INTERMEDIATE EXAMINATION

June 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 your answer.

Wherever necessary, candidates may make appropriate assumptions and clearly state them in the answers.

- Please (1) Write answers to all parts of a question paper.
 - (2) Open a new page for answers to a new question.
 - (3) Attempt the required number of questions only.

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)

(50 marks)

Section-I

Answer the following questions.

- 1. (a) Choose the correct answer from the given four alternatives (You may write only the Roman numeral and Alphabet chosen for your answer): 1×6=6
 - (i) X Ltd. provides you with the following information:

Particulars	April to 30th June	1st July to 31st March
Sales @ ₹ 100 per unit	₹ 10,00,000	₹ 35,00,000
Total Cost	₹ 3,90,000	₹ 13,20,000

Calculate Total Fixed Costs for the year.

- (A) ₹2,40,000
- (B) ₹3,60,000
- (C) ₹4,80,000
- (D) ₹7,20,000

- (ii) Budgeted Sales of Product X is 8,000 units. At the end of the previous year, the Closing Finished Stock (on a FIFO basis) of Product X is ₹ 20,000 @ ₹ 20. At the end of the budget year expected Closing Finished Stock of Product X is 2,700 units. Post Production Rejection Rate of Product A is 3%. Calculate the Budgeted Production of Product (A)
 - (A) 9,700
 - (B) 10,000
 - (C) 9,991
 - (D) 9,417
- (iii) Average of Actual Price per kg of Material and Standard Price is ₹ 22.50. Difference between the Standard Quantity of Material and the Actual Quantity of Material 16 kg. Average of Standard Quantity of material and Actual Quantity of material 52 kg. Material Cost Variance is ₹ 100 (F). Calculate the Material Usage Variance.
 - (A) ₹ 320 (F)
 - (B) ₹ 320 (A)
 - (C) ₹470 (F)
 - (D) ₹470 (A)
- (iv) Calculate the Efficiency Ratio, if Capacity and Activity Ratios are 96% and 90.24% respectively.
 - (A) 95%
 - (B) 94%
 - (C) 86.63%
 - (D) 106·388%
- (v) If Break-Even Point is Low and the Angle of Incidence is Small then:
 - (A) Margin of Safety is Low and Rate of Profit is High
 - (B) Margin of Safety is Low and Rate of Profit is Low
 - (C) Margin of Safety is Large and Rate of Profit is High
 - (D) Margin of Safety is Large and Rate of Profit is Low
- (vi) Budgeted Production is Equal to:
 - (A) Budgeted Sales + Budgeted Opening Stock Budgeted Closing Stock
 - (B) Budgeted Sales Budgeted Opening Stock + Budgeted Closing Stock
 - (C) Budgeted Sales + Budgeted Opening Stock + Budgeted Closing Stock
 - (D) Budgeted Sales Budgeted Opening Stock Budgeted Closing Stock

(b) Match the Statement under Column I with the most appropriate statement under Column II (You may Opt to write only the numeral and the matched alphabet instead of copying the contents into the answer book):

1×4=4

	Column I		Column II
(i)	Variance analysis	(A)	Explicit cost
(ii)	Zero-based budgeting	(B)	Uncertain demand of cash
(iii)	Angle of Incidence	(C)	Management by Exception
(iv)	A key factor	(D)	Implicit Cost
		(E)	Profitability Rate
		(F)	Limits the activity of an entity
		(G)	Durand
		(H)	Decision Package

- (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 book):

 1×4=4
 - (i) Standard hour is the quantity of output or amount which should be produced in one hour under given conditions.
 - (ii) Performance Budgeting is a technique under which Responsibility Centres are established and the targets in terms of physical performance are set for each Responsibility Centre.
 - (iii) Fixed Cost per unit varies with the change in the volume of production but Variable Cost per unit remains fixed.
 - (iv) If the BEP is High and angle of incidence is small and the margin of safety is low, then the business will start making a profit at a high rate earliest.

Section-II

Answer *any three* questions from question numbers 2, 3, 4 and 5. Each question carries 12 marks.

2. (a) GYC Ltd. provides you with the following information:

Year I		Year II	
Loss	₹ 40,000	Cost	₹ 11,40,000
Cost	108% of Sales	Profit	24% of Sales

During the next year III, the Selling Price and Variable Cost are expected to be reduced by 20% and 33-1/3% respectively and Fixed Costs are expected to increase by 25%.

