

INTERMEDIATE EXAMINATION

June 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.
Assumptions, if any, must be clearly indicated.*

- 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 further 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) Decision-marking concerns with:
- (A) Past
 - (B) Future
 - (C) Past and Future both
 - (D) None of the above

Please Turn Over

- (ii) A large Margin of Safety indicates
- (A) Over-Capitalization
 - (B) The soundness of business
 - (C) Over Production
 - (D) None of the above
- (iii) Revision of budgets is
- (A) Unnecessary
 - (B) Cannot determine
 - (C) Necessary
 - (D) Inadequate data
- (iv) Which of the following operating measures would a manager would like to see decreasing over time?
- (A) Merchandise Inventory Turn-over
 - (B) Total quality cost
 - (C) % of on-time deliveries
 - (D) Finished Goods Inventory Turn-over
- (v) Which of the following departments is most likely responsible for a Price Variance in Direct Materials?
- (A) Warehousing
 - (B) Receiving
 - (C) Purchasing
 - (D) Production
- (vi) Another name for the 'Learning Curve' is
- (A) Exponential Curve
 - (B) Growth Curve
 - (C) Production Curve
 - (D) Experience Curve

- ✓ (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 the alphabet instead of copying contents into the answer books.): 1×4=4

Column I		Column II	
1	Distinctive feature of Learning curve _c	(A)	on the principle of exception.
2	Standard Costing works	(B)	is designed to fix responsibilities on executives, through the preparation of budgets.
3	Budgetary Control System _(B)	(C)	is that notional value at which goods and services are transferred between divisions in a decentralized organization.
4	Transfer Price	(D)	Persons engaged in repetitive task will improve his performance over time.

- ✓ (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 Statements into the answer books.): 1×4=4

- 7 (i) Management Accounting is largely based on estimates and as such total accuracy is not ensured under Management Accountancy.
- ✓ (ii) The main objective of Budgetary control is to co-ordinate the different departments.
- (iii) Standard Costing are applicable in Banking Industry.
- (iv) Learning Curve is a Cost Reduction technique.

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Section II

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

Each question carries 12 Marks.

2. (a) QUALITY PRODUCTS LTD., manufactures and markets a single product.

The following data are available:

	₹/Unit
Materials	16
Conversion Costs (Variable)	12
Dealer's Margin (10% of Sales)	4
Selling Price	40
Fixed Cost : ₹ 5 Lakhs	
Present Sales : 90,000 units	
Capacity Utilization : 60%	

There is acute competition. Extra efforts are necessary to sell. Suggestions have been made for increasing sales:

(A) By reducing Selling Price by 5%

(B) By increasing dealer's margin by 25% over the existing rate.

Required:

(i) Which of these two suggestion you would recommend, if the company desires to maintain the present profit?

(ii) Give reasons.

4+2=6

(b) XYZ Co. purchases 40,000 glass cases per annum from an outside supplier at ₹ 5 each. The production manager feels that these should be manufactured and not purchased. A machine

costing ₹ 1,00,000 (no salvage value) will be required to manufacture the item within the factory. The machine has an annual capacity of 60,000 units and life of 5 years. The costs required for manufacture of each glass case is as follows:

Direct Materials	₹ 2.00
Direct Labour	₹ 1.00
Variable overheads	100% of Labour Cost

Required:

- (i) Should the company continue to purchase the glass cases from outside supplier or should it make them in the factory?
 - (ii) Should the company accept an order to supply 10000 glass cases to the market at a selling price of ₹ 4.50 per unit? 3×2=6
3. (a) The Standard Material cost to produce a tonne of prefabricated building material of AJANTA LTD. is:

300 kgs. of material X @ ₹ 10 per kg.

400 kgs. of material Y @ ₹ 5 per kg.

500 kgs. of material Z @ ₹ 6 per kg.

