INdIAN INSTITUTE OF MATERIALS MANAGEMENT
Post Graduate Diploma in Materials Management

Paper 15
Strategic Cost and Financial Management

Date: 15.12.2010
Time: 2.00 pm to 5.00 pm

Max.Marks: 100
Duration: 3 Hours

Instructions:
1. From Part-A answer all questions (compulsory). Each question carries 8 marks.
Total: 32 Marks.
2. From Part B answer any 3 questions out of 5 questions. Each question carries 16 marks.
Total: 48 Marks.
3. Part C is a case study (compulsory). Read the case carefully and answer the questions.
Total: 20 Marks.

PART A

Q1. Choose the right answer from below:

1. A company with fixed costs of Rs.50,000 seeks to earn a profit @ 20% on its selling price. Its selling price is Rs.20 per unit and variable cost is Rs.15 per unit. The number of units sold will be:
   (a) 50,000
   (b) 60,000
   (c) 25,000
   (d) None of the above.
2. Over-absorption of overheads is Rs.20,000. Actual machine hours are 50,000 and overhead rate per machine hour is Rs.5. Actual overheads will be:
   a) Rs.5,00,000
   b) Rs.2,30,000
   c) Rs.2,50,000
   d) Rs.2,70,000
3. Which one of the following describes the commercial paper most appropriately?
   a) Unsecured long-term loan notes
   b) Unsecured short-term loan notes
   c) Secured short-term loan notes
   d) Secured long-term loan notes
4. When cost of capital of a project is equal to its Internal Rate of Return,
   a) NPV will be zero
   b) NPV will be negative
   c) NPV will be positive
   d) Benefit cost ratio will be zero.
5. Operating Leverage is 2 and Financial Leverage is 1.75. If sales increase by 10%, EPS will increase by,
   a) 10%
   b) 15%
   c) 30%
   d) 35%
6. Two firms A Ltd and B Ltd. are similar in all respects except that B Ltd. has Rs.10 lakhs of debentures. Corporate tax rate applicable to both is 30%. The value of B Ltd. will be greater than that of A Ltd. by,
   a) Rs.7,00,000
   b) Rs.3,00,000
   c) Rs.4,00,000
   d) None of the above

7. Sources of financing project cost exclude
   a) Leasing
   b) Share capital
   c) Deferred credit
   d) Trade credit

8. For arriving at the book value of equity shares, which one of the following factors should be considered?
   a) Increase in market price of the shares
   b) Earning available to equity shareholders
   c) Dividend paid
   d) Net worth

Q2. State whether the following statements are ‘True’ or ‘False’:
1. Retained earnings are that portion of Income which is left with a company before paying interest on Debentures and dividend on share capital.
2. In a financial lease, the lessor is entitled to claim depreciation on the leased asset.
3. There will be a flow of funds when both the accounts in a transaction are non-current.
4. Interest Coverage Ratio:
   \[
   \frac{\text{Net Profit after Interest and Tax}}{\text{Fixed Interest charges}}
   \]
5. The Hire purchaser can return the goods to the Hire vendor before payment of the last installment.
6. Normal loss arising out of natural material waste is charged to costing Profit and Loss account.
7. Conversion cost is the sum of direct wages plus factory overheads.
8. The purchase of book debts (Accounts receivable) is central to Factoring.

Q3. Fill in the blanks:
1. ----------------- analysis refers to the study of relationship of various items in the financial statements of one Accounting period.
2. Cash payments to suppliers of goods and services are classified under Cash Flows from ------------------------ activities in the cash flow statement.
3. Quick Ratio is also known as ------------------ Ratio.
4. Where the division is responsible for both cost and revenue, it is called ----------- centre.
5. Electricity expenses are classified as ----------------- costs
6. --------------------- discount is allowed on bulk purchases.

7. Principal objective of Financial Management is --------------------- maximisation.

8. Cost of Capital is the --------------------- rate of return expected by Investors.

Q4. Match the following:

1) Bridge loan a) Notional cost
2) Period cost b) No voting rights.
3) Rent on own premises c) Benefit Cost ratio
4) Low Turnover ratio d) Cash management technique.
5) Debentures e) Stock exchange
6) Lock Box system f) Cost not assigned to products
7) Listing of Securities g) Short-term loans by Commercial Banks
8) Profitability Index h) Slow-moving materials.

PART B

Q5. a) In the course of manufacture of the main product X, by products Y and Z also emerge. The joint expenses of manufacture amount to Rs.2,39,100. All the three products are processed further after separation and sold as per details given below:

<table>
<thead>
<tr>
<th>Main product</th>
<th>By products</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Y</td>
</tr>
<tr>
<td>Sales (Rs.)</td>
<td>1,80,000</td>
</tr>
<tr>
<td>Costs incurred after separation (Rs.)</td>
<td>12,000</td>
</tr>
<tr>
<td>Profit as percentage of sales (%)</td>
<td>25</td>
</tr>
</tbody>
</table>

Total fixed selling expenses are 10% of total cost of sales which are apportioned to the three products in the ratio of 20:40:40.

