Paper 8- Cost Accounting & Financial Management

## Paper-8: Cost Accounting & Financial Management

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

- (i) Material with invoice value ₹ 10,000 was received in the Stores Dept. The transport cost was ₹ 200. Since the material leaked in transit, damage to other goods of ₹ 350 had to be paid to the transporter. What would be the material cost?
- (ii) Prime Cost = ₹ 12,50,000; Works Cost = ₹ 20,00,000 and office overheads are 30% of factory overheads. What is the Cost of Production?
- (iii) The variable and semi variable costs of producing 50,000 units are ₹ 6 per unit and ₹12 per unit respectively. If at 20,000 units, these total costs add up to ₹ 4,80,000, what is the amount of fixed cost component of the semi variable cost?
- (iv) M. Ltd. does not use any debt in its capital structure. The company has earnings before interest and tax of ₹ 2,00,000 per annum and the capitalization rate is 12%. Assume corporate tax of 30%. Calculate the value of the firm according to MM Hypothesis.
- (v) The proprietor's fund is ₹45,00,000 and ratio of fixed assets to proprietor's funds is 0.75. Find the amount of net working capital.

### (B) State whether the following statements are True or False $[5 \times 1 = 5]$

- (i) Overhead and conversion cost are inter-changeable terms.
- (ii) Royalty based on units produced is considered as direct expenses.
- (iii) Ideal standards are achievable in normal course.
- (iv) Operating Cycle means time required to Produce One Quantity of a Product.
- (v) NPV is Non-Discounted Cash Flow Technique of Capital Budgeting. [False]

### (C) Fill in the Blanks

- (i) When time saved is equal to time taken then earnings of a worker under Halsey Plan and Rowan Plan are the \_\_\_\_\_\_.
- (ii) The difference between actual and absorbed factory overhead is called

(iii) Under-absorption of ----- results in higher amount of profit.

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#### [5 ×2 = 10]

### [5 × 1 = 5]

(iv) If Profitability Index is 1, cash inflow and cash outflow would be ------

(v) A GDR is a ..... Instrument.

# (D) Match the Following

## [5 × 1 = 5]

| Column I                              | Column II                            |
|---------------------------------------|--------------------------------------|
| 1. Time & Motion Study                | A. No. of extensions in a department |
| 2. Primary Packing Material           | B. Profitability rate                |
|                                       |                                      |
| 3. Telephones                         | C. Management                        |
| 4. Management accounting is a tool to | D. Direct Material Cost              |
| 5. Angle of Incidence                 | E. Labour Incentive Scheme           |

# Section-B

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

- 2. (A) A Ltd. was ordering (in economic order quantities) (EOQ) its raw material RM at a price of ₹750 per unit. The average annual consumption was 18000 units. Carrying cost was 20% of average inventory and the ordering cost was ₹1500 per order. A Ltd. wants to move towards the Just-In-Time system and the new policy proposes as follows: the average number of units held in stock will be 100 units; ordering cost per order will be ₹1510; carrying cost will be 20% of average inventory. However the purchase price will increase. The total new ordering cost will be 9 times the new carrying cost.
  - (i) What was the EOQ before the new policy?
  - (ii) Calculate the inventory turnover ratio before and after the new policy.
  - (iii) How much is the increase in purchase price under the new policy? Compare the two policies regarding raw material management and offer your comments. [3+4+5=12]
- (B) ₹3,000/- and ₹60,000/- are written off raw materials and finished goods respectively for obsolescence. How should these be treated in Cost Accounts?
  [3]
- 3. (A) What are the differences between Cost Control and Cost Reduction?
- [5]

(B) Compute the employee cost from the following particulars:

Basic pay ₹3,00,000. Accommodation provided to employees free of cost (this accommodation is owned by the employer, depreciation of the accommodation is ₹50,000. Maintenance charges ₹40,000 and municipal tax of the accommodation ₹2,000.

Employer's contribution to PF ₹60,000. Due to delay in making payment, a penalty was imposed for ₹3,000, which was paid by the employer.

Reimbursement of medical expenses ₹40,000.

Employees contribution to PF ₹60,000.

Bonus paid to employees ₹1,00,000.

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Hospitalisation expenses of Employee's family ₹1,00,000 paid by employer.

- [10]
- (A) Following particulars are revealed from the costing records of M/S Jupiter & Co. Ltd. in the year 2015:

Production - 15,000 units

|                   | (₹)      |
|-------------------|----------|
| Raw material cost | 3,00,000 |
| Labour cost       | 1,80,000 |
| Factory overheads | 1,20,000 |
| Office overheads  | 60,000   |
| Selling expenses  | 15,000   |

Rate of profit 25% on selling price.

Now the management decided to produce 20,000 units in 2016. As per Co's estimate, cost of raw materials will be increased by 25% and labour cost will also increase by 15%. 50% of overhead charges are fixed and the rest is variable. The selling expenses per unit will also be reduced by 25%.

There will be no change in rate of profit.

Prepare Cost Statements for both the years 2015 and 2016.

- (B) What are the main objectives of group bonus system?
- 5. (A) A firm has purchased a plant to manufacture a new product. The cost data are given below:

| Estimated annual sales    | 36,000 units  |
|---------------------------|---------------|
| Material                  | ₹4 per unit   |
| Direct labour             | ₹0.6 per unit |
| Overheads - Manufacturing | ₹24,000 p.a.  |
| Administrative expenses   | ₹28,800 p.a.  |
| Selling Expenses          | 15% of sales  |

Calculate the selling price if profit per unit is ₹ 1.50. Assume whatever is produced is sold [5]

(B) The following information relates to the activities of production Dept. M of MTH Ltd. for Nov 2016:

Materials Consumed: ₹3,83,000; Direct labour: ₹5,74,000; Factory overhead chargeable to Dept. M: ₹ 2,75,760; Labour hours worked: 18,384 hours; Machine hours: 3064 hours;

One job order carried out in Dept. M has the following details:

Material Consumed: ₹ 11,000; Direct Labour Cost = ₹ 19,000; Direct labour hours: 540 hours;

Machine hours worked: 85 hours.

