

INTERMEDIATE EXAMINATION

December 2018

**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 (i) Write answers to all parts of a question together.

(ii) Open a new page for answers to a new question.

(iii) 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) The well-known basic function of management is

- (A) Motivating
- (B) Leadership
- (C) Decision-making ✓
- (D) Communicating

Please Turn Over

- (ii) Contribution margin is equal to
- (A) Sales-Fixed Cost—Profit
 - (B) Profit + Variable Cost
 - (C) Fixed Cost – Loss •
 - (D) None of the above
- (iii) In a system whereby all activities are revaluated each time a budget is formulated and starts with the assumption that requirement of funds does not exist is called
- (A) Performance Budgeting •
 - (B) Programme Budgeting
 - (C) Flexible Budgeting
 - (D) Zero-based Budgeting
- (iv) The management's time is saved by reporting only the deviations from the predetermined standards is called
- (A) Management by objectives
 - (B) Budgetary Control
 - (C) Standard Costing •
 - (D) Management by Exception
- (v) Marginal Costing is also known as
- (A) Direct Costing
 - (B) Absorption Costing
 - (C) Variable Cost
 - (D) Variable Costing •
- (vi) Another name for 'Contribution' is
- (A) Marginal Income •
 - (B) Gross Profit
 - (C) Net Income
 - (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 the matched alphabet instead of copying the contents into the answer book): 1×4=4

Column I		Column II	
1	Learning Curve	(A)	Theodore P. Wright ₄
2	Transfer Price	(B)	Cumulative Average Time ₁
3	Experience Curve	(C)	Notional Value ₂
4	Factors affecting the cost of Airlines	(D)	Boston Consulting Group ₃

- (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 Costing may not be suitable for small concerns. ₄
- (ii) Production Budget is prepared before Sales Budget. ₄
- (iii) Budgets are always prepared for one year. ₄
- (iv) At Break Even Point, the Margin of Safety is nil. ₄

Section II

Answer any three questions from Question Nos. 2, 3, 4 and 5.

Each question carries 12 Marks.

2. (a) CADINI LTD., a factory engaged in manufacturing Plastic Buckets is working to 40% capacity and produces 10,000 Buckets per annum. The present cost break-up for one Bucket is:

Material	- ₹ 10	
Labour	- ₹ 3 and	
Over head	- ₹ 5 (out of which 60% is fixed)	

20000
15000

50,000
30,000

20,000

The Selling Price is ₹ 20 per Bucket.

If it is decided to work the factory at 50% capacity, the Selling Price falls by 3%.

Calculate:

- (i) The profit at 50% capacity,
(ii) Break Even Quantity in units.

19.4
15.4

4.40
3.2

1.4

120000

4+2=6

120000
90000

30,000
18000

12000

Please Turn Over

- (b) XER Co. manufactures an electronic product and puts a price tag of ₹ 190.00 as wholesale price. The company has a production and storage facility with a 100,000 unit monthly output capacity based on running an 8 hours shift each workday.

Estimated Costs are given below:

Monthly Fixed Costs	(₹)	Per Unit Costs	(₹)
Building Depreciation	2,50,000	Production Labour	45-00
Project Management	1,75,000	Supervisors Charges	5-00
Advertising Costs	3,00,000	Material Handling	8-00
Network Administration	75,000	Sales Commissions	12-00
Office Expenses	1,50,000	Materials	70-00
Equipment (Depreciation)	2,00,000	Electricity Costs	3-00

Required:

- Based on the information provided, what quantity must this firm produce in order to be at breakeven?
- If the firm produces at the plant's capacity, what is the minimum price at which the firm can sell the product and still breakeven?
- Suppose the firm seeks to target profit of ₹ 30,00,000 from this product based on the input costs and wholesale price noted in the problem. How many units would the firm need to produce to generate the required profit?

3. (a) The following information is available from the records of REEDYAAH LTD. a manufacturing company using Standard Costing System for the week ended April 30, 2018:

	Standard		Actual	
	Qty.	Unit Price	Qty.	Unit Price
Material 'A'	60%	₹ 20	44 kg	₹ 25
Material 'B'	40%	₹ 10	66 kg	₹ 5
Processing loss	10%	—	—	—
			Actual output 90kg.	

