INTERMEDIATE EXAMINATION

December 2019

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.
Please (1) Write answers to all parts of a question together.
(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 each.

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) A budget that gives a summary of all the functional budgets and projected Profit and Loss A/c is known as

(A) Master budget

(B) Flexible budget

(C) Performance budget

(D) Discretionary budget

(ii) When there are no opening or closing stocks, profit under marginal costing will be

(A) Greater than in absorption costing

(B) Less than in absorption costing

(C) Equal to absorption costing

(D) Greater, Lower or Equal depending on certain factors

(iii) Break Even Point can be reduced by

(A) Increasing selling price per unit

(B) Reducing the variable costs

(C) Reducing fixed costs

(D) All of the above

(iv) One of the following is not within the scope of Management Accounting

(A) Formulation of policies

(B) Classification and collection of costs

(C) Planning and co-ordinating the activities of the enterprise

(D) Decision making on alternative courses of action

(v) AB company budgets for fixed overhead of ₹ 24,000 and Production of 4800 units. Actual Production is 4200 units. If fixed overhead cost increased is ₹ 22,000, the Fixed overhead volume variance will be

(A) ₹ 1,000 (Adv.)

(B) ₹ 2,000 (Fav.)

(C) ₹ 3,000 (Adv.)

(D) ₹ 3,000 (Fav.)

(vi) Which one of the following does not describe a Transfer Pricing Method?

(A) Negotiated Transfer Pricing

(B) Market Price based Transfer Pricing

(C) Fixed Cost Based Transfer Pricing

(D) Opportunity Cost based Transfer Pricing

(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 coping the contents into the answer book): 1×4=4

	Column-I		Column-II
(i)	Absorption Costing	(A)	is concerned with accounting information, which is useful to Management.
(ii)	Management Accounting	(B)	at which total revenue is equal to total cost.
(iii)	Break Even Point	(C)	is frequently used in conjunction with establishing bid price for contract.
(iv)	Learning Curve	(D)	both Fixed and Variable costs are considered for Inventory valuation.

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

(i) A Sequential profit graph is prepared when multiple products are produced.

(ii) Management Accounting is largely based on accuracy than estimates.

(iii) Zero-Base budgeting is more suitably applicable to Discretionary Cost areas.

(iv) The PV ratio increases when the fixed costs of a firm decreases.

Section-II

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

Each question caries 12 marks.

2. (a) REAXON LTD. a manufacturing company provides you the following details for the year 2018.

Sales (16,000 units)	₹ 16,00,000
Less Expenses (including ₹ 8,00,000 Fixed Expenses)	₹ 17,60,000
Net loss	₹ 1,60,000

The manager believes that an increase of ₹ 4,00,000 in advertising outlays will increase sales substantially. His plan was approved by the chairman of the board:

Required:

(i) Calculate P/V Ratio and Break Even Sales.

(ii) What additional sales will be required to offset that increase in advertisement outlays?

(iii) What should be selling price per unit if the breakeven point is brought down to 20,000 units? 6

(b) ZEESLIN LTD. has furnished the following relevant information for the two years:

Year ended March 31	2018	2019
Sales	₹ 9,30,000	?
Profit/Volume Ratio (P/V ratio)	50%	38%
Margin of Safety sales as a % of total sales	40%	22%

There has been substantial savings in the fixed cost in the year 2019 due to the restructuring process. The company could maintain its sales quantity level of 2018 in 2019 by reducing selling price.

You are required to calculate the following:

(i) Sales for 2019 in ₹

(ii) Fixed cost for 2019

(iii) Break-even sales for 2019 in Rupees. 6

3. (a) ESKAY LTD. a manufacturing company operating Standard Costing System produces a product Cemco by blending two basic raw materials. The following standard have been set up for materials:

Material	Standard Mix	Standard Price per kg
A	40%	20
B	60%	30

Standard loss in process is 10%. During the month of September 2019 the Company produced 182 kg of Cemco. The Cost records for the period showed the following usage:

Material	Quantity (kg)	Price per kg (₹)
A	90	18
B	110	34

You are required to calculate the following Material Variances:

(i) Material Cost Variance (MCV)

(ii) Material Price Variance (MPV)

(iii) Material Usage Variance (MUV) 6

(b) The following information is extracted from the records of ALJHON LTD. a manufacturing company using standard costing system for the month ending October, 2019.

	Budget	Actual
Fixed overhead	₹ 10,000	₹ 12,000
Production (units)	2,000	2,100
Standard time per unit (hours)	10	—
Actual hours worked	—	21,000

Required:

Calculate the following Fixed Overhead Variances:

(i) Fixed Overhead Cost Variance

(ii) Fixed Overhead Expenditure Variance

(iii) Fixed Overhead Volume Variance 6

4. (a) The following data have been compiled for TTA Tea Co regarding the budgeted and actual production of green tea packets for six months ending 30 June, 2019.

