 45\%$$

If only house flipping was that easy. Keep in mind that you can certainly lose money on an investment. If there is a loss, the formula will yield a negative number. Here's a simple example:

$$\text{ROI} = -1,000 / 5,000 * 100$$

$$\text{ROI} = -0.2 * 100$$

## **Systematic and nonsystematic risk**

While systematic risk can be supposed of as the probability of a loss that is linked with the whole market or a segment thereof, unsystematic risk refers to the probability of a loss within a definite business or security.

### **Examples:**

The example of systematic risk is lockdowns that may affect all industries and unsystematic risk is loss in specific segment like securities.

### Question No.03

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Purchase = 20,000

Current value = 21500

Gain = 1500

Revenue = 800

$$\begin{aligned}\text{Totalgain} &= \frac{1500 + 1800}{20,000} \times 100 \\ &= 11.5\%\end{aligned}$$

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Purchahse=12,000

Current value= 11800

Loss= 200

Revenue = 1700

$$\text{Return} = \frac{1700-200}{12,000} \times 100$$

$$=12.5\%$$

### Question No.04

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#### Capital Expenditure

#### Data for Bennett

#### Company

	Project A	Project B
<b>Initial investment</b>	<b>\$42,000</b>	<b>\$45,000</b>
<b>Year</b>	<b>Operating cash inflows</b>	
<b>1</b>	<b>14000</b>	<b>28000</b>
<b>2</b>	<b>14000</b>	<b>12000</b>
<b>3</b>	<b>14000</b>	<b>10000</b>
<b>4</b>	<b>14000</b>	<b>10000</b>
<b>5</b>	<b>14000</b>	<b>10000</b>

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1	12727	25454
2	11570	9917
3	10518	7513
4	9589	6844
5	8717	6211
<b>NPV</b>	<b>53070</b>	<b>55923</b>

## **PAY BACK**

Project A payback after 3 years

Project B Payback after 2.5 years

Project Value =  $F.v = \frac{14000}{(1+i)^n}$

$(1+i)^n = 1.10$