Required: Estimate the Sales so as to earn a return of 30% on Capital Employed. Working Capital is 25% of Sales and 20% of Capital Employed.

(b) Kaloo Ltd. manufactures three products X, Y and Z. The unit selling price of these products are ₹ 50, ₹ 30 and ₹ 20 respectively. The corresponding Variable Cost to Sales Ratio is 20%, 30% and 50%. The total fixed costs are ₹ 59,83,000.

Required: (i) Calculate the Overall P/V Ratio if the proportion (Quantitywise) in which these products are manufactured and sold are 20%, 30% and 50% respectively. (ii) Calculate Overall Contribution per unit if the proportion (value-wise) in which these products are manufactured and sold are 20%, 30% and 50% respectively.

3. (a) Oreo Ltd. provides you with the following information:

Material and Labour requirements:	
Direct Material @₹5 Per Unit	1.9 Units
Direct Labour @₹5 Per Hour	2·4 Hours
Material Wastage Rate	5%
Expected increase in labour productivity	25%

	(₹ In Lakhs)	
e potopa em a manjolasti logistilig te ymneti uz i si	At 80% Capacity	At 60% Capacity
Production Overheads (including depreciation) (₹)	5.224	4.768
Depreciation on Production Machinery (₹)	0.40	0.40
Administrative Overheads (₹)	3.840	3.680
Selling & Distribution Overheads (₹)	3.800	3.600
Sales @ ₹ 200 Per Unit	32.00	24.00

Required: Prepare Flexible Budget at 50% and 90% capacity.

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(b) Oli Ltd. manufactures two products X and Y. Product X requires 5 hours to produce while 5 units of product Y can be produced in one hour. In July of 24 effective working days of 8 hours a day, 3000 units of X and 15,000 units of Y were produced. The company employs 100 workers in the production department to produce X and Y. There were 25 working days specified in the budget. Maximum possible working hours in July 24,000 hours.

Required: Calculate (a) Efficiency Ratio, (b) Activity Ratio, (c) Capacity Ratio, (d) Calendar Ratio (e) Idle Capacity Ratio, (f) Standard Capacity Usage Ratio and (g) Actual Usage of Maximum Capacity Ratio.

4. (a) Following information relates to the labour of Baba Ltd:

Particulars	Skilled	Semi-skilled	Unskilled	Total
Number of workers in standard gang	12	8	5	25
Standard rate per hour (₹)	75	50	40	_
Number of workers in actual gang				25
Actual rate per hour (₹)	80	48	42	-

The standard output of the gang was 12 units per hour of product M. The gang was engaged for 200 hours during the month of March 2022 out of which 20 hours were lost due to machine breakdown and 2,295 units of product M were produced. The actual number of skilled workers was 2 times the semi-skilled workers. Total labour mix variance was ₹ 10,800 (A). You are required to calculate actual number of workers in each category.

(b) Calculate Variable Overheads Efficiency Variance, Fixed Overheads Efficiency Variance and Fixed Overheads Calendar Variance from the following information provided by ALD Ltd:

Particulars	Budgeted	Actual
No. of Working days	25	26
Working hours per day	8	9
No. of Workers	150	132
Output per man-hour (in units)	$\frac{1}{2}$	1/2.2
Fixed Overheads	₹ 75,000	₹ 78,570
Variable Overheads	₹ 18,000	₹ 15,930
Semi-variable Overheads	₹ 27,000	₹ 24,300

5. Write short notes on any three out of the following:

 $4 \times 3 = 12$

- (a) Break-Even Analysis, Variance Analysis and Budget Manual
- (b) State only one basic difference between the following:
 - (i) Direct Costing and Marginal Costing
 - (ii) Marginal Costing and Absorption Costing
 - (iii) Period cost and Product Cost
 - (iv) Variable Cost and Direct Cost
- (c) State only one basic difference between the following:
 - (i) Fixed Budget and Flexible Budget
 - (ii) Sales Budget and Sales Forecast
 - (iii) Cash Budget and Cash Flow Statement
 - (iv) Zero Base Budget and Conventional Budget (or Traditional Budget)

- (d) State only one basic difference between the following:
 - (i) Standard Cost and Estimated Cost
 - (ii) Standard Costing and Historical Costing
 - (iii) Standard Costing and Budgetary Control
 - (iv) Standard Hour and Budgeted hour

