Paper 10- Cost & Management Accounting and Financial Management

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Full Marks: 100 **Time allowed: 3 hours**

PART – A (Cost and Management Accounting)
Section I

1. Answer the following questions:

1.(a) Choose the correct answer from the given four alternatives. **[1x6=6]**

(i) Planning and control are done by
(a) top management
(b) lowest level of management
(c) all levels of management
(d) None of the above

(ii) The use of management accounting is
(a) Compulsory
(b) Optional
(c) Mandatory as per the law
(d) None of the above

(iii) The budgets are classified on the basis of
(a) Time
(b) Function
(c) Flexibility
(d) All of the above

(iv) Which of the following departments is most likely responsible for a price variance in direct materials?
(a) Warehousing
(b) Receiving
(c) Purchasing
(d) Production

(v) Idle time variance is always:
(a) Favourable
(b) Adverse
(c) Favourable (or) Adverse
(d) None of these

(vi) In marginal costing, stock is valued at _________
(a) Fixed Cost
(b) Variable Cost
(c) Inventory
(d) sales

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

	Column I		Column II
i.	Transfer pricing	A	Opportunity cost

ii.	Budgetary Control	B	Divisional Profits
iii.	Learning Curve	C	An Executive Function
iv.	Relevant Cost	D	A mathematical or Statistical Technique

(b) State whether the following statements are True or False **[1x4=4]**

(i) It is optional for a company to have financial accounting.
(ii) There is no difference between standard costing and budgeting.
(iii) Contribution is the difference between the selling price and the variable cost.
(iv) Constraint on various resources is also known a key factor or limiting factor.

Section II

Answer any three Question from Q. No 2, 3, 4 and 5. Each Question carries 12 Marks

2. A market gardener is planning his production for next season and he asked you, as a cost consultant, to recommend the optimum mix of vegetable production for the coming year. He has given you the following data relating to the current year:

	POTATOES	TOMATOES	PEAS	CARROTS
Area occupied in acres	25	20	30	25
Yield per acre in tons	10	8	9	12
Selling Price per ton ₹	1,000	1,250	1,500	1,350
Variable Cost per acre:				
Fertilizer	300	250	450	400
Seeds	150	200	300	250
Pesticides	250	150	200	250
Direct Wages	4,000	4,500	5,000	5,700

Fixed Overhead per annum: ₹ 5,40,000
The land which is being used for the production of carrots and peas can be used for either crop but not for potatoes and tomatoes. The land being used for potatoes and tomatoes can be used for either crops but not carrots and peas .In order to provide an adequate market service, the gardener must produce each year at least 40 tons of each of potatoes and tomatoes and 36 tons of each peas and carrots .You are required to present a statement to show :

(a) (1) The profit for the current year:
(2) The profit for the production mix you would recommend;

(b) Assuming that the land could be cultivated in such a way that any of the above crops could be produced and there was no market commitment. You are required to:
(1) Advice the market gardener on which crop he should concentrate his production.
(2) Calculate the profit if he were to do so, and
(3) Calculate in rupees the breakeven - point of sales. [3 + 4 + 1 + 2 + 2 = 12]

3.(a)

Item	Budget	Actual
No. of working days	20	22
Output per man hour	1.0 Units	0.9 Units
Overhead cost	₹ 1,60,000	₹ 1,68,000
Man-hours per day	8,000	8,400

Calculate Overhead Variances. [8]

(b)

Standard			Actual		
Quantity	**S.P.**	**Total**	**Quantity**	**A.P.**	**Total**
A - 1600	24	38,400	A - 2400	20	48,000
B - 1400	18	25,200	B - 1400	18	25,200
C - 600	12	7,200	C - 750	14	10,500
D - 400	15	6,000	D - 450	14	6,300
4000		76,800	5000		90,000

From the above data calculate various sales variances [4]

4. (a) Sintex Ltd. has prepared its expense budget for 25,000 units in its factory for the year 2016 as detailed below:

	₹ per unit
Direct Materials	45
Direct Labour	20
Variable overhead	15
Direct Expenses	6
Selling Expenses (80% Variable)	15
Factory Expenses (100% fixed)	7
Administration Expenses (100% fixed)	4
Distribution Expenses (25% fixed)	12
Total	₹124

Prepare Flexible budget for the production of 15,000 units and 20,000 units.

