INTERMEDIATE EXAMINATION

December 2023

P-10(CMFM)
Syllabus 2016

# COST & MANAGEMENT ACCOUNTING AND FINANCIAL MANAGEMENT

Time Allowed: 3 Hours | Full Marks: 100

*The figures in the margin on the right side indicate full marks.*
*All workings must form part of the answer.*

*Whenever necessary, candidates may make appropriate assumptions and clearly state them in the respective Answer.*

*This Paper has been divided into two parts A & B, each carrying 50 Marks. Further, each part has been divided into two sections only.*

## Part–A
## Cost & Management Accounting

### SECTION - I — 50 Marks

***Answer the following questions.***

1. (a) **Choose the answer from the given four alternatives. You may write only the Roman Numeral and Alphabet chosen for your answer:** 1×6=6

(i) Which one of the following Accountings helps the organization in proper delegation of authority for the attainment of the Vision and Mission of the business?

(A) Financial Accounting
(B) Cost Accounting
(C) Management Accounting
(D) Green Accounting

(ii) The Profit / Volume Ratio of ROXY Ltd. is 50%, while margin of Safety is 40%. If sales volume of the Company is ₹ 50 Lakh, the Net Profit will be

(A) ₹ 10 Lakh
(B) ₹ 12 Lakh
(C) ₹ 15 Lakh
(D) ₹ 20 Lakh

(iii) In a factory of BAC Ltd. where standard costing is operated, the budgeted fixed overhead per unit is ₹ 5. For the month of September 2023, the actual Fixed overhead incurred was ₹ 40000 for the production of 9000 units resulting in a fixed overhead volume variance of ₹ 5000 (Adv.). The budgeted production will be

(A) 12000 units
(B) 10000 units
(C) 9000 units
(D) 8000 units

(iv) An employee of RON Ltd., took 100 minutes to produce first unit of a product. The operation of the Company has an 90% learning curve. How much should the second unit time?

(A) 200 minutes
(B) 100 minutes
(C) 8 minutes
(D) 80 minutes

(v) Transfer Prices are normally set for

(A) Intermediate products
(B) Finished products
(C) Giffen products
(D) None of the above

(vi) ZBB is more suitably applicable to

(A) Manufacturing Activities
(B) Historical Cost Activities
(C) Service or Support Type Activities
(D) Discretionary Cost Area

(b) **Match the Statement under Column I with the most appropriate statement under Column II :** (*You may opt to write only the Roman numeral and the matched Alphabet instead of copying the contents into the answer books*): 1×4=4

| Column I | | Column II | |
|---|---|---|---|
| (i) | Angle of Incidence | (A) | Arises due to change in the proportion of the number of skilled workers. |
| (ii) | Performance Budget | (B) | Supply of raw material or power which can affect production. |
| (iii) | Gang Variance | (C) | Indicator of profit earning capacity of the firm over breakeven sales. |
| (iv) | Boston Consulting Group | (D) | Responsibility of Various levels of Management is predetermined in terms of output. |
| | | (E) | Experience curve |
| | | (F) | Decision Making |

(c) **State whether the following statements are True or False**: (You may write only the Roman Numeral and whether True or False without copying the statement into the answer books): 1×4=4

(i) When there is not opening or closing stock the profit / loss under absorption and marginal costing will be equal.

(ii) Transfer pricing can always based on market price fluctuations are not taken into account.

(iii) A Budget Manual is a document which only contain instruction regarding how actual expenditures will be compared with budgeted expenditure.

(iv) Contribution can be increased by either increasing the selling price per unit or by decreasing the variable cost per unit or doing both.

**SECTION - II** 12×3=36

***Answer* any three *questions from question nos, 2, 3, 4, and 5.***

**2.** (a) The Cost Volume – Profit relationship of AVOM Ltd., is described by the equation Y = ₹ 240000 + 0.6 x, in which x represents Sales revenue and Y is the Total Cost (FC + VC) at the Sales revenue / Volume represented by X.

**Required :**

(i) Identify the P/V Ratio

(ii) What Sales volume must be obtained to Break-even for the Company?