During December 2017, 100 tonnes of mixture prefabricated building material were produced from the usage of:

35 tonnes of material X at a cost of ₹ 9,000 per tonne

42 tonnes of material Y at a cost of ₹ 6,000 per tonne

53 tonnes of material Z at a cost of ₹ 7,000 per tonne

Required:

Calculate the following variances:

- (i) Total material cost variance
- (ii) Total and individual material price variances
- (iii) Total and individual material usage variances

2/2/17

2x 100
Please Turn Over

(b) The following details are available for ABC LTD. A manufacturing company

	Budgeted Expenses, units & hrs	Actual Expenses units & hrs
Variable Overheads (₹)	5,00,000	5,20,000
Output in units	50,000	40,000
Working hours	2,50,000	2,20,000

You are Required to Calculate the following variances:

- (i) Variable Overhead Expenditure Variance
- (ii) Variable Overhead Efficiency Variance
- (iii) Total Variable Overhead Variance

2/3-4

4. (a) PENTAX LTD., has prepared its Expense Budget for 20,000 units in its factory for a year as detailed below:

Particulars	₹/unit
Direct Material	50
Direct Labour	20
Variable Overhead	15
Direct Expenses	6
Selling Expenses (20% Fixed)	15
Factory Expenses (100% Fixed)	7
Administrative Expenses (100% Fixed)	4
Distribution Expenses (85% Variable)	12
Total(₹)	129

Required:

Prepare an Expenditure Budget for the Production of 15,000 units and 18,000 units.

(b) SANAK LTD. received an order to make and supply sixteen units of standard product which involves intricate labour operations. The first unit was made in 8 hours. It is understood that this type of operations is subject to 90% learning rate. The workers are getting a wage rate of ₹ 15 per hour.

Required:

What is the total time and labour cost required to execute the order?

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

(a) Concept of Management Accounting

(b) Performance Budgeting

(c) Transfer Pricing

(d) Difference between Standard Costing and Budgetary Control. (any four)

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 numeral and alphabet chosen for your answer):

(i) Which of the following is a Profitability Ratio?

- (A) Proprietary Ratio
- (B) Debt-Equity Ratio
- (C) Price-Earning Ratio
- (D) Fixed Asset Ratio

(ii) Which of the following is not a source of fund?

- (A) Issue of Capital
- (B) Issue of Debenture
- (C) Decrease in Working Capital
- (D) Increase in Working Capital

(iii) β (Beta) of a security measures its

- (A) Divisible Risk
- (B) Financial Risk
- (C) Market Risk
- (D) None of the above

(iv) The following is not a Discounted Cash Flow Technique:

- (A) NPV
- (B) PI
- (C) Accounting of Average Rate of Return
- (D) IRR

(v) The 'Dividend-Payout Ratio' is equal to

- (A) The Dividend yield plus the capital gains yield
- (B) Dividends per share divided by Earning per Equity Share
- (C) Dividends per share divided by par value per share
- (D) Dividends per share divided by current price per share

(vi) If EBIT = ₹ 1,00,000, Fixed Assets = ₹ 2,00,000, Sales = ₹ 10,00,000 and Variable Cost = ₹ 7,00,000. Then, the Operating Leverage will be

- (A) 2
- (B) 3
- (C) 6
- (D) 4

(b) Match the statement under Column I with the most appropriate statement under Column II:
1x4=4

Column I		Column II	
1.	Dividend Models	(A)	Modigliani and Miller Hypothesis
2.	Theory of Capital Structure	(B)	Fund Based Financial service
3.	Factoring	(C)	Indicator of Short-term solvency of a company
4.	Liquid Ratio	(D)	Gorden Model

(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 answer the books.)

1×4=4

- (i) Debt Service Coverage Ratio indicates the liquidity of a firm in relation to its ability to meet projected daily expenditure from operations.
- (ii) Bill Discounting is defined as the relationship between the seller of goods and a financial firm, called the Factor.
- (iii) Finance is called the "Chemistry of money".
- (iv) Capital Budgetary Forecasts Returns on proposed long-term investments and compares profitability of different Investments and their cost of capital.

Section IV

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

Each question carries 12 Marks.

7. (a) The following is the summary of Financial Ratios and form of a TEXTILE COMPANY having a sale of ₹ 32 lakh.

Sales to net worth (times)	2.3
Current debt to net worth (%)	42
Total debt to net worth (%)	75
Current ratio (times)	2.9
Net sales to inventory (times)	4.7
Fixed assets to net worth (%)	53.2

Proforma Balance Sheet

Net worth	...	Fixed assets	...
Long-term debt	...	Cash	...
Current debt	...	Stock	...
	...	Sundry debtors	568889

You are required to Complete the Proforma Balance Sheet.