Part - B

(FINANCIAL MANAGEMENT)

(50 Marks)

Section-III

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 your answer): 1×6=6
 - (i) Annual Cost Saving ₹ 80,000, Applicable Present Value of Annualised Cash flows for ₹ 1 is 2.855, Profitability index 1.064, Salvage value 0. NPV will be:
 - (A) ₹ 14,617·60
 - (B) ₹ 14,671·60
 - (C) ₹ 14,761·60
 - (D) None of the above
 - (ii) X Ltd and Y Ltd are identical in every respect except that X Ltd does not employ Debt in its capital structure whereas Y Ltd employs 10% Debentures amounting to ₹ 4 Lakhs. EBIT is ₹ 2,40,000. Equity Capitalization Rate of X Ltd is 20%. Tax Rate 25%. Assuming that all assumptions of M–M model are met. Which of the following is false?
 - (A) Value of X Ltd = $\mathbf{7}$ 9,00,000 and Value of Y Ltd = $\mathbf{7}$ 10,00,000
 - (B) k_e of Y Ltd = 25%
 - (C) k_o of Y Ltd =18% and k_o of X Ltd = 20%
 - (D) None of the above

- (iii) The capital structure of X Ltd. consists of 40% Equity Share Capital, 40% Preference Capital and 20% Debt. The after-tax cost of the Preference Capital and Debt are 15% and 7.20% respectively. The weighted average cost is 15.44%. X Ltd. paid currently a dividend of ₹ 4 per share. The current market price of its equity share is ₹ 44. Find the growth rate.
 - (A) 8%
 - (B) 9%
 - (C) 10%
 - (D) 11%
- (iv) Total Sales ₹ 125 lakhs, Credit Sales being four times the cash sales, Variable Cost 85% of Sales, Bad Debt 5%, Selling Price per unit ₹ 500, Average Cost per unit ₹ 450, Credit Terms are 3/24, Net 40, 25% of the credit customers avail Cash Discount facility, Required Rate of Return (pre-tax) 16%, Tax Rate 25%. Calculate the Opportunity Cost of Investment in Receivable (assume 360 days in a year).
 - (A) ₹1,08,000
 - (B) ₹ 1,20,000
 - (C) ₹ 1,40,000
 - (D) None of the above
- (v) The company maintains a minimum cash balance of ₹ 10,00,000. The standard deviation of the company's daily cash flow is ₹ 3,60,000. The annual interest rate is 12%. The transaction cost of buying & selling securities is ₹ 180 per transaction. (Assume 360 days in a year). Which of the following is false as per the Miller-Orr model?
 - (A) Upper limit = ₹ 21,23,245
 - (B) Return Point = ₹ 13,74,415
 - (C) Average Cash Balance = ₹ 14,99,220
 - (D) None of the above
- (vi) Which among the following is not an assumption of the Net Income Approach?
 - (A) No Corporate Taxes
 - (B) No Change in Risk Perception
 - (C) Debt Capitalisation Rate is equal to Equity Capitalisation Rate
 - (D) Value of the firm does not remain the same

(b) Match the Statement under Column I with the most appropriate statement under Column II (You may Opt to write only the numeral and the matched alphabet instead of copying the contents into the answer book):

1×4=4

	Column I		Column II
(i)	Miller-Orr Model	(A)	Explicit Cost
(ii)	Retained Earnings	(B)	Uncertain Demand of Cash
(iii)	Annualized Equivalent Present Value	(C)	Certain Demand of Cash
(iv)	Optimal Capital Structure	(D)	Implicit Cost
3-1		(E)	Equal useful lives
		(F)	Unequal useful lives
		(G)	Durand
		(H)	Walter

- (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 book): 1×4=4
 - (i) In the case of a partially debt-financed firm, $k_{\rm o}$ is less than $k_{\rm e}$.
 - (ii) Every source of funds has an explicit cost of capital.
 - (iii) If the PI of a project is less than 1, its NPV will be negative and IRR will be greater than the discount rate.
 - (iv) Average Cash Balance under Miller-Orr Model = Lower Limit + 3/4 Z.

Section-IV

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

Each question carries 12 marks.

