INTERMEDIATE EXAMINATION

December 2017

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 working 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 answer to a new question.

(iii) Attempt the required number of questions only.

Part-A

(Cost and Management Accounting)

Section-I

Answer the following questions.

1. (a) Choose the correct answer from the given four alternatives: 1×6=6

(i) Which statement best describes the role of the management accountant?

(A) Management accountants prepare the financial statements for an organization.

(B) Management accountants facilitate the decision-making process within an organization.

(C) Management accountants make the principal decisions within an organization.

(D) Management accountants are basically information collectors.

(ii) In a factory when production is increased within the relevant range then:

(A) variable costs will vary on a per unit basis.

(B) variable costs will vary in total.

(C) fixed costs will vary in total.

(D) fixed and variable cost stay the same in total.

(iii) The main objective of budgetary control is:

(A) to define the goal of the firm

(B) to coordinate different departments

(C) to plan to achieve its goals

(D) All of the above

(iv) Method of pricing, when two separate pricing methods are used to price transfer of products from one subunit to another, is called:

(A) dual pricing

(B) functional pricing

(C) congruent pricing

(D) optimal pricing

(v) When are overhead variances recorded in a standard costing system?

(A) When the goods are transferred out of work-in-progress.

(B) When the factory overhead is applied to work-in-progress.

(C) When the cost of goods sold is recorded.

(D) When the direct labour is recorded.

(vi) Which of the following factors does not affect Learning Curve?

(A) Method of Production

(B) Labour Strike

(C) Shut Down

(D) Efficiency Rate

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

Column I		Column II	
(i)	Market Based Price	(A)	Break-Even Analysis
(ii)	Decision Unit	(B)	Differential Cost
(iii)	Margin of Safety	(C)	Transfer Pricing
(iv)	Difference between costs of two alternatives	(D)	Zero-Base Budgeting

(c) State whether the following statements are *True* or *False*: 1×4=4

(i) The profit calculated under absorption costing and marginal costing is always equal.

(ii) A flexible budget takes into account only fixed costs.

(iii) At break-even point, margin of safety is nil.

(iv) An increase in production means an increase in overall productivity.

Section II

Answer *any three* questions from Question No. 2, 3, 4 and 5.

Each question carries 12 Marks.

2. (a) The Asian Industries specialize in the manufacture of small capacity motors. The Cost Structure of a motor is as under:

Material	₹ 50
Labour	₹ 80
Variable overheads	75% of labour cost.

Fixed overheads of the company amounts to ₹ 2·4 lakhs per annum. The sale price of the motor is ₹ 230 each.

(i) Determine the number of motors that have to be manufactured and sold in a year in order to break-even.

(ii) How many motors will have to be made and sold to make a profit of Rupees one lakh per year?

(iii) If the sale price is reduced by ₹ 15 each, how many motors will have to be sold to break-even?

(b) The table below shows the Costs and Profits of three different products — X, Y & Z, manufactured by Jerbera Co. Ltd.

	X	Y	Z	Total
	₹	₹	₹	₹
Sales	3,00,000	1,80,000	1,20,000	6,00,000
Variable Cost	2,40,000	1,26,000	72,000	4,38,000
Contribution	60,000	54,000	48,000	1,62,000
Fixed Cost				81,000
Profit				81,000

Can the profits of the company be increased by changing the sales mix of the products? Use Marginal Costing technique to arrive at your answer. 6+(2+2+2)=12

3. (a) X Ltd. uses budgetary control and standard costing system. The following data are available:

Product	Budgeted		Actual	
	Units to be sold	Sales value (₹)	Units sold	Sales value (₹)
A	100	1,200	100	1,100
B	50	600	50	600
C	100	900	200	1,700
D	75	450	50	300
	325	**3,150**	**400**	**3,700**

Calculate:

(i) Sales Volume Variance

(ii) Sales Price Variance

(iii) Sales Variance

(b) The standard labour and the actual labour engaged in a week for a job are as under:

	Skilled workers	Semi-skilled workers	Unskilled workers
A. Standard number of workers in the gang	32	12	6
B. Standard rate of wages per hour (₹)	3	2	1
C. Actual number of workers employed in the gang during the week	28	18	4
D. Actual rate of wages per hour (₹)	4	3	2

During the 40-hour working week, the gang produced 1800 standard labour hours of work.

