

## **Paper 8- Cost Accounting & Financial Management**

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Full Marks:100

Time allowed: 3 hours

Section A : Answer Question No. 1 which is compulsory Carries 25 Marks

1. Answer the following questions

(A) Each Question carries 2 Marks [5 × 2 = 10]

- (i) A company buys in lots of 6,250 units, which is a 3 months supply. The cost/unit is ₹ 2.40. Each order costs ₹ 45 and the inventory carrying cost is 15%. Calculate the EOQ?
- (ii) The actual machine hours worked in June' 2015, is 35,000 and the predetermined overhead recovery rate is @ ₹ 3 Per hour, the actual overhead is ₹ 1,57,500. Is it under recovery or Over recovery? If so by what amount?
- (iii) A worker has completed his job within 35 hours instead of 40 standard hours. What will be the earnings under Rowan bonus plan of the worker, if the wages rate per hour is ₹ 36?
- (iv) A firm has sales of ₹ 40 lakhs; variable cost of ₹ 25 lakhs; fixed cost of ₹ 6 lakhs; Calculate operating Leverage?
- (v) X Ltd Sales during the year 2014-15 is ₹ 12,00,000; Opening Stock for 2014-15 ₹ 3,00,000 and Closing stock for 2014-15 ₹ 1,80,000. Calculate the Inventory turnover ratio?

(B) State whether the following statements are True or False 5 × 1 = 5

- (i) Cost Accounting is defined as technique and process of ascertaining costs
- (ii) Marginal cost is the Prime cost plus Variable Overheads
- (iii) Cost of abnormal idle time is charged to the Product Labour Cost
- (iv) Liquid Assets do not include Inventory.
- (v) NPV is Non-Discounted Cash Flow Technique of Capital Budgeting

(c) Fill in the Blanks 5 × 1 = 5

- (i) The Objective of Wage Incentives is to improve \_\_\_\_
- (ii) Bin Card is maintained by .....department.
- (iii) The total of all Indirect expenditure is called as.....
- (iv) In Financial Management EPS stands for .....
- (v) Net Working Capital is the difference between .....

(D) Match the Following 5 × 1 = 5

|                           |  |
|---------------------------|--|
| (i) Relevant Cost         | (A) Capital Structure                  |
| (ii) FSN Analysis         | (B) Capital Budgeting                  |
| (iii) Net Income Approach | (C) Labour Turnover                    |
| (iv) Separation Method    | (D) Inventory Classification & Control |
| (V) Benefit Cost Ratio    | (E) Costs affected by Decision Making  |

**Sec-B**

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Answer any three Question from Q. No 2,3,4 and 5. Each Question carries 15 Marks

2. (A) A manufacturing organization has imported four types of materials. The invoice reveals the following data:

|          |   | Quantity (Kgs.) | Rate US \$ per kg. |
|----------|---|-----------------|--------------------|
| Material | A | 1,000           | 1.50               |
|          | B | 2,000           | 1.25               |
|          | C | 1,500           | 2.00               |
|          | D | 3,000           | 1.00               |

Import duty                      23% of invoice value  
 Insurance                         2% of invoice value  
 Freight and Clearing         ₹ 30,000  
 Exchange Rate US \$ 1 = ₹ 64.00

50% of the materials imported are issued to production centers. While determining the value of closing stock 5% allowance is provided to cover up storage loss. Determine the value of closing stock of each type of materials. 10

- (B) Distinguish between Bin card and Stores Ledger 5

3. (A) Ten men work as a group. When the weekly production of the group exceeds standard (200 pieces per hour) each man in the group is paid a bonus for the excess production in addition to his wages at hourly rates. The bonus is computed thus:

The percentage of production in excess of the standard amount is found and one-half of this percentage is considered as the men's share. Each man in the group is paid as bonus this percentage of a wage rate of ₹ 3.20 per hour. There is no relationship between the individual workman's hourly rate and the bonus rate. The following is the week's records.

|           | Hours Worked | Production |
|-----------|--------------|------------|
| Monday    | 90           | 22,100     |
| Tuesday   | 88           | 22,600     |
| Wednesday | 90           | 24,200     |
| Thursday  | 84           | 20,100     |
| Friday    | 88           | 20,400     |
| Saturday  | 40           | 10,200     |
|           | 480          | 1,19,600   |

- (a) Compute the rate and amount of bonus for the week;  
 (b) Compute the total pay of Jones who worked 41 ½ hours and was paid ₹ 2 per hour basic and of Smith who worked 44 ½ hours and was paid ₹ 2.50 per hour basic.