Prepare a statement showing the apportionment of joint costs to the main product and the two By-products. (8 Marks)

b) Describe the technical aspects of Project appraisal. (8 Marks)

Q6. a) Describe the factors that affect the Working Capital requirements of a firm. (10 Marks)

b) Calculate operating Financial and Combined leverages from the following details:
   EBIT Rs.2,000 lakhs; PBT Rs.600 lakhs; and Fixed Operating cost Rs.1400 lakhs.
   Ascertain the percentage of change in EPS, if sales increase by 2%. (6 Marks)

Q7. Write Short Notes on any 4 from the following:

1) Responsibility centre.
2) Objectives of Uniform Costing.
3) Weighted Average Cost of Capital.
4) Sale and Lease back arrangement.
5) Propositions of MM approach to Capital structure.
6) Capital rationing.
7) Functions of SEBI.
8) Distinction between Job Costing and Process Costing.

Q8. The following are the summarized Balance Sheets of Growth Ltd:

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>31.3.08 (Rs.)</th>
<th>31.3.09 (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share capital</td>
<td>450000</td>
<td>450000</td>
</tr>
<tr>
<td>General reserve</td>
<td>300000</td>
<td>310000</td>
</tr>
<tr>
<td>P &amp; L a/c</td>
<td>56000</td>
<td>68000</td>
</tr>
<tr>
<td>Creditors</td>
<td>168000</td>
<td>134000</td>
</tr>
<tr>
<td>Cash provision</td>
<td>75000</td>
<td>10000</td>
</tr>
<tr>
<td>Mortgage loan</td>
<td>0</td>
<td>270000</td>
</tr>
</tbody>
</table>

**Assets**

<table>
<thead>
<tr>
<th>Plant &amp; Machinery</th>
<th>400000</th>
<th>320000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investments</td>
<td>50000</td>
<td>60000</td>
</tr>
<tr>
<td>Inventory</td>
<td>240000</td>
<td>210000</td>
</tr>
<tr>
<td>Debtors</td>
<td>210000</td>
<td>455000</td>
</tr>
<tr>
<td>Bank a/c</td>
<td>149000</td>
<td>197000</td>
</tr>
</tbody>
</table>

| **Assets** | 1049000 | 1242000 |

During the year

(i) Investments of Rs.8000 were sold for Rs.8500.
(ii) Provision for tax was made at Rs.9000.
(iii) Plant & Machinery costing Rs.10000 was sold for Rs.12000.
(iv) Dividend was paid totaling Rs.44080.

Prepare the Cash Flow Statement under the Indirect method as per Accounting Standard -3 (revised). (16 Marks)

Q9.a) Global Ltd. is currently considering a project which will yield the following returns over a period of time.

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross yield (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,00,000</td>
</tr>
<tr>
<td>2</td>
<td>1,00,000</td>
</tr>
<tr>
<td>3</td>
<td>90,000</td>
</tr>
<tr>
<td>4</td>
<td>90,000</td>
</tr>
<tr>
<td>5</td>
<td>80,000</td>
</tr>
</tbody>
</table>

Initial investment in the machinery works to Rs.2,50,000 and depreciation to be charged on machinery would be 25% p.a on written down value basis, with its balance value to be written-off in the fifth year, since Scrap value at the end of 5th year is nil. Income tax rate applicable is 35%. If average cost of capital is 12%, advise the management whether the project should be accepted as per internal rate
of return method. Present Value Factors @ 12% & 18% may be adopted as given below:

<table>
<thead>
<tr>
<th>End of year</th>
<th>@ 12%</th>
<th>@ 18%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.8929</td>
<td>0.8475</td>
</tr>
<tr>
<td>2</td>
<td>0.7972</td>
<td>0.7182</td>
</tr>
<tr>
<td>3</td>
<td>0.7118</td>
<td>0.6086</td>
</tr>
<tr>
<td>4</td>
<td>0.6355</td>
<td>0.5158</td>
</tr>
<tr>
<td>5</td>
<td>0.5674</td>
<td>0.4371</td>
</tr>
</tbody>
</table>

b) State the importance of the Cash Budget to the management of a firm

(4 Marks).

PART C (compulsory)

Q10. A review made by the Board of New Age Ltd., which makes only one product, of the result of the first quarter of the year 2009-10 revealed the following:

<table>
<thead>
<tr>
<th>Sales in units</th>
<th>10,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss</td>
<td>Rs.10,000</td>
</tr>
<tr>
<td>Fixed cost (for the year Rs.1,20,000)</td>
<td>Rs.30,000</td>
</tr>
<tr>
<td>Variable cost per unit</td>
<td>Rs.8</td>
</tr>
</tbody>
</table>

For the second quarter, the Board has received the following 3 proposals:

(i) The finance manager suggests that the company should at least break-even in the second quarter with a drive for increased sales. Towards this, the company should introduce a better packing which will increase the cost by 50 paisa per unit.

(ii) The sales manager has an alternative proposal: For the second quarter additional sales promotion expenses can be increased to the extent of Rs.5,000 and a profit of Rs.5,000 can be aimed at during the period with increased sales.

(iii) The production manager feels otherwise. To improve the demand, the selling price per unit has to be reduced by 3%. As a result the sales volume can be increased to attain a profit level of Rs.4,000 for the quarter.

The Managing Director asks you to evaluate the 3 proposals and calculate the additional sales volume that will be required in each case.

(iv) Give your recommendation based on the above.