Find the amount of factory overheads for the job under the following methods of overhead absorption: % of direct material cost, % of direct labour cost, % of prime cost, direct labour hour rate and machine hour rate. [10]

[4]

[4+7=11]

# <u>Section-C</u>

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

6. (A) XYZ Co. Ltd. desires to produce a new product at a price of ₹1,200 per unit, with the expectation of annual sales of 5,000 units. Variable costs amounts to ₹800 per unit and two months credit facility is to be granted.

It is estimated that 10% of customers will be defaulters. Others will pay on due date. Interest rate is 15% p.a. A credit agency has offered the Company a suggestion which it claims can help to identify possible bad debts. The agency for such job will demand ₹3,00,000 p.a. and will be able to identify 20% of customers as being potential bad debts. If these customers are rejected no actual bad debts will result. Should the Company accept the suggestion of credit agency? [3+4=7]

(B) M/S Light & Sound Co. Ltd. has sales of ₹ 12,00,000, variable cost ₹9,00,000 and fixed cost is ₹2,00,000 and debt of ₹5,00,000 of 10% rate of interest.
 From the above details find out the operating, financial and combined leverages. If the Co. wants to double its earnings before interest and tax (EBIT). How much of a rise in sales would be needed on a percentage basis?

7. (A) The following accounting information and financial ratios of Bhalu Ltd. relate to the year ended 31st March, 2016:

| Inventory Turnover Ratio (considering cost of goods sold) | 6 times  |
|---|----------|
| Creditors Turnover Ratio                                  | 10 times |
| Debtors Turnover Ratio                                    | 12 times |
| Current Ratio   | 2.4      |
| Gross Profit Ratio  | 25%      |

Total sales ₹60 lakhs; cash sales 25% of credit sales; cash purchases ₹ 4,60,000; working capital ₹7,14,000; closing inventory is ₹1,60,000 more than opening inventory.

- You are required to calculate:
- (i) Average Inventory
- (ii) Purchases
- (iii) Average Debtors
- (iv) Average Creditors
- (v) Average Payment Period
- (vi) Average Collection Period
- (vii)Current Assets
- (viii) Current Liabilities

[10]

(B) A company has earnings of ₹5,00,000. The capital structure of the company has debt and equity in which debt of ₹8,00,000 is borrowed at 10%. The cost of equity capital is currently 12.5%. Calculate the value of the firm and overall cost of capital by the net income approach. Ignore taxes. Take market value of debt at par.

8. (A) The following balances are provided by M Ltd. for the years ended 31st March, 2015 and 2016:

| Particulars     | 31.03.2015 | 31.03.2016 |
|-----------------|------------|------------|
| General Reserve | 2,40,000   | 2,90,000   |

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| Profit & Loss A/c        | 4,20,000  | 6,00,000  |
|--------------------------|-----------|-----------|
| 11 % Debentures          | 10,00,000 | 6,00,000  |
| Goodwill                 | 2,00,000  | 1,60,000  |
| Land & Building          | 14,00,000 | 13,00,000 |
| Plant & Machinery        | 12,00,000 | 13,20,000 |
| Investment (Non trading) | 4,80,000  | 4,40,000  |
| Creditors                | 3,70,000  | 4,30,000  |
| Provision for tax        | 1,60,000, | 2,10,000  |
| Proposed Dividend '      | 2,72,000  | 2,88,000  |
| Stock                    | 8,00,000  | 7,70,000  |
| Debtors                  | 5,76,000  | 8,30,000  |
| Cash at Bank             | 1,76,000  | 1,86,000  |
| Prepaid Expenses         | 30,000    | 22,000    |

Additional Information:

- Investment were sold during the year for ₹70,000.
- During the year an old machine costing ₹1,60,000 was sold for ₹72,000. Its written down value was ₹90,000.
- Depreciation was charged on plant and machinery @ 20% on the opening balance.
- There was no purchase or sale of land and building during the year.
- Provision for tax made during the year was ₹1,92,000.
- During the year premium on redemption of debentures written-off was ₹40,000.
  You are required to prepare a statement showing the net cash flow from operating activities.
- (B) M/s. Progressive Co. Ltd. is considering an investment in Machine X. The cash flows expected are as under:

| Initial Outflow (in lakhs ₹) | Cash in flows (in lakhs ₹) |                      |                      |                      |                      |
|------------------------------|----------------------------|----------------------|----------------------|----------------------|----------------------|
| Cost of Machine              | At the end of              |                      |                      |                      |                      |
|                              | 1 <sup>st</sup> year       | 2 <sup>nd</sup> year | 3 <sup>rd</sup> year | 4 <sup>th</sup> year | 5 <sup>th</sup> year |
| 30                           | -                          | 10                   | 15                   | 12                   | 16                   |

The cost of capital is 10% p. a. PV of ₹1 at 10% from year one to five:

| End of year | 1   | 2   | 3   | 4   | 5   |
|-------------|-----|-----|-----|-----|-----|
| P/V factor: | .91 | .83 | .75 | .68 | .62 |

Advise the Management whether the machine may be bought using the Net Present Value Method. [5]