Required:

Calculate from the information stated Supra:

- Material Cost Variance.
- Material Price Variance
- Material Usage Variance
- Material Mix Variance
- Material Yield Variance

- (b) The following information has been obtained from the records of PURNOMINA LTD., a manufacturing organization using the Standard Costing System for the month ended March 31, 2018:

	Budget	Actual
Production (Units)	4000	3800
Working days	20	21
Fixed overhead (₹)	40000	39000

You are required to calculate the following overhead cost variances:

- Fixed overhead expenditure variance;
- Fixed overhead volume variance;
- Fixed overhead efficiency variance;
- Fixed overhead calendar variance;
- Fixed overhead cost variance;

6

4. (a) You are given the following particulars concerning MINTEX LTD, a manufacturing organisation:

	At 80% capacity (₹)
<i>Variable Overheads:</i>	
Indirect Labour	12,000
Stores (including Spares)	4,000
<i>Semi-Variable Overheads:</i>	
Power (30% Fixed)	20,000
Repairs & Maintenance (60% Fixed)	2,000
<i>Fixed Overheads:</i>	
Depreciation	11,000
Insurance	3,000
Salaries	10,000
Total Overheads	62,000
Estimated Directed Labour Hours	124,000 Hours.

Handwritten notes:
 14000 - Variable
 6000 - Fixed
 12000 - Fixed
 8000 - Variable

You are required to:

- Draw a Flexible Budget for Overhead expenses on the basis of the above data at 80% and 90% Plant Capacity.
- Determine the Overhead Rates at 80% and 90% Plant Capacity. 4+2=6

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- (b) RADIANCE ENGINES LTD. manufacture engines mounting for Akash airlines. They have been asked to bid on a prospective contract for 30 engines mounting for the Jet aircraft. They have just completed and initial run of 10 of these mounting at the following costs:

Particulars	Amount in ₹
Direct materials	7,000
Direct labour (2000 hours @ ₹ 4)	8,000
Variable overhead (₹ 0.50 per labour hour)	1,000
Fixed overhead (₹ 1 per labour hour)	2,000
	18,000

An 80% learning curve is thought to be pertinent in this case. Marketing Director believes that the quotation is unlikely to be accepted if it exceeds ₹ 38,000 and as the company are short of work, he believes the contract to be vital.

You are required to comment whether it is worth accepting at ₹ 38,000.

6

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

4×3=12

- Application of Marginal Costing in Decision Making
- Advantages of Standard Costing
- Distinctive Features of Learning Curve Theory
- Difference between Fixed and Flexible Budget (Any four points)

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 the alphabet chosen for your answer):

1×6=6

- Which of the following does not help to increase Current Ratio?
 - Issue of Debentures to buy Stock
 - Issue of Debentures to pay Creditors
 - Sale of Investment to pay Creditors
 - Avail Bank Overdraft to buy Machine

(ii) Which of the following is not considered while preparing cash budget?

- (A) Accrual Principal.
- (B) Difference in Capital and Revenue items.
- (C) Conservation Principle.
- (D) All of the above ✓

(iii) Cost of capital may be defined as:

- (A) Weighted Average cost of all debts. ✓
- (B) Rate of Return expected by Equity Shareholders.
- (C) Average IRR of the Projects of the firm.
- (D) Minimum Rate of Return that the firm should earn.

(iv) At Indifference level of EBIT, different capitals have:

- (A) same EBIT. ✓
- (B) same EPS.
- (C) same PAT.
- (D) same PBT.

(v) ABC Analysis is used in

- (A) Inventory Management.
- (B) Receivables Management. ✓
- (C) Accounting Policies.
- (D) Corporate Governance.

(vi) Which of the following is not incorporated in Capital Budgeting?

- (A) Tax-Effect.
- (B) Time Value of Money. ✓
- (C) Required Rate of Return.
- (D) Rate of Cash Discount.

- (b) Match the statement under Column I with the most appropriate statement in Column II off to (You may opt to write only the numeral and matched alphabet instead of copying contents into the answer book): 1×4=4

Column I		Column II	
(1)	Gordon's Model	(A)	Activity Ratio ✓
(2)	Discounted Cash Flow	(B)	Inventory Management 3
(3)	Carrying Cost	(C)	Internal Rate of Return ✓
(4)	Working Capital Turnover Ratio	(D)	Relevance of Dividends on share value ✓

- (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 statements into the answer book.) 1×4=4

- (i) In mutually exclusive capital budgeting decisions, the firm can accept all feasible proposals. ✓
- (ii) Weighted Average Cost of Capital is always calculated with reference to book value of different sources of funds. ✓
- (iii) Debt-Equity Ratio is a measure of long-term solvency of a firm. ✓
- (iv) Capital Rationing is a situation when the Government has imposed a ceiling on investment by a firm. ✓

Section IV

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

Each question carries 12 Marks.