Calculate:

(i) Labour Sub-efficiency Variance

(ii) Labour Mix or Gang Variance

(iii) Labour Efficiency Variance

(iv) Labour Rate Variance

(v) Labour Cost Variance $4\frac{1}{2}+7\frac{1}{2}=12$

4. (a) A manufacturing company has two divisions — X and Y. Division X is mainly engaged in production of an electronic device and Division Y packs and labels the product and sells it in the market. Division X supplies 25,000 units of the product per month to Y for packaging and labelling. Division X incurs ₹ 16 as the variable cost for the product and fixed cost of ₹ 8,40,000 per year. Investment in fixed assets is ₹ 9,60,000. The division plans to have 12% return on fixed assets as normal profits. Division Y incurs ₹ 10 per product as variable expenses for packaging and marketing.

(i) Find the Transfer Price per unit of the product that Division X can charge for transfer to Y.

(ii) What will be profit of Division Y if it can sell all the products in the market at ₹ 80 per unit?

(iii) If Division Y can sell only 15,000 units of the product per month and asks Division X to supply only 15,000 units, what will be the effect on the Transfer Price and the profits of the divisions?

(b) As a Cost and Management Accountant of MJK Ltd., prepare a Sales Overhead Budget for the months of January, February and March from the estimates given below:

Expenses per month:	₹
Advertisement	2,500
Salaries of the Sales Department	5,000
Expenses of the Sales Department	1,500
Counter Salesmen's Salaries and Dearness Allowance	6,000

Commission to counter salesmen @ 1% on their sales. Travelling salesmen's commission @ 10% on their sales and expenses @ 5% on their sales.

The sales during the period were estimated as under:

Month	**Counter Sales**	**Travelling Salesmen Sales**
	₹	₹
January	80,000	10,000
February	1,20,000	15,000
March	1,40,000	20,000

(2+3+2)+5=12

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

(a) Break-even Analysis

(b) Absorption Costing Vs. Marginal Costing

(c) Zero Based Budgeting

(d) Uniform Costing

Part-B

(Financial Management)

Section-III

6. Answer the following questions:

(a) Choose the correct answer from the given four alternatives. $1 \times 6 = 6$

(i) ROI (Return on Investment) can be decomposed into the following ratios:

(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) Which one of the following activities is outside the purview of dividend decision in financial management?

(A) Identification of the profit after taxes

(B) Measurement of the cost of funds

(C) Deciding on the pay-out ratio

(D) Considering issue of bonus shares to equity shareholders

(iii) Which of the following does not help to increase Current Ratio?

(A) Issue of Debentures to buy Stock

(B) Issue of Debentures to pay Creditors

(C) Sale of Investment to pay Creditors

(D) Avail Bank Overdraft to buy Machine

(iv) Which of the following statements is correct?

(A) A higher Receivable Turnover is not desirable.

(B) Interest Coverage Ratio depends upon Tax Rate.

(C) Increase in Net Profit Ratio means increase in Sales.

(D) Lower Debt-Equity Ratio means lower Financial Risk.

(v) "Shareholders' wealth" in a firm is reflected by:

(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.

(vi) The excess of Current Assets over Current Liabilities is called:

(A) Net Current Assets

(B) Net Working Capital

(C) Working Capital

(D) All of the above

(b) Match the statement in Column I with the most appropriate statement in Column II. 1×4=4

Column I		Column II	
1.	Dividend policy has no effect on its value of assets	(A)	Myron Gordon
2.	Value of share is worth the present value of its future dividend rather than its earnings	(B)	Graham & Dodd
3.	Dividend policy has an impact on share valuations	(C)	John Burr Williams
4.	Market Price of share will increase when company declares dividend rather than when it does not	(D)	Modigliani & Miller

(c) State whether the following statements are *True* or *False*: 1×4=4

(i) Treasury Bills are short term instruments issued by the Reserve Bank of India to address short term liquidity shortfalls.

(ii) While calculating cost of redeemable debt, it is necessary to consider the repayment of the principal, but the interest can be ignored.

(iii) A Depository Receipt in the US market is called American Depository Receipt (ADR).

(iv) Net Present Value method cannot serve as the best decision criteria for selection of projects when they are mutually exclusive.

Section IV

Answer *any three* questions from question no. 7, 8, 9 and 10.

Each question carries 12 Marks.

7. (a) From the following information prepare a statement of Proprietors' Funds:

(i) Current Ratio = 2·5 : 1

(ii) Fixed Assets/Proprietors Funds = 0·75

(iii) Liquid Ratio = 1·5 : 1

(iv) Bank Overdraft = ₹ 10,000

(v) Reserves and Surplus = ₹ 80,000

(vi) Working Capital = ₹ 1,20,000

(b) Prepare a schedule of Changes in Working Capital and a Fund Flow Statement from the following information relating to XYZ Co. Ltd.