(iii) Analyze Sales volume to be required to produce an income of ₹ 100000

2+2+2=6

(b) FOVA Ltd., a manufacturing company sells 24,000 flower vases every year. The detail of cost for year ended 31 st March 2022 is given below:

| | | |
|---|---|---|
| Selling price per flower vase | | ₹ 800 |
| Variable Cost per flower vase = | | ₹ 600 |
| Fixed Cost : | Staff salaries : | ₹ 2400000 |
| | General Office Cost : | ₹ 800000 |
| | Advertising Cost : | ₹ 800000 |

**Required :**

(i) **Assess** the Break-Even Point and margin of safety in no of units of sales.

(ii) The company has gained reputation and in the year 2023 no advertising cost will have to incurred if the company so decides. The selling price will remain unaltered. The variable costs will have to increase by 10% to make the flower vases more attractive. Considering the new BEP and the new margin of safety, Justify it would be prudent to cut the advertising cost. 3+3=6

**3.** (a) ZNB Ltd., operates a system of standard costing throughout its division. The company produces an alloy by mixing and processing two materials A and B.

For making 10 kgs. of Alloy, the standard requirement are :

| Material | Quantity (KG) | Rate per kg (₹) |
|---|---|---|
| A | 8 | 6 |
| B | 4 | 4 |

During the month of September 2023 1000 Kgs of Finished Alloy were produced.

The actual Consumption of Materials is as under :

| Material | Quantity (KG) | Rate per kg (₹) |
|---|---|---|
| A | 750 | 7 |
| B | 500 | 5 |

**Required :**

**Analyze** the following Material Variances :

(i) Material Cost Variance (MCV)

(ii) Material Price Variance (MPV)

(iii) Material Usage Variance (MUV) 5

(b) TEXO Ltd., a manufacturing unit using the standard costing and budgetary Control system has furnished the following information for the month of November 2023.

| Particulars | Budget | Actual |
|---|---|---|
| Output (Units) | 30000 | 32500 |
| Hours | 30000 | 33000 |
| Fixed Overhead | ₹ 45000 | ₹ 50000 |
| Working days | 25 | 26 |

**Required :**

**Analyze** the following fixed Overhead Variances :

(i) Fixed Overhead Cost Variance

(ii) Fixed Overhead Expenditure Variance

(iii) Fixed Overhead Volume Variance

(iv) Fixed Overhead Efficiency Variance

(v) Fixed Overhead Capacity Variance

(vi) Fixed Overhead Calendar Variance 7

4. (a) BOB Ltd., an Electronics Company has just Completed the manufacture of 20 units of a Fire Alarm Equipment. The manufacturing Costs are as follows :

| | ₹ |
|---|---|
| Direct Materials | 40000 |
| Direct Labour 400 hours @ 30 per hour | 12000 |
| Variable overheads @ Rs 15 per hour | 6000 |
| Special tools (Re-usable) | 6000 |
| Fixed overhead apportioned | 12000 |
| **TOTAL** | **76000** |

The Company uses a mark up to 25% on Total Costs. The company received another order for 60 units of Fire alarm equiments for which the company has been asked to quote a price for fulfill this order. The 90% learning curve is thought to be pertinent in this case.

**Required :**

(i) **Identify** the selling price per unit of First order for 20 units of Fire alarm equipment.

(ii) **Assess** the minimum quoted price per unit of Second order for 60 units of Fire alarm equipment. 6

(b) BOTON Ltd., is manufactures electronic switches. Each switch requires three minor circuits that cost ₹ 2.00 each. The company has prepared a production budget for the electronic switches by quarters for Year 2 and the first quarter of Year 3, as follows :

| | Years 2 | | | | Years 3 |
|---|---|---|---|---|---|
| Budgeted Productions | First | Second | Third | Fourth | First |
| | 60000 | 90000 | 150000 | 100000 | 80000 |

The inventory of the circuits at the end of a quarter must be equal to 20% of the following quarter's production needs. There will be 36000 minor circuits on hand to start the first quarter of year two.

**Required :**

**Prepare** direct materials budget for the minor circuits, for each quarter for years 2. 6

5. **Write short notes on *any three* out of the following four questions :** 4×3=12

(a) **Enumerate** the Significance of Management Accounting.

(b) **Summarize** the limitation of Inter- firm comparison.

(c) **Append** the objectives of Inter – Company Transfer Pricing.

(d) **Enumerate** the main Concepts of Performance Budgeting.

## Part – B
## Financial Management

### SECTION – III

50 Marks

*Answer the following questions.*

6. (a) **Choose the correct answer from the given four alternatives.** (You may write only the Roman Numeral and Alphabet chosen for you answer) : 1×6=6

(i) Clientele effect associated with which of the following ?

