

4. The new owners of Bluegrass Natural Foods, Inc., have hired to help you to help them diagnose and cure problems that the company has had in maintaining adequate liquidity analysis. As a first step, you perform a liquidity analysis. You do an analysis of the company's short-term activity ratios. Your calculations and appropriate industry norms are listed.

Ratio	Bluegrass	Industry norms
Current Ratio	4.5	4.0
Quick Ratio	2.0	3.1
Inventory Turnover	6.0	10.4
Average Collection Period	73 days	52 days
Average Payment Period	31 days	40 days

- What recommendations relative to the amount and the handling of inventory could you make to the new owners?
- What recommendations relative to the amount and the handling of accounts receivable could you make to the new owners?
- What recommendations relative to the amount and the handling of accounts payable could you make to the new owners?
- What results, overall, would you hope your recommendations would achieve? Why might your recommendation not be effective?

[7 marks]

5. Answer the questions below:

- Distinguish between gross working capital and net working capital
- Explain operating cycle (C2C cycle)
- How are liquidity, technical insolvency, and risk related?
- Explain different approaches to determine appropriate financing mix.

[7 marks]

6. Explain briefly the view of traditional writers on the relationship between capital structure and the value of a firm.

[7 marks]



IIT Delhi  
B Tech – SML 401 – Managerial Accounting & Financial Management  
Major Test – May 3, 2015

Max Marks: 35

Duration: 2 hours

**Instructions:**

- Attempt any 5 questions.
- The marks that each question carries are indicated in brackets.

✓ 1. The Zenith Manufacturing Company produces a special kind of cement, which is packaged and sold in bags of 20 kg. During the past month its revenues and cost patterns were as follows:

Selling price per bag	Rs. 30
Variable Cost per bag	Rs 16
Fixed Costs	Rs 10,000
Quantity	3,000 bags

Consider each of the following separately:

1. What is the break-even quantity?
2. Assume a 10% increase in production volume. What is the percentage change in profits?
3. Assume a 10% increase in selling price. What is the new break-even point?
4. Assume a 50% increase in fixed costs. What is the new break-even point?
5. Assume the variable cost increases to Rs 20 per bag. What is the new break-even point?

*Independent*

[7 marks]

2. Longstreet Communications Inc. (LCI) has the following capital structure, which is considered to be optimal:

Debt	25%
Preferred Stock	15%
Common Stock	60%
Total capital	100%

LCI's tax rate is 40 percent and investors expect earnings and dividends to grow at a constant rate of 9% in the future. LCI paid a dividend of \$ 3.60 per share last year and its stock currently sells at a price of \$ 60 per share. T-bills yield 11%; an average stock has a 14 percent expected rate of return; and LCI's beta is 1.51. These terms would apply to the new security offerings:

Preferred: New preferred could be sold to public at a price of \$100 per share, with a dividend of \$11. Floatation cost of \$5 per share would be incurred.

Debt: Debt would be sold at an interest rate of 12%.

- a. Find the component cost of debt, preferred stock, and common stock. Assume LCI does not have to issue any additional shares of common stock.
- b. What is the weighted average cost of capital?

[7 marks]

✓ 3. Dane Cosmetics is evaluating a new fragrance-mixing machine. The initial cost of the machine is \$16,000 and the investment required in working capital is \$8,000. The earnings before tax will be \$4,000 annually for next 7 years. The salvage value of the machine at the end of seventh year will be \$2000. The company uses straight-line method of depreciation. The tax rate applicable to the firm is 40%. For each of the cost of capital listed, (1) calculate the net present value (NPV), (2) indicate whether to accept or reject the machine, and (3) explain your decision.

- a. The cost of capital is 10%; b. The cost of capital is 12%; c. The cost of capital is 14%.

[7 marks]