(Amount in ₹)

Liabilities	31.03.2016	31.03.2017	Assets	31.03.2016	31.03.2017
Equity Share Capital	2,00,000	3,00,000	Land	2,00,000	2,00,000
Share Premium	—	10,000	Plant at cost	2,08,000	2,00,000
General Reserve	1,00,000	1,20,000	Furniture at cost	14,000	18,000
Profit and Loss Account	20,000	34,000	Investments	1,20,000	1,60,000
6% Debentures	1,40,000	1,00,000	Debtors	60,000	1,40,000

Provision for Depreciation on Furniture	10,000	12,000	Stock	1,20,000	1,30,000
Provision for Depreciation on Plant	1,00,000	1,12,000	Cash	60,000	90,000
Provision for Taxation	40,000	60,000			
Sundry Creditors	1,72,000	1,90,000			
	7,82,000	9,38,000		7,82,000	9,38,000

A plant purchased for ₹ 8,000 (Depreciation 4,000) was sold on cash for ₹ 1,600 in October 2016. In July 2016, a piece of furniture was purchased for ₹ 4,000 and a dividend of 22.5% was paid to Equity Shareholders.

4+8=12

8. (a) Jai & Karti are regular customers of MJK Ltd. Kolkata and have approached the sellers for extension of credit facility for enabling them to purchase goods from MJK Ltd. On the analysis of past performance and on the basis of information supplied, the following pattern of payment schedule emerges in regard to Jai & Karti:

Schedule	Pattern
At the end of 30 days	15% of the bill
60 days	34% of the bill
90 days	30% of the bill
100 days	20% of the bill
Non-recovery	1% of the bill

Jai & Karti wants to enter into a firm commitment for purchase of goods of ₹ 15,00,000 in 2016, deliveries to be made in equal quantities on the first day of each quarter in the calendar year. The price per unit of the commodity is ₹ 150 on which a profit of ₹ 5 per unit is expected to be made. It is anticipated by the MJK Ltd. that taking up of this contract would mean an extra recurring expenditure to ₹ 5,000 per annum. If the opportunity cost of funds in the hands of MJK Ltd. is 24% per annum, would you as a Management Accountant of the seller recommend the grant of credit to Jai & Karti? Working should form part of your answer.

(b) Company A reports the following information from its financial statements.

	₹
Sales	8,00,000
Less: Variable cost	2,40,000
Contribution	5,60,000
Fixed Cost	4,00,000
EBIT	1,60,000
Less: Interest	20,000
Profit before Tax	1,40,000

Find out:

(i) Using concept of financial leverage, by what percentage will the taxable income increase, if EBIT increases by 10%? Verify the results in terms of Rupees.

(ii) Using the concept of operating leverage, by what percentage will EBIT increase if there is 10% increase in sales? Verify the results in terms of Rupees. 8+(2+2)=12

9. (a) Given below is the Statement of Assets and Liabilities of a company as at 31st December, 2016.

Liabilities	**₹**	**Assets**	**₹**
Equity share capital 40000 shares of ₹ 100 each	4,00,000	Fixed Assets	6,00,000
Reserve and surplus	2,60,000	Investments	1,00,000
8% debentures	1,70,000	Current assets	2,80,000
Current Liabilities			
Short term loans	1,00,000		
Trade creditors	50,000		
	9,80,000		9,80,000

Calculate the company's weighed average cost of capital using balance sheet valuations. The following additional information are also available.

(i) 8% Debentures were issued at par.

(ii) All interests payments are up to date and equity dividend is currently 12%.

(iii) Short term loan carries interest at 18% p.a.

(iv) The shares and debentures of the company are quoted on the Calcutta Stock Exchange and current Market Prices are as follows:

Equity Shares at ₹ 14 each and 8% Debentures at ₹ 98 each.

(v) The rate of tax for the company may be taken at 50%.

(b) ZZZ Co. has four potential projects all with an initial cost of ₹ 15,00,000. The capital budget for the year will only allow the company to take up only one of the three projects. Given the discount rates and the future cash flows of each project, which project should they accept?

PROJECT	Annual Net Cash Flows per year for five years (₹)	Discount Rates
A	3,50,000	4%
B	4,00,000	8%
C	5,00,000	10%

7+5=12

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

(a) Internal Rate of Return

(b) Sweat Equity Shares

(c) Venture Capital

(d) Combined Leverage