[10]

- (B) How do you treat Idle time in Cost Accounting as per CAS-7? [5]

4. (A) At Ltd engineering Co. having 25 different types of automatic machines, furnishes you the following data for 2011-12 in respect of machine B:

|                        |          |
|------------------------|----------|
| 1. Cost of the machine | ₹ 50,000 |
|------------------------|----------|

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|    |   |                    |
|----|---|--------------------|
|    | Life – 10 years   | Scrap value is nil |
| 2. | Overhead expenses are:  |                    |
|    | Factory Rent  | ₹ 50,000 p.a.      |
|    | Heating and Lighting  | ₹ 40,000           |
|    | Supervision   | ₹ 1,50,000 p.a.    |
|    | Reserve equipment of machine B  | ₹ 5,000 p.a.       |
|    | Area of the factory   | 80,000 sq. ft.     |
|    | Area occupied by machine B  | 3,000 sq. ft.      |
| 3. | Wages of operator is ₹ 24 per day of 8 hours including all fringe benefits. He attends to one machine when it is under set up and two machines while under operation. |                    |
| 4. | Estimated production hours  | 3,600 p.a.         |
|    | Estimated set up time   | 400 hrs. p.a.      |
|    | Power 0.5 per hour  |                    |

Prepare a schedule of comprehensive machine hour rate and find the cost of the following jobs:

|                       | JOB 1102 | JOB 1308 |
|-----------------------|----------|----------|
| Set up time (Hrs.)    | 80       | 40       |
| Operation time (Hrs.) | 130      | 160      |

(B) What is absorption? What are the various methods of absorbing of Overheads in Cost Accounting? 5

5. (A) PR Ltd. Manufacturers and sells a typical brand of Tiffin boxes under its own brand name. The installed capacity of the plant is 1,20,000 units per year distributable evenly over each month of calendar year. The cost accountant of the company has informed the following cost structure of the product, which is as follows:

- Raw material ₹ 20 per unit.
- Direct labour ₹ 12 per unit
- Direct expenses ₹ 2 per unit
- Variable overheads ₹ 16 per unit.
- Fixed overhead ₹ 3,00,000 per unit

Semi-variable overheads are as follows:

- a. ₹ 7,500 per month upto 50% capacity &
- b. Additional ₹ 2,500 per month for every additional 25% capacity utilization or part thereof, the plant was operating at 50% capacity during the first seven months of the calendar year 2009, at 100% capacity in the remaining months of the year.

The selling price for the period from 1<sup>st</sup> Jan, 2011 to 31<sup>st</sup> July, 2011 was fixed at ₹ 69 per unit. The firm has been monitoring the profitability and revising the selling price to meet its annual profit target of ₹ 8,00,000. You are required to suggest the selling price per unit for the period from 1<sup>st</sup> August 2011 to 31<sup>st</sup> December 2011.

Prepare cost sheet clearly showing the total and per unit cost and also profit for the period.