- 7. (a) Funds required ₹ 10,00,000, Financial Plan I: 40% Equity Shares of ₹ 10 each to be issued at Rs. 20, Balance 10% Debt, Financial Plan II: 40% Equity Shares of ₹ 10 each to be issued at Rs. 20, 50% in 10% Debt and Balance in 15% Preference Shares, Tax Rate: 25%. Calculate the Indifference Point and Financial Break Even Point. 6
 - (b) Funds required ₹ 10,00,000 to be arranged by the issue of 30% Equity Shares of ₹ 10 each to be issued at ₹ 20, 60% in 10% Debt and Balance by 15% Preference Shares, Tax Rate: 25%. Return on Investment (ROI) is 30%. Calculate Return on Equity Shareholders Funds (ROE).

8. (a) HDR Ltd. provides you with the following information:

Particulars	Machine X
1. Purchase Price of Machine	₹ 6,00,000
2. Working Capital	₹3,00,000
3. Useful Life of the machine	5 years
4. Estimated Salvage Value at the end of useful life	₹ 1,00,000
5. Actual Salvage Value realised at the end of useful life	₹ 1,20,000
6. Method of Depreciation	Straight line
7. Tax Rate	30%
8. Annual Earning before tax	₹ 2,00,000
9. Cost of Capital	10%
10. Annuity Factor for 5 @ 10%	3.791
11. PV Factor for 5th @ 10 %	0.621

You are required to calculate:

(i)	Pay Back Period	2
(ii)	Average Rate of Return (ARR)	2
(iii)	Net Present Value	2
(iv)	Discounted Pay Back Period and	2
(v)	Profitability Index	1

(b) Calculate the Marginal Cost of Capital for the company if it requires additional capital of ₹ 20 lakhs for a new project. It plans to have a target Debt of 331/3% of Equity. The debt will carry an interest rate of 10 % (before tax) for the first ₹ 2,00,000 and 13% (before tax) beyond that. The prevailing default-risk free interest rate on 10-year GOI Treasury Bonds is 5%. The average market risk premium is 12.5%. The beta of the company is 1.2. Company's tax rate is 30%.

9. (a) ALC Ltd. provides you with the following information:

Estimated Level of Activity: Completed Units of Production 1,04,000 plus units of WIP.

Raw-material	19.6% of the selling price
Wages	10.6% of the selling price
Production Overheads (including depreciation of ₹ 15 per unit at the budgeted level of activity)	17.6% of the selling price
Selling Price	₹ 500 per unit
Average raw material in stock	3 weeks
Average work-in-progress (% of completion with respect to Material- 75%, Conversion Cost- 70%)	2 weeks

Finished goods in stock	4 weeks
Credit allowed to debtors	2½ weeks
Credit allowed by creditors	3½ weeks
Time lag in payments of labour	2 weeks
Time lag in payments of Production Overheads	1½ weeks
Cash Sales and Cash Purchases	25%

The company believes in keeping $\overline{\xi}$ 3,00,000 available to it including the overdraft limit of $\overline{\xi}$ 75,000 not yet utilized by the company.

Provision for contingencies is required @ 4% of working capital requirement including that provision.

Assume that production is carried on evenly throughout the year (52 weeks) and wages and overheads accrue similarly.

You are required to calculate the Net Working Capital Requirement on Cash Cost Basis if ALC Ltd. is a newly formed company.

(b) A garment trader is preparing a cash forecast for the first three months of the calendar year 2023. His estimated sales for the forecasted periods are as below:

Particulars	January February		March	
	(₹ in 000)	(₹ in 000)	(₹ in 000)	
Total Sales	600	600	800	

- (i) The trader sells directly to the public against cash payments and to other entities on credit. Credit sales are expected to be four times the value of direct sales to the public. He expects 15% of customers to pay in the month in which credit sales are made, 25% to pay in the next month and 58% to pay in the next to next month. The outstanding balance is expected to be written off.
- (ii) Purchases of goods are made in the month prior to sales and it amounts to 90% of sales and are made on credit. Payments of these occur in the month after the purchase. No inventories of goods are held.
- (iii) Cash balance as of 1st January 2023 is ₹ 50,000.
- (iv) Actual sales for the last two months of the calendar year 2022 are as below:

Particulars	November	December	
We William May co.	(₹ in 000)	(₹ in 000)	
Total sales	640	880	

You are required to prepare a monthly cash budget for the three months from January to March, 2023.