(A) Gordon Model

(B) Residual Model

(C) Graham & Dodd Model

(D) Modigliani and Miller Model

(ii) The relationship between the seller of the goods and financial firm is best explained by which of the following ?

(A) Lease

(B) Factoring

(C) Forfeiting

(D) Hire Purchase System

(iii) The current Assets of BOT Ltd. is ₹ 400000, while Quick Ratio is 1.80 : 1. If the current liabilities are ₹ 200000 what will be value be value of Stock ?

(A) ₹ 60000

(B) ₹ 50000

(C) ₹ 40000

(D) None of the above

(iv) BONI Ltd., has paid dividend of ₹ 3 per share of ₹ 10 each last year and it is expected to grow @ 10% next year. If the market price of share is ₹ 60 the Cost of equity will be

(A) 16.50 %

(B) 15.50 %

(C) 12.50 %

(D) 12.00 %

(v) The Present value of Total cash inflows of a Project for 5 years is ₹ 337050. If the profitability Index is 1.05 what will be the cost of a project ?

(A) ₹ 353900

(B) ₹ 350000

(C) ₹ 321000

(D) ₹ 320000

(vi) Cash received from issue of shares comes under the following head

(A) Cash flow from Operating activities

(B) Cash flow from Investing activities

(C) Cash flow from Financial activities

(D) None of the above

(b) **Match the Statement under Column I with the most appropriate statement under column II** (You may Opt to write only the Numeral and match alphabet instead of copying the contents into the answer book) : 1×4=4

| Column I | | Column II | |
|---|---|---|---|
| (i) | Stock Splits | (A) | Market price of Securities |
| (ii) | Sweat Equity Shares | (B) | Commercialize unproven technology |
| (iii) | Venture Capital | (C) | Intellectual property rights |
| (iv) | Modigliani Miller Hypothesis | (D) | Regulate the price of Shares |
| | | (E) | Theory of Capital Structure |
| | | (F) | Optimal Cash Balance |

(c) **State whether the following statement are True or False** (You may write only the Roman Numeral and whether True or False without copying the statement into the answer books) : 1×4=4

(i) Liquidity Ratio of a company helps in determining the cash position of the company.

(ii) Future expected profits from an investments are taken as returns from the investment for capital budgeting.

(iii) If the dividend per share remains constant and the market price of the share declines, the Dividend Yield ratio will increase.

(iv) Venture Capital is a form of equity financing for funding high risk and high reward companies.

## SECTION – IV

**Answer *any three* questions from question numbers 7 , 8 , 9 and 10.**

**Each question carries 12 Marks.**

**7.** (a) The following Financial Parameters are extracted from the records of VOTEX Ltd. for the year ended March 31, 2023

| | |
|---|---|
| Working Capital | ₹ 300000 |
| Fixed Assets to Net worth | 0.75 |
| Other Equity (Reserves & Surplus) | ₹ 200000 |
| Bank overdraft | ₹ 60000 |
| Trade Payables | ? |
| Current Ratio | 2.5 |
| Quick Ratio | 1.8 |

**Required :**

(i) **Assess** the amount of Trade payables.

(ii) **Assess** the value of Equity Share Capital.

(iii) The value of Fixed Assets would be **how much**?

(iv) **Analyze** the value of Inventories of VOTEX Ltd. 2+2+1+1=6

(b) ADON Ltd. has furnished the following information for Preparation of Cash Flow Statement for the year ended March 31, 2023.

| | **(₹ In Lakhs)** |
|---|---|
| Net Profit | 305 |
| Dividend (including interim dividend) paid | 95 |
| Provision for Income Tax | 75 |
| Income Tax paid during the year | 60 |
| Loss on sale of assets (net) | 2 |
| Book value of assets sold | 10 |
| Depreciation charged to P&L Account | 250 |
| Loss on Sale of investments | 3 |
| Value of investments sold | 306 |
| Interest paid during the year | 145 |
| Increase in working capital (excluding cash and cash equivalents) | 505 |

| | (₹ In Lakhs) |
|---|---|
| Purchase of fixed assets | 18 |
| Investment in joint venture | 105 |
| Opening cash and cash equivalents | 12 |
| Closing cash and cash equivalents | 30 |