[8]

(b) A company fixes the inter-divisional transfer prices for its products on the basis of cost plus an estimated return on investment in its divisions. The relevant portion of the budget for the Division A for the year 2015-16 is given below.

Particulars	**Amount in (₹)**
Fixed Assets	5,00,000
Current Assets (other than debtors)	3,00,000
Debtors	2,00,000
Annual fixed cost for the division	8,00,000
Variable cost per unit of product	10
Budgeted volume of production per year (units)	4,00,000
Desired Return on Investment	28%

You are required to determine the transfer price for Division A. **[4]**

5. Write short note on any three. [3 x 4=12]

(a) Write any four causes of Material Price variance.

(b) Requisites for Installation of a Uniform Costing System

(c) Factors Affecting Learning Curve

(d) Process of Zero-Base Budgeting Or Steps Involved In Zero-Base Budgeting

PART – B (Financial Management)
Section III

6. Answer the following questions:

(a) Choose the correct answer from the given four alternatives. **[1x6=6]**

(i) Present value of inflows ₹ 10 lakhs from a project and initial investment is ₹ 7.5 lakhs. The NPV is:
(a) ₹ 17.5 lakhs
(b) ₹ 7.5 lakhs
(c) ₹10 Lakhs
(d) ₹ 2.5 lakhs

(ii) Cash & Bank ₹ 20,000; Debtors ₹ 2,00,000; Stock ₹ 2,80,000 and Current Liabilities: Creditors ₹ 1,00,000; Bills Payable ₹ 50,000. Then the working capital is:
(a) ₹ 4,00,000
(b) ₹ 3,80,000
(c) ₹ 3,50,000
(d) ₹ 70,000

(iii) 1,00,000; 10% Debentures of ₹ 100 each of company, the interest payable for quarter is:
(a) ₹ 10,00,000
(b) ₹ 2,50,000
(c) ₹ 5,00,000
(d) None of these

(iv) Gross margin is added to cost of sold goods for calculating
(a) revenues
(b) selling price
(c) unit price
(d) bundle price

(v) Cash Flow Statement is also known as
(a) Statement of Changes in Financial Position on Cash basis
(b) Statement accounting for variation in cash
(c) Both a and b
(d) None of the above.

(vi) Degree of financial leverage of business indicates.
(A) Total risk
(B) Operating risk
(C) Financial risk
(D) None of these

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

	Column I		Column II
i.	Liquid Ratio	A	Operations Statement

ii.	Funds Flow Statement	B	Quick Assets / Current Liability
iii.	IRR	C	Permissable Finance
iv.	Tandon Committee	D	PVs of inflows minus outflows is ZERO.

(a) State whether the following statements are True or False **[1x4=4]**

(i) ARR is the Accounting Rate of Return or Average Rate of Return.
(ii) Capital Budgeting is the short term financial planning
(iii) Risk free interest rate and cost of capital are same things.
(iv) Financial leverage depends upon the operating leverage.

Section IV

Answer any three Question from Q. No 7, 8, 9 and 10. Each Question carries 12 Marks

7.(a) A company has a profit margin of 20% and asset turnover of 4 times. What is the company's return on investment? How will this return on investment vary if?
(i) Profit margin is increased by 5%?
(ii) Asset turnover is decreased to 3 times? **[2+2]**

(b) The Balance Sheets of a company as on 31st March, 2015 and 2016 are given below:

₹

Liabilities	**31.03.15**	**31.03.16**	**Assets**	**31.03.15**	**31.03.16**
Equity Share Capital	14,40,000	19,20,000	Fixed Assets	38,40,000	45,60,000
Capital Reserve	-	48,000	Less: Depreciation	(11,04,000)	(13,92,000)
General Reserve	8,16,000	9,60,000		27,36,000	31,68,000
Profit & Loss A/c	2,88,000	3,60,000	Investment	4,80,000	3,84,000
9% Debentures	9,60,000	6,72,000	Sundry Debtors	12,00,000	14,00,000
Sundry Creditors	5,50,000	5,90,000	Stock	1,40,000	1,84,000
Bills Payable	26,000	34,000	Cash in hand	4,000	-
Proposed Dividend	1,44,000	1,72,800	Preliminary Expenses	96,000	48,000
Provision for tax	4,32,000	4,08,000			
Unpaid dividend	-	19,200			
	46,56,000	**51,84,000**		**46,56,000**	**51,84,000**

Additional Information:
During the year ended 31st March, 2016 the company:
a) Sold a machine for ₹ 1,20,000; the cost of machine was ₹ 2,40,000 and depreciation provided on it was ₹ 84,000.
b) Provided ₹ 20,000 as depreciation on fixed assets.
c) Sold some investment and profit credited to capital reserve.
d) Redeemed 30% of the debenture @ ₹ 105.
e) Decided to write off fixed assets costing ₹ 60,000 on which depreciation amounting to ₹ 48,000 has been provided.

You are required to prepare Cash Flow Statement as per AS-3. **[8]**

8.(a) The following are the details regarding the operations of a firm during a period of 12 months.

Sales ₹12,00,000

Selling price per unit	₹10
Variable cost price per unit	₹ 7
Total cost per unit	₹9

Credit period allowed to customers one month. The firm is considering a proposal for a more liberal extension of credit which will result in increasing the average collection period from one month to two months. This relaxation is expected to increase the sales by 25% from its existing level.

You are required to advise the firm regarding adoption of the new credit policy, presuming that the firm's required return on investment is 25%. **[5]**

(b) Calculate the level of earnings before interest and tax (EBIT) at which the EPS indifference point between the following financing alternatives will occur.

Combination-I

Equity share capital of ₹ 6,00,000 and 12% Debentures of ₹ 4,00,000.

Combination-II

Equity share capital of ₹ 4,00,000, 14% Preference share capital of ₹ 2,00,000 and 12% Debentures of ₹ 4,00,000.

Assume the corporate tax rate is 30% and par value of equity share is ₹ 100 in each case.

[3+4=7]

9.(a) From the following interest calculate the total market value of each firm under Net Income Approach.

Interest (I) at 12% and equity capitalization rate (K_e) given below:

Firms	EBIT	I	K_e
	₹	₹	₹
A	3,00,000	60,000	16%
B	6,00,000	2,40,000	18%
C	5,00,000	2,00,000	15%

[6]

(b) PKJ Ltd. is considering two mutually – exclusive projects. Both require an initial cash outlay ₹ 10,000 each for machinery and have a life of 5 years. The Company's required rate of return is 10% and it pays tax at 50%. The projects will be depreciated on a straight line basis. The net cash flows (before taxes) expected to be generated by the projects and the present value (PV) factor (at 10%) are as follows:

	Year				
	1	**2**	**3**	**4**	**5**
	(₹)	(₹)	(₹)	(₹)	(₹)
Project 1	4,000	4,000	4,000	4,000	4,000
Project 2	6,000	3,000	2,000	5,000	5,000
PV factor (at 10%)	0.909	0.826	0.751	0.683	0.621

You are required to compute NPV of each project. **[6]**

10. Write short note on any three. [3 x 4=12]

(a) Objectives of SEBI
(b) Global Depository Receipt (GDR)
(c) Capital Asset Pricing Model
(d) Significance of Capital Budgeting