	(Amount in ₹)	
Production	Units 40,000 (Budgeted)	Units 50,000 (Actual)
Material Consumed	1,35,000 (45,000 kgs @ ₹ 3 per kg)	1,89,750 (55,000 kgs @ ₹ 3·45)
Wages at 3 hrs. per unit	1,80,000 (@ ₹ 1·5 per hr.)	2,44,500 (@ ₹ 1·63 per hr.)
Variable overheads	80,000 (@ ₹ 2·00 per unit)	1,25,000 (@ ₹ 2·50)
Fixed overheads	75,000	1,00,000
Total	4,70,000	6,59,250

During the budgeted period:

(i) Production is expected to go up to 60,000 units.

(ii) Material required is expected to go up to 65,000 kgs for production.

(iii) The prices of materials are expected to increase further in the same manner as they had increased over the budgeted price.

(iv) Labour charges are expected to increase by ₹ 0·50 per hour above the actual rate shown above though efficiency is expected to decline by 20%.

(v) Variable overheads are expected to increase by 10% over June 2019 Actual.

(vi) Fixed overheads are expected to increase by 20% over June 2019 Actual.

You are required to prepare the Production Cost Budget for the six months ending 31st December, 2019. 5

(b) Division Z of STAREX LTD. is a profit center which produces four products A, B, C and D. Each product is sold in the external market also. Following data are available for the period:

	A	B	C	D
Market price per unit (₹)	600	580	560	510
Variable cost of production per unit (₹)	520	400	360	335
Labour hours required per unit (₹)	3	4	2	3

Product D can be transferred to division Y, but the maximum quantity that may be required for transfer is 15,000 units of D.

The maximum sales in the external market are:

A	16,800 units
B	15,000 units
C	13,800 units
D	9,600 units

Division Y can purchase the same product at a price of ₹ 500 per unit from outside instead of receiving transfer of product D from Division Z.

Required:

What should be the transfer price for each unit for 15,000 units of D, if the total Labour hours available in division Z are 1,20,000 hours. 7

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

(a) Significance of Management Accounting

(b) Zero-Base Budgeting (ZBB)

(c) Limitations of Uniform Costing

(d) Uses of Learning Curve (LC)

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) Of the product of which two ratios is the ROI composed?

(A) Overall Turnover Ratio and Current Ratio

(B) Net Profit Ratio and Fixed Assets Turnover

(C) Working Capital Turnover Ratio and Net Profit Ratio

(D) Net Profit Ratio and Overall Turnover Ratio

(ii) A firm determines the shareholders' wealth by taking

(A) the number of people employed in the firm.

(B) the book value of the firm's assets less the book value of its liabilities.

(C) the amount of salary paid to its employees.

(D) the market price per share of the firm.

(iii) Capital Budgeting techniques which considers the time value of money is based on

(A) Cash Flows of the organisation

(B) Accounting Profit of the organisation

(C) Interest Rate on Borrowings

(D) Last Dividend Paid

(iv) Debt Financing is a cheaper source of finance because of

(A) Time Value of Money.

(B) Rate of Interest.

(C) Tax-deductibility of Interest.

(D) Dividends not Payable to lenders.

(v) What should be the optimum Dividend payout ratio, when r=12% and Ke=10%?

(A) Zero

(B) 50%

(C) 12%

(D) 100%

(vi) The term Float is used in

(A) Receivable Management

(B) Cash Management

(C) Marketable Management

(D) Inventory Management

(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 coping the contents into the answer book): 1×4=4

	Column-I		Column-II
(i)	Defensive interval Ratio	(A)	Exporter relinquishes the right to a receivable due in future for immediate cash payment
(ii)	Capital Asset pricing model	(B)	Two control limits are used for managing balances
(iii)	Forfeiting	(C)	Risk- return trade off securities
(iv)	Miller and Orr model of Cash Management	(D)	Liquidity of a firm in relation to its ability to meet daily operating expenditure

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

(i) Wealth maximization goal is only an extension of profit maximization goal of the organization.

(ii) Cost of capital is not the minimum required rate of earning or the cut off rate of capital Expenditure.

(iii) Low degree of operating leverage and high degree of financial leverage is not an ideal situation.

(iv) IRR indicated that the discounting rate at which net present value is Zero.

Section-IV

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

Each question caries 12 marks.

7. (a) With the help of the following information, complete the Balance Sheet of MENWOOD LTD. as at 31st March, 2019.