7. (a) Complete the Balance Sheet in the table below for TANISH LTD. using the following financial data:
- Total Debt to Net Worth = 1 : 2 $\frac{M}{D}$
 - Total Assets Turnover = 2 $\frac{Sales}{A}$
 - Gross Profit on Sales = 30% $\frac{GP}{Sales}$
 - Average Collection Period (Assume 360 days in a year) = 40 days
 - Inventory Turnover Ratio on Cost of Goods Sold and year-end inventory = 3
 - Acid Test Ratio = 0.75

Balance Sheet as on 31st March 2018			
Liabilities	₹	Assets	₹
Equity Share Capital	4,00,000	Plant & Machinery & Other Fixed Assets	--
Reserves and Surplus	6,00,000		
Total Debt:		Current Assets:	
Current Liabilities	--	Inventory	--
		Debtors	--
		Cash	--
Total	--	Total	--

Assume that there is no Bank OD in this Balance Sheet Format.

(b) VEDIKA LTD. gives you the following information for the year ended 31st March, 2018:

- (i) Sales for the year totalled ₹ 96,00,000. The company sells goods for cash only.
- (ii) Cost of goods sold was 60% of sales. Closing inventory was higher than opening inventory by ₹ 20,000. $\rightarrow 5760000 - 32,40,000$
- (iii) Tax paid amounted to ₹ 7,00,000. Other expenses totalled ₹ 21,45,000. Outstanding expenses on 31st March, 2017 and 31st March, 2018, totalled ₹ 82,000 and ₹ 91,000 respectively.
- (iv) New machinery and furniture costing ₹ 10,50,000 in all were purchased. One equipment was sold for ₹ 20,000.
- (v) A right issue was made of 50,000 shares of ₹ 10 each at a premium of ₹ 3 per share. The entire money was received with application.
- (vi) Dividends totalling ₹ 4,00,000 were distributed among the shareholders.
- (vii) Cash in hand and at Bank as at 31st March, 2017 and 31st March, 2018 totalled ₹ 2,10,000 and ₹ 4,14,000 respectively.

You are required to prepare cash flow statement as per CAS-3 for the year ended 31st March, 2018 using the Direct method.

8. (a) GOLDEN GARMENT LTD. manufactures readymade garments and sells them on credit basis through a network of dealers. Its present sale is ₹ 60 lakh per annum with 20 days credit period. The company is contemplating an increase in the credit period with a view to increasing sales. Present variable costs are 70 per cent of sales and the total fixed costs ₹ 8 lakh per annum. The

Please Turn Over

company expects pre-tax return on investment @ 25 per cent. Some other details are given as under:

Proposed credit policy	Average collection period (days)	Expected annual sales (Amount in ₹ lakh)
I	30	65
II	40	70
III	50	74

Required:

Which credit policy should the company adopt?

Present your answer in a tabular form. Assume 360-day a year. Calculations should be made up to two digits after decimal. Ignore taxation. 7

- (b) Jai & Karti Ltd. sells 1000,000 bottles of Soda in a year. Each bottle produced has a variable cost of ₹ 5 and sells for ₹ 10. Fixed operating costs are ₹ 10,00,000. The company has debt of ₹ 12,00,000 at 10% rate of interest.

As a Cost and Management Accountant you are required to **calculate:**

- (i) The Degree of Operating Leverage,
- (ii) The Degree of Financial Leverage, and
- (iii) The Degree of Total Leverage. 5

9. (a) You have been provided the following particulars pertaining to the three companies A LTD., B LTD. and D LTD. operating identical business:

Company	A LTD	B LTD	D LTD
EBIT (₹)	15,00,000	15,00,000	15,00,000
No. of Shares	3,00,000	2,50,000	2,00,000
12% debentures (₹)		9,00,000	10,00,000

Every company expects 12% Return on investment (ROI).

Required:

Find out the value of the Companies A LTD., B LTD. and D LTD. and value of their equity shares as per the Modigliani-Miller (MM) approach. 5

- (b) ZENITH LTD. is faced with the problem of choosing between two mutually exclusive projects A and B. Project A requires a cash outlay of ₹ 10,00,000 and cash running expenses of ₹ 3,50,000 per year. On the other hand, Project B will cost ₹ 15,00,000 and require cash running expenses of ₹ 2,00,000 per year. Both the projects have an eight-year life. Project A has a salvage value of ₹ 40,000 and Project B has a salvage value 1,40,000. The company's tax rate is 50% and it has a 10% required rate of return.

Handwritten note:

$$\frac{R_A - R_D}{R_B - R_C}$$

Required:

Assuming depreciation on straight line basis and that there is no funds constraint for the company, **Ascertain which project** should be accepted.

[Given: **PVIFA** (10%, 8 years) = 5.335 and **PVIF** (10%, 8 years) = 0.467]

Note: Solve the problem by an incremental cash flow approach.

7

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

4×3=12

- (i) Defensive-Interval Ratio (DIR)
- (ii) Venture Capital
- (iii) Advantages of Ratio Analysis
- (iv) Danger of inadequate amount of working capital

CFAT_{pa} × AF_w

CFAT_{pa} × AF_{acc, m.p.}