10. Write short notes on any three out of the following:

 $4 \times 3 = 12$

- (a) Meaning and Methods of Venture Capital Financing
- (b) Assumptions and Criticisms of M-M Approach as to Capital Structure
- (c) State only one basic difference between the following:
 - (i) Asset Securitisation and Debt Securitisation
 - (ii) Capital Structure and Financial Structure
 - (iii) Net Operating Income theory and Net Income theory of capital structure
 - (iv) Internal Rate of Return (IRR) and Modified Internal Rate of Return (MIRR)
- (d) State only one basic difference between the following:
 - (i) Aggressive Approach and Conservative Approach of Financing Current Assets
 - (ii) Non-recourse Factoring and Recourse Factoring
 - (iii) Factoring and Forfaiting
 - (iv) Baumol's Model and Miller-Orr's Model Cash Management Model

SUGGESTED ANSWERS TO QUESTIONS

PART - A

SECTION-I

1. (a)

- (i) (B)
- (ii) (B)
- (iii) (A)
- (iv) (B)
- (v) (D)
- (vi) (B)

1. (b)

- (i) (C)
- (ii) (H)
- (iii) (E)
- (iv) (F)

1. (c)

- (i) False
- (ii) True
- (iii) True
- (iv) False

SECTION-II

2. (a)

Estimated Sales = ₹ 24,00,000

2. (b)

Overall Contribution per unit = ₹ 15.8974

3.(a)

Particulars	50%	90%
Sales (In Units)	10000	18000
Sales (In ₹)	₹ 20,00,000	₹ 36,00,000
Total Variable Costs	₹ 4,00,000	₹ 7,20,000
Contribution (Sales – Variable Costs)	₹ 16,00,000	₹ 28,80,000
Total Fixed Costs	₹ 9,60,000	₹ 9,60,000
Profit (Contribution – Fixed Costs)	₹ 6,40,000	₹ 19,20,000

3. (b)

- Efficiency Ratio = 0.9375 or 93.75%
- Activity Ratio = 0.90 or 90%
- Capacity Ratio = 0.96 or 96%
- Calendar Ratio = 0.96 or 96%
- Idle Capacity Ratio = 0.04 or 4%
- Standard Capacity Usage Ratio = 0.8333 or 83.33%
- Actual Usage of Maximum Capacity Ratio = 0.80 or 80%

4. (a)

Skilled Workers = 14 Semi-skilled Workers = 7 Unskilled Workers = 4

4. (b)

Variable Overheads Efficiency Variance = ₹ 2,948.40 (A) Fixed Overheads Efficiency Variance = ₹ 8,283.60 (A) Fixed Overhead Calendar Variance = ₹ 3,540 (F)

5. (a)

Break-even Analysis is a method for examining the relationship between sales revenue, variable costs and fixed costs to determine the minimum value of production necessary to break even. Break Even means the volume of production or sales where there is no profit or loss. In other words, Break Even Point is the volume of production or sales where total costs are equal to revenue. It helps in finding out the relationship between costs and revenues to output. In understanding the breakeven point, cost, volume and profit are always used. The break-even analysis is used to answer many questions of the management in day-to-day business.

Variance Analysis is nothing but the differences between Standard Cost and Actual Cost. In ordinary language we call it difference; in statistics, we call it deviations and in costing terminology we call it variances. When Standard Costing is adopted, the standards are set for all the costs, revenue and profit, and if the difference in case of cost is more than the standard we call it adverse variance, symbolized (A) and if the difference is less than the standard, we call it favourable variance, symbolized (F). However, in the case of sales and profit, if the standard is more than the actual it is an adverse variance and if the standard is less than the actual it is a favourable variance. From this, we understand that variances can be calculated in all the elements of costs, sales and profit too.

Budget Manual is a document which contains standing instructions regarding the procedures to be followed at the time of budget preparation.

5. (b) Basic Differences:

(i) Direct Costing and Marginal Costing:

The primary difference between Direct Costing and Marginal Costing lies in the treatment of fixed direct costs. In Marginal Costing, fixed direct costs are considered as period costs and are not allocated to product costs. On the other hand, Direct Costing allocates both variable and fixed costs directly related to the product to the product cost, absorbing all direct costs into the product cost.

