Paper 10 – Cost & Management Accounting and Financial Management

Paper 6- Cost & Management Accounting and Financial Management

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

The figures in the margin on the right side indicate full marks.
This paper contains five questions.
All questions are compulsory, subject to instruction provided against each questions.
All workings must form a part of your answer.
Assumptions, if any, must be clearly indicated.

Section A

1. Answer all the following questions.

(a) Multiple choice questions: **[3×1=3]**

(i) Which of the following is the difference between actual and standard cost of material caused by the actual quantity of material used exceeding the standard quantity of material allowed?

A. Price variance

B. Mix variance

C. Quantity variance

D. Yield variance

(ii) A key factor is one which restricts

A. The volume of production

B. The volume of sales

C. The volume of purchase

D. All of the above

(iii) Planning and control are done by

A. Top management

B. Lowest level of management

C. All levels of management

D. None of the above

(b) Match the following: **[4×1=4]**

Column I	Column II
1. Inter firm comparison	A. Effective and efficient
2. Benefit Cost Ratio	B. Technique for evaluating performance
3. Organisation has to be both	C. Decision making
4. Zero based Budgeting	D. Capital Budgeting

(c) Fill in the blanks: [1×4 =4]

(i) A GDR is a _______ Instrument.

(ii) Current Ratio is the ratio of Current Assets to_________

(iii) The term IRR with relevance to capital budgeting stands for______

(iv) Management accounting a___________ tools to management.

(d) State whether the following statements are True or False: [1×4=4]

(i) Cost of abnormal idle time is charged to the Product Labour Cost.

(ii) Liquid Assets do not include Inventory.

(iii) Budgetary control does not facilitate introduction of 'Management by Exception'.

(iv) Operating Cycle means time required to Produce One Quantity of a Product.

(e) Answer the following questions. [2×5=10]

(i) Mr. X expects to receive ₹2,00,000 at the end of three years. What would be the present value if the rate of discount is 10%?

(ii) The current market price and expected year-end dividend of an equity share are ₹90 and ₹4.50 respectively. The dividend growth rate is expected at 7% annually. Compute the cost of capital under the dividend growth model

(iii) Vividha Ltd. has paid a dividend of ₹ 8 per share with annual growth rate of 5%. The expected return on the market portfolio and the risk free rate of return are estimated to be 15% and 10% respectively. Calculate the Required rate of Return, if the market sensitivity index (β) is 1.5.

(iv) The monthly cost of maintenance of machinery for 11,000 machine hours run is ₹1,70,000 and for 18,500 hours it is ₹ 2,02,500. What is the cost of maintenance for 14,000 hours?

(v) A company's fixed cost amount to ₹ 110 lakhs p.a. and its overall P/V ratio is 0.4. What is the annual sales of the company to have a Margin of Safety of 25%?

Section B

I. Answer any one Question from Q. No 2 and 3. Each Question carries 15 Marks

2.(a) A company