(b) INDOGROWTH LTD provides the following data:

Comparative trial balance

	March 31, 2018	March 31, 2017	Increase (decrease)
<i>Debit Balance</i>			
Working capital	₹ 2,00,000	₹ 1,00,000	₹ 1,00,000
Investments	1,00,000	1,50,000	(50,000)
Building and equipment	5,00,000	4,00,000	1,00,000
Land	40,000	50,000	(10,000)
	<u>8,40,000</u>	<u>7,00,000</u>	<u>1,40,000</u>
<i>Credit balance</i>			
Accumulated depreciation	2,00,000	1,60,000	40,000
Bonds	1,00,000	50,000	50,000
Reserves	3,40,000	3,40,000	—
Equity shares	2,00,000	1,50,000	50,000
	<u>8,40,000</u>	<u>7,00,000</u>	<u>1,40,000</u>

Income statement for the period ending March 31, 2018

Sales		₹ 10,00,000
Cost of goods sold		<u>5,00,000</u>
		5,00,000
Selling expenses	₹ 50,000	
Administrative expenses	50,000	
Operating income		<u>1,00,000</u>
<i>Other charges and credits:</i>		4,00,000
Gain on sale of building and equipment	₹ 5,000	
Loss on sale of investments	(10,000)	
Interest	(6,000)	
Taxes	(1,89,000)	
Net income after taxes		<u>(2,00,000)</u>
		2,00,000

- Notes: (i) The depreciation charged for the year ended March's, 2018 was ₹ 60,000.
(ii) The book value of the building and equipment disposed off was ₹ 10,000.
(iii) Land was sold at no profit no loss basis.

Required:

Prepare a Funds Flow Statement for the period ending March 31, 2018.

- (a) The management of CAMELLIA LTD. has called for a statement showing the working capital needed to finance a level of activity of 3,00,000 units of output for the year ended March 31, 2018. The cost structure for the company's product, for the above mentioned activity level, is detailed below:

	Cost per unit
Raw materials	₹ 20
Direct labour	5
Overheads	<u>15</u>
Total cost	40
Profit	<u>10</u>
Selling price	50

Past trends indicate that the raw materials are held in stock, on an average, for two months. Work-in-process (50 per cent complete) will approximate to $\frac{1}{2}$ month's production. Finished goods remain in warehouse, on an average, for 1 month. Suppliers of materials extend 1 month's credit. Two month's credit is normally allowed to debtors. A minimum cash balance of ₹ 25,000 is expected to be maintained. The production pattern is assumed to be even during the years. (12 months)

Required:

Prepare a statement of Working Capital determination.

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- (b) The following information is available for AVANTI CORPORATION:

Earning per share	₹ 6
Rate of Return on Investment	20%
Rate of return required by share holders	16%

Required:

What should be the approximate dividend pay-out ratio so as to keep the share price at ₹ 44 by using Walter Model?

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$$\frac{D (E-D) \beta_c / r_c}{r_a}$$

Please Turn Over

9. (a) The CMD Ltd. has the following specific cost of capital along with the indicated book and market value weights:

Type of Capital	Cost	Book value weights	Market value weights
Equity	0.18	0.50	0.58
Preference shares	0.15	0.20	0.17
Long-term debt	0.07	0.30	0.25
		1.00	1.00

Required:

- Calculate the weighted cost of capital, using book and market value weights.
- Calculate the weighted average cost of capital, using marginal weights, if the company intends to raise the needed funds using 50 per cent long-term debt, 35 per cent preference shares and 15 per cent retained earnings.

Note: Ignore Taxation

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(b) ANURAG MILLS LTD. has number of machines that were used to make a product that the firm has phased out of its operations. An existing machine was originally purchased six years ago for ₹ 5,00,000 and is being depreciated by the straight line method; its remaining useful life is 4 years. No salvage value is expected at the end of the useful life. It can currently be sold for ₹ 1,50,000. The machine can also be modified to produce another product at a cost of ₹ 2,00,000. The modifications would not affect the useful life, or salvage value, and would be depreciated using the straight line method.

If the firm does not modify the existing machine, it will have to buy a new machine at a cost of ₹ 4,40,000, (no salvage value) and the new machine would be depreciated over 4 years. The engineers estimate that the cash operating costs with the new machine would be ₹ 25,000 per year less than with the existing machine. Cost of capital is 15 per cent and corporate tax rate is 35 per cent.

Advise the company whether the new machine should be bought, or the old equipment modified. Assume straight line method of depreciation for tax purposes and loss on sale of existing machine can be claimed as short-term capital loss in the current year itself.

[Given : PVIFA (15% 4 years) = 2.855]

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

4×3=12

(a) Debtors Turnover Ratio

(b) Determinants of Working Capital

(c) Advantages of Ratio Analysis (any four)

(d) Differences between Fund Flow Statement and Cash Flow Statement