Equity share capital	₹ 1,00,000
The relevant ratios of the company are as follows:	
Current debt to total debt	0·40
Total debt to owner's equity (Equity Shares Capital)	0·60
Fixed assets to owner's equity (Equity Shares Capital)	0·60
Total assets turnover	2 Times
Inventory turnover	8 Times

6

(b) SHELLICOLA (IND) LTD. has furnished the following information for the year ended 31st march, 2019.

	(₹ in lakhs)
Net profit	35,500·00
Dividend (including interim dividend paid)	10,000·00
Provision for Income Tax	7,500·00
Income Tax paid during the year	6,300·00
Loss on sale of assets (net)	60·000
Book value of assets sold	250·00
Depreciation charged to P&L Account	30,000·00
Profit on Sale of investments	150·00
Value of investments sold	40,650·00
Interest expenses (due during the year)	15,000·00
Interest paid during the year	15,780·00
Increase in working capital (excluding cash and bank balance)	84,100·00
Purchase of fixed assets	840·00
Opening cash and bank balances	1,032·50
Closing cash and bank balances	12,912·50

You are required to prepare the cash flow statement in accordance with AS 3 (Revised) ended march 31, 2019. 6

8. (a) BENTECH (I) LTD. is presently having credit sales of ₹ 12 lakh. The existing credit terms are 1/10, net 45 days and average collection period is 30 days. The current bad debts loss is 1·5%. In order to accelerate the collection process further as also to increase sales, the company is contemplating liberalization of its existing credit terms to 2/10, net 45 days. It is expected that sales are likely to increase by 1/3 of existing sales, bad debts increase to 2% of sales and average collection period to decline to 20 days. The contribution to sales ratio of the company is 22% and opportunity cost of investment in receivables is 15 per cent (pre-tax). 50 per cent and 80 per cent of customers in terms of sales revenue are expected to avail cash discount under existing and liberalization scheme respectively. The tax rate is 30%.

(Assume 360 days in a year.)

Required:

Should the Company change its credit terms? 6

(b) NESTINO LTD. had the following Balance Sheet as on March 31, 2019.

Liabilities and Equity	**₹ (in crores)**	**Assets**	**₹ (in crores)**
Equity Share Capital (one crore shares of ₹ 10 each)	10	Fixed Assets (Net)	25
Reserves and Surplus	2	Current Assets	15
15% Debentures	20		
Current Liabilities	8		
	40		40

The additional information given is as under:

Fixed Costs per annum (exclusive interest)	₹ 8 crores
Variable operating costs ratio	65%
Total Assets turnover ratio	2·5
Income-tax rate	40%

Required:

Calculate the following:

(i) Earnings per share

(ii) Operating Leverage

(iii) Financial Leverage

(iv) Combined Leverage 6

9. (a) The following is the capital structure of ZENITH LTD.:

Source of capital	**Book value**	**Market value**
	₹	₹
Equity shares @ ₹ 100 each	80,00,000	1,60,00,000
9 per cent cumulative preference shares @ ₹ 100 each	20,00,000	24,00,000
11 per cent debentures	60,00,000	66,00,000
Retained earning	40,00,000	—
	2,00,00,000	2,50,00,000

The current market price of the company's equity share is ₹ 200. For the last year the company had paid equity dividend at 25 per cent and its dividend is likely to grow 5 per cent every year. The corporate tax rate is 30 per cent and shareholders personal income tax rate is 20 per cent.

You are required to calculate:

(i) Cost of capital for each source of capital.

(ii) Weighted average cost of capital on the basis of market value weights. 6

(b) MONPTEK LTD. wants to replace its old machine with a new automatic machine. Two models A and B are available at the same cost of ₹ 5 lakhs each. Salvage value of the old machine is ₹ 1 lakh. The utilities of the existing machine can be used if the company purchases A. Additional cost of utilities to be purchased in that case is ₹ 1 lakh. If the company purchases B then all the existing utilities will have to be replaced with new utilities costing ₹ 1·8 lakhs. The earnings after taxation are expected to be:

Year	(cash in-flows of)		
	A ₹	B ₹	P.V. Factor @ 15%
1	1,00,000	2,00,000	0·87
2	1,50,000	2,10,000	0·76
3	1,80,000	1,80,000	0·66
4	2,00,000	1,70,000	0·57
5	1,70,000	40,000	0·50
Salvage Value at the end of Year 5	50,000	60,000	

The targeted return on capital is 15%.

Based on Profitability Index Criterion, **advise the company** on which machine should be taken up by it. 6

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

(a) Process of Debt Securitization

(b) Determinants of Working Capital

(c) Significance of Degree of Financial Leverage

(d) Need of Capital Budgeting Decision.
