

Investment Analysis & Portfolio Management (Fin 630)**Question #01**

Ellite Corporation has total assets of Rs. 6,000,000 of which Rs. 1,000,000 is inventory, 500,000 is cash, 1,000,000 is account receivable, 500,000 is marketable securities and the balance is fixed assets. Ellite Corporation has total liabilities of Rs. 2,500,000 of which current liabilities are Rs. 1,500,000.

- 1. Calculate the current and quick ratio for Ellite Corporation.**
- 2. If Ellite Corporation takes 250,000 from cash and pays off Rs. 250,000 of current liabilities, what happens to its current ratio and quick ratio?**
- 3. If Ellite Corporation sells the inventory of Rs. 1,000,000 and places the proceeds from the sale of inventory in marketable securities, what happens to its current ratio and quick ratio?**

Question #02

Currently Alpha Corporation's shares are selling at \$60 per share and company is paying \$5 per share dividend. Dividends are expected to grow at an annual rate of 3% for foreseeable future. Required rate of return for investors is 12%

At the same time, Heller Corporation's shares are selling at \$58 per share and company is paying \$4 per share dividend. Dividends are expected to grow at an annual rate of 5% for foreseeable future. Required rate of return for investors is 12%

- a. Calculate the current value of each stock on the basis of Dividend Discount Model.**
- b. On the basis of above calculation, determine either each stock is overvalued or undervalued.**

Solution

Question #01

Part 1

Current ratio = Current assets/ current liabilities

Current assets:

Particulars	Amount (Rs.)
Cash	500,000
Inventory	1,000,000
Marketable securities	500, 000
Account receivables	1,000,000
Total Current Assets	3,000,000

Current ratio = 3,000,000/ 1,500,000
= **2:1**

Quick Ratio = (Current assets - Inventory) / Current liabilities

Quick assets= 3,000,000 – 1,000,000 = 2,000,000

Quick Ratio = 2,000,000/1,500,000

Quick Ratio = 1.33:1

Part 2

Cash = 500,000-250,000 = 250,000

Current liabilities= 1,500,000-250,000= 1,250,000

Particulars	Amount (Rs.)
Cash	250, 000
Inventory	1,000,000
Marketable securities	500, 000
Account receivables	1,000,000
Total Current Assets	2,750,000

Current ratio = 2,750,000/ 1,250,000 = 2.2:1

Quick Ratio = 1,750,000/1,250,000 = 1.4:1

Part 3

Inventory = 1,000,000 - 1,000,000 = 0

Marketable securities = 500,000 + 1,000,000 = 1,500,000

Particulars	Amount (Rs.)
Cash	500, 000
Inventory	-
Marketable securities	1,500, 000
Account receivables	10,00,000
Total current assets	3,000,000

Current ratio = 3,000,000/1,500,000 = **2:1**

Quick Ratio = 3,000,000/1,500,000 = **2:1**

Question #02

Part a:

For stock A

Current value of stock A = $D1/k-g$

$D1 = D0 (1+g)$

$D1 = 5 (1+0.03)$

$D1 = 5.15$

Current value of stock A = $D1/k-g$

Current value of stock A = $5.15/.12-.03$

Current value of stock A = \$57.22

For stock B

Current value of stock B = $D1/K-g$

$D1 = D0 (1+g)$

$D1 = 4 (1+0.05)$

$D1 = 4.2$

Current value of stock B = $D1/K-g$

Current value of stock B = $4.2/.12-.05$

Current value of stock B = \$60

Part b:

Stock A is overvalued

Stock B is undervalued