(ii) Marginal Costing and Absorption Costing:

The key distinction between Marginal Costing and Absorption Costing is in the treatment of fixed manufacturing direct and overhead costs. Marginal Costing treats fixed manufacturing direct and overhead costs as period costs and does not allocate them to products. Conversely, Absorption Costing allocates both variable and fixed manufacturing direct & overhead costs to products, incorporating all manufacturing costs into the product cost.

(iii) Period Cost and Product Cost:

The fundamental difference between Period Cost and Product Cost lies in the timing of recognition. Period costs are incurred and expensed during a specific accounting period and are not linked to the production of goods or services. Conversely, Product Costs are incurred to create a product and are recognized as part of the cost of goods sold or inventory.

(iv) Variable Cost and Direct Cost:

The main difference between Variable Cost and Direct Cost is in the treatment of fixed manufacturing direct costs. Variable Costs consider all fixed costs as period costs and do not allocate them to products. On the other hand, Direct Cost allocates both variable and fixed costs directly related to the product to the product cost.

5. (c)

Basic Differences:

(i) Fixed Budget and Flexible Budget:

The main difference between a Fixed Budget and a Flexible Budget lies in their adaptability to changing conditions. A Fixed Budget remains unchanged regardless of the actual level of activity or output achieved. It is based on a single level of activity, typically the budgeted level. In contrast, a Flexible Budget adjusts to changes in the level of activity or output. It allows for different cost levels corresponding to different levels of activity achieved, providing a more realistic assessment of performance in dynamic business environments.

(ii) Sales Budget and Sales Forecast:

The key difference between a Sales Budget and a Sales Forecast is their purpose and level of detail. A Sales Forecast is an estimate of future sales based on historical data, market trends, and other factors. It serves as an essential input in the budgeting process. On the other hand, a Sales Budget is a formal financial plan that outlines the expected sales revenue for a specific period, usually based on the Sales Forecast. It provides a detailed breakdown of sales targets and is used for monitoring and control purposes.

(iii) Cash Budget and Cash Flow Statement:

The primary difference between a Cash Budget and a Cash Flow Statement is their timing of preparation and usage. A Cash Budget is a forward-looking financial plan that estimates the expected cash inflows and outflows for a specific future period. It helps a company ensure it has sufficient cash to meet its obligations and manage cash flows effectively. In contrast, a Cash Flow Statement is a historical financial statement that provides a summary of cash inflows and outflows for a past period, typically a month or a year. It reports on the actual cash movement within the organization.

(iv) Zero Base Budget and Conventional Budget (or Traditional Budget):

The main difference between Zero Base Budgeting and Conventional (or Traditional) Budgeting is their approach to budget formulation. Conventional Budgeting involves adjusting the previous period's budget (usually incremental changes) to arrive at the new budget. It starts with the existing budget as a base. In contrast, Zero Base Budgeting requires each budget item to be justified from scratch, regardless of whether it was present in the previous period's budget. It starts from a "zero base," and all expenses must be justified based on their necessity and contribution to organizational goals.

5. (d)

Basic Differences:

(i) Standard Cost and Estimated Cost:

The primary difference between Standard Cost and Estimated Cost is their purpose and usage. Standard Cost represents the predetermined cost that management expects to incur for the production of goods or services under normal operating conditions and efficiency levels. It serves as a benchmark against which actual costs are compared for performance evaluation and cost control. On the other hand, Estimated Cost is an approximate calculation of future costs based on available information, but it is not necessarily used as a performance benchmark like Standard Cost.

(ii) Standard Costing and Historical Costing:

Standard Costing and Historical Costing are different costing methods used for performance evaluation. Standard Costing involves the application of predetermined standard costs to measure and evaluate performance. It compares actual costs with the predetermined standard costs to identify variances and assess efficiency. Historical Costing, on the other hand, relies on actual historical costs incurred for measuring performance. It does not involve the use of predetermined standards but rather focuses on actual costs as the basis of evaluation.

(iii) Standard Costing and Budgetary Control:

Standard Costing and Budgetary Control are two distinct management control techniques used for different purposes. Standard Costing focuses on measuring and evaluating the efficiency of the production process by comparing actual costs with predetermined standard costs. It helps in cost control and performance evaluation. Budgetary Control, on the other hand, involves the formulation of budgets for various business functions and comparing actual results with budgeted amounts to assess overall financial performance and achieve financial goals.