**Required :**

**Analyze the Cash Flows from**

(i) Operating Activities

(ii) Investing Activities

(iii) Financial Activities as per AS-3 (Revised) 3+2+1=6

**8.** (a) A proforma cost sheet of BOSM Ltd., a manufacturing Company provide the following particulars:

| Particulars | Amount per unit (₹) |
|---|---|
| Raw materials cost | 100.00 |
| Direct labour cost | 37.50 |
| Overheads cost | 75.00 |
| Total Cost | 212.50 |
| Profit | 37.50 |
| Selling price | 250.00 |

The Company keeps raw material in stock, on an average for one month; work-in-progress, on an average for one week; and finished goods in stock on an average for two weeks. The credit allowed by suppliers is three weeks and company allows for six weeks credit to its debtors. The lag in payment of wages is one week and lag in payment of overhead expenses is two weeks.

The Company sells one-fifth of the output against cash and maintains cash-in-hand and at bank put together at Rs. 37,500.

**Required :**

**Prepare** a statement showing estimate of working capital needs to finance an activity level of 1,30,000 units of production. Assume that production is carried on evenly throughout the year, and wages and overheads accrue similarly. Work-in-progress stock is 80% complete in all respects. 6

(b) The Balance Sheet of TUPN Ltd. as on March 31' 2023 is as follows :

| Liabilities | Amount (₹) | Assets | Amount (₹) |
|---|---|---|---|
| Equity Share Capital (₹ 10 each) | 120000 | NET Fixed Assets | 300000 |
| Other Equity | 40000 | Current Assets | 100000 |
| 10% Long term Debt | 160000 | | |
| Current Liabilities | 80000 | | |
| | **400000** | | **400000** |

The Company's total assets turnover ratio is 2. Its fixed operating costs are ₹ 200000 and the variable operating cost ratio 60 per cent. The Corporate Tax rate is 35 per cent.

**Required :**

(i) **Analyze** the Operating, Financial and Combined Leverages.

(ii) **Assess** the likely level of EBIT, if EPS is ₹ 5. 6

9. (a) ENGON Ltd., is considering the purchase of a new computer system for its research and development division, which would cost ₹ 35 lakh. The operation and maintenance costs (excluding depredation) are expected to be ₹ 7 lakh per annum. It is estimated that the useful life of the System would be 6 years, at the end of which the disposal value is expected to be ₹ 1 lakh.

The tangible benefits expected from the system in the form of reduction in design and draftsmanship costs would be ₹ 12 lakh per annum. The disposal of used drawing and drawing office equipment and furniture initially is anticipated to net ₹ 9 lakh.

As Capital expenditure in research and development, the proposal would attract a 100 per cent write-off for tax purposes. The gains arising from disposal of used assets may be considered tax-free. The Corporate tax rate is 35%. The average cost of capital of the company is 12 per cent. Ignore tax on Salvage value.

(Calculation should be made upto three decimal Points)

Given [PVIF (12%, 6 years) = 0.507 and PVIFA (12%, 6 years) = 4.111]

**Required :**

(i) **Assess** the Net Present Value (incremental) from the computer System.

(ii) As a financial adviser, **what** would your recommendation to the Company in respect of purchase of Computer System. 6

(b) The Capital Structure of YAN Ltd., as on March 31' 2023 is as follows :

| | (₹ in Crore) |
|---|---|
| Equity Capital (₹ 10 each – fully paid up at par) | 15 |
| 11% Preference Capital (₹ 100 each, fully paid up at par) | 1 |
| Other Equity | 20 |
| 13.5 % Debentures (₹ 100 each) | 10 |
| 15% Term Loans | 12.50 |
| | 58.50 |

The expected dividend on equity shares per share is ₹ 3.60; the dividend per share is expected to grow at the rate of 7%. The market price per share is ₹ 40. Preference stock, redeemable after ten years, is currently selling at ₹ 75 per share. The income tax rate for the company is 40%.

**Required :**

(i) **Identify** the Cost of Equity and Cost of Preference Capital.

(ii) **Assess** the Weighted Average Cost of Capital (WACC) of YAN Ltd. Using Book Value Proportions.

6

**10. Write short notes on *any three* out of the following Four questions :** 4×3=12

(a) **Interpret** the concept of Forfeiting.

(b) **Identify** the consequences of inadequate working capital in an organization.

(c) **Append** the Significance of Capital Budgeting decision.

(d) **Enumerate** the assumptions of Baumol's Model.