1. from 1<sup>st</sup> Jan. to 31<sup>st</sup> July, 2011
2. from 1<sup>st</sup> Aug. to 31<sup>st</sup> Dec, 2011. [10]

(B) Distinguish between Cost Control and Cost Reduction [5]

**Sec- C**

Answer any two Questions from Q. No 6, 7 and 8. Each Question carries 15 Marks

6 (A) Balance Sheets of a company as on 31<sup>st</sup> March, 2007 and 2008 were as follows:

| Liabilities            | 31.03.07  | 31.03.08  | Assets                             | 31.03.07  | 31.03.08  |
|------------------------|-----------|-----------|------------------------------------|-----------|-----------|
| Equity share capital   | 10,00,000 | 10,00,000 | Good will                          | 1,00,000  | 80,000    |
| 8% Pref. Share capital | 2,00,000  | 3,00,000  | Land and Building                  | 7,00,000  | 6,50,000  |
| General Reserve        | 1,20,000  | 1,45,000  | Plant and Machinery                | 6,00,000  | 6,60,000  |
| Securities Premium     | --        | 25,000    | Investments                        |           |           |
| Profit & Loss a/c.     | 2,10,000  | 3,00,000  | (non trading)                      | 2,40,000  | 2,20,000  |
| 11% Debentures         | 5,00,000  | 3,00,000  | Stock                              | 4,00,000  | 3,85,000  |
| Creditors              | 1,85,000  | 2,15,000  | Debtors                            | 2,88,000  | 4,15,000  |
| Provision for tax      | 80,000    | 1,05,000  | Cash and Bank                      | 88,000    | 93,000    |
| Proposed Dividend      | 1,36,000  | 1,44,000  | Prepaid Expenses                   | 15,000    | 11,000    |
|                        |           |           | Premium on Redemption of debenture | --        | 20,000    |
|                        | 24,31,000 | 25,34,000 |                                    | 24,31,000 | 25,34,000 |

Additional Information:

- Investments were sold during the year at a profit of ` 15,000.
- During the year an old machine costing ` 80,000 was sold for ` 36,000. Its written down value was ` 45,000.
- Depreciation charged on Plant and Machinery @ 20% on the opening balance.
- There was no purchase or sale of Land and Building.
- Provision for tax made during the year was ` 96,000.
- Preference shares were issued for consideration of cash during the year.

You are required to prepare Cash flow statement for the year 2007- 08 as per AS-3.

[12]

(B) What are the limitations of Ratio Analysis

[3]

7 (A) The board of Directors of Nanak Engineering Company Private Ltd. request you to prepare a statement showing the working capital requirements forecast for a level of activity of 1,56,000 units of production.

The following information is available for your calculation:

|                        | Per unit |
|------------------------|----------|
| Raw materials          | ` 90     |
| Direct labour          | 40       |
| Overheads              | 75       |
|                        | 205      |
| Profits                | 60       |
| Selling price per unit | 265      |

- Raw materials are in stock on average one month.
- Materials are in process, on average 2 weeks.
- Finished goods are in stock, on average 1 month.

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- (iv) Credit allowed by supplier one month.
- (v) Time lag in payment from debtors two months.
- (vi) Lag in payment of wages 1½ week.
- (vii) Lag in payment of overheads is one month.

20% of the output is sold against cash. Cash in hand and at bank is expected to be ₹ 60,000. It is to be assumed that production is carried on evenly throughout the year, wages and overheads accrue similarly and a time period of 4 weeks is equivalent to a month. [10]

(B) Calculate the Cost of Capital from the following cases:

- (i) 10-year 14% Preference shares of ₹100, redeemable at premium of 5% and flotation costs 5%. Dividend tax is 10%. [5]
- (ii) An equity share selling at ₹50 and paying a dividend of ₹6 per share. [5]

8. (A) A limited Company is considering investing a project requiring a capital outlay of ₹ 2,00,000. Forecast for annual income after depreciation but before tax is as follows:

| Year | Income   |
|------|----------|
| 1    | 1,00,000 |
| 2    | 1,00,000 |
| 3    | 80,000   |
| 4    | 80,000   |
| 5    | 40,000   |

Depreciation may be taken as 20% on original cost and taxation at 50% of net income.

You are required to evaluate the project according to each of the following methods:

- (i) Pay-back method
- (ii) Rate of return on original investment method
- (iii) Rate of return on average investment method
- (iv) Discounted cash flow method taking cost of capital as 10% - NPV [10]

(B) Briefly explain Operating Leverage and Financial Leverage [5]