(iv) Standard Hour and Budgeted Hour:

Standard Hour refers to the predetermined time expected to be taken by a worker or a machine to complete a specific task or produce output. These hours are based on the company's predetermined standards or expectations for efficiency and productivity whereas Budgeted Hours, on the other hand, are the anticipated or planned hours of work for a particular period, such as a month or a year. These hours are part of the budgeting process and are used to estimate labour costs and resource requirements for the planned level of production or operations.

PART – B SECTION–III

6. (a)

- (i) (D)
- (ii) (D)
- (iii) (C)
- (iv) (A)
- (v) (D)
- (vi) (C)

6. (b)

- (i) (B)
- (ii) (D)
- (iii) (F)
- (iv) (G)

6. (c)

- (i) True
- (ii) False
- (iii) False
- (iv) True

SECTION-IV

7. (a)

The Indifference point between Financial Plan I and Financial Plan II is indeterminate.

Financial Break-Even Point for Plan I = 30000

Financial Break-Even Point for Plan II = ₹ 70,000

7. (b)

Return on Equity Shareholders Funds = 0.55 or 55%

8. (a)

- (i) Pay Back Period = 3.75 years or 3 years 9 months
- (ii) Average Rate of Return = 0.2154 or 21.54%
- (iii) Net Present Value = ₹ 2,66,934
- (iv) Present Value of Cash inflows of 5th year = ₹ 4,06,134 Discounted Pay Back Period = 4.3427 years or 4 years 4.11 months
- (v) Profitability Index = 1.2966

8. (b)

Marginal Cost of Capital = 0.17065 or 17.065%

9. (a)

Net Working Capital Requirements (On Cash Cost basis) = ₹ 31,68,399

9.(b)Cash Budget from January 2023 to March 2023

Particulars	January 2023	February 2023	March 2023
	(In ₹)	(In ₹)	(In ₹)
Opening Balance	50,000	1,74,960	3,55,280
Cash Sales	1,20,000	1,20,000	1,60,000
Received from Debtors	5,44,960	6,00,320	4,94,400
Payment to Creditors	5,40,000	5,40,000	7,20,000
Closing Balance	1,74,960	3,55,280	2,89,680

10. (a)

Meaning and Methods of Venture Capital Financing

Venture Capital Financing

Venture Capital is a form of equity financing especially designed for funding high-risk and high-reward projects. The term 'Venture Capital' represents a financial investment in a highly risky project with the objective of earning a high rate of return.

There is a common perception that Venture Capital is a means of financing high-technology projects. However, Venture Capital is an investment of long-term finances made in:

- 1. Ventures promoted by technically or professionally qualified but unproven entrepreneurs, or
- 2. Ventures seeking to harness commercially unproven technology, or
- 3. High-risk ventures

Method of Venture Capital Financing

- 1) Equity: Most venture capital funds provide financial support to entrepreneurs in the form of equity by financing 49% of the total equity. This is to ensure that the ownership and overall control remain with the entrepreneur. Since there is a great uncertainty about the generation of cash inflows in the initial years, equity financing is the safest mode of financing. A debt instrument on the other hand requires periodical servicing of dept.
- 2) Conditional Loan: From a venture capitalist point of view, equity is an unsecured instrument hence a less preferable option than a secured debt instrument. A conditional loan usually involves either no interest at all or a coupon payment at a nominal rate. In addition, a royalty at agreed rates is payable to the lender on the sales turnover. As the units pickup in sales levels, the interest rate is increased and royalty amounts are decreased.
- 3) Convertible Loans: The convertible loan is subordinate to all other loans which may be converted into equity if interest payments are not made within an agreed time limit.

10. (b)

Assumptions and Criticisms of M-M Approach as to Capital Structure:

Assumptions of the MM Approach

- 1. There is a perfect capital market. Capital markets are perfect when:
 - (i) Investors are free to buy and sell securities,
 - (ii) They can borrow funds without restriction at the same terms as the firms do,
 - (iii) They behave rationally,
 - (iv) They are well-informed, and
 - (v) There are no transaction costs.
- 2. Firms can be classified into homogeneous risk classes. All the firms in the same risk class will have the same degree of financial risk.
- 3. All investors have the same expectation of a firm's net operating income (EBIT).
- 4. The dividend pay-out ratio is 100%, which means there are no retained earnings.
- 5. There are no corporate taxes.

Criticisms of the M-M Approach

The arbitrage process is the behavioural and operational foundation for M M Hypothesis. But this process fails the desired equilibrium because of the following limitations.

- (i) Rates of interest are not the same for individuals and firms. The firms generally have a higher credit standing because of which they can borrow funds at a lower rate of interest as compared to individuals.
- (ii) Home Made leverage is not a perfect substitute for corporate leverage. If the firm borrows, the risk to the shareholder is limited to his shareholding in that company. But if he borrows personally, the liability will be extended to his personal property also. Hence, the assumption that personal or homemade leverage is a perfect substitute for corporate leverage is not valid.
- (iii) The assumption that transaction costs do not exist is not valid because these costs are necessarily involved in buying and selling securities.
- (iv) The working of arbitrage is affected by institutional restrictions, because institutional investors are not allowed to practice homemade leverage.
- (v) The major limitation of M M hypothesis is the existence of corporate taxes. Since the interest charges are tax deductible, a levered firm will have a lower cost of debt due to tax advantage when taxes exist.

10. (c)

Basic Differences:

- (i) The basic difference between Asset Securitisation and Debt Securitisation is the nature of the underlying assets. In Asset Securitisation, a pool of diversified financial assets (e.g., mortgages, loans) is converted into tradable securities, while in Debt Securitisation, the focus is on converting existing debt obligations (e.g., bonds, loans) into marketable securities, backed by the debtors' repayment commitments.
- (ii) Capital Structure and Financial Structure are terms often used interchangeably, but there is a subtle difference. Capital Structure refers specifically to the mix of long-term debt, equity, and other financial instruments used to finance a company's assets. On the other hand, Financial Structure encompasses a broader perspective, including both short-term and long-term sources of funds and how they are allocated to various assets and operations within the organization.
- (iii) Net Operating Income theory and Net Income theory of capital structure differ in their focus. Net Operating Income (NOI) theory suggests that the cost of capital is solely influenced by the operating income generated by a firm's assets, irrespective of the financing mix. In contrast, the Net Income theory asserts that the capital structure decision affects the overall cost of capital, as financial

- leverage impacts the cost of equity capital, leading to changes in the firm's net income and its market value.
- (iv) Internal Rate of Return (IRR) and Modified Internal Rate of Return (MIRR) are both measures of investment performance. The key difference lies in how they handle cash flows. IRR assumes that cash flows are reinvested at the project's IRR, which may not be practical. MIRR addresses this limitation by assuming that positive cash flows are reinvested at a firm's cost of capital and computes a single, more realistic rate of return for the investment.

10. (d)

Basic Differences:

- (i) The basic difference between the Aggressive Approach and the Conservative Approach of Financing Current Assets lies in their risk and profitability trade-off. The Aggressive Approach involves financing a significant portion of current assets with short-term debt, aiming to maximize profitability through increased leverage. However, this exposes the company to higher liquidity and refinancing risks. On the other hand, the Conservative Approach relies on more long-term financing and less short-term debt, prioritizing lower risk even though it might result in slightly lower profitability.
- (ii) The key difference between Non-recourse Factoring and Recourse Factoring is the party assuming credit risk. In Non-recourse Factoring, the factor assumes the credit risk of the accounts receivables, meaning if the debtor fails to pay, the factor absorbs the loss. In Recourse Factoring, the seller retains the credit risk, and if the debtor defaults, the factor has the right to seek payment from the seller, shifting the risk back to them.
- (iii) Factoring and Forfaiting are both methods of financing receivables, but they differ in the type of transactions involved. Factoring is typically used for short-term domestic receivables and involves the outright purchase of receivables by the factor. Forfaiting, on the other hand, is used for long-term export receivables and involves the purchase of trade receivables related to exports without recourse to the exporter. It is a form of financing with fixed, negotiable terms.
- (iv) Baumol's Model and Miller-Orr's Model are cash management models that differ in their approach to cash balance management. Baumol's Model suggests maintaining a constant cash balance to minimize transaction costs and opportunity costs associated with holding cash. In contrast, Miller-Orr's Model uses upper and lower control limits to determine when to invest or disinvest excess cash. It aims to minimize the costs of both holding cash and making transactions, providing a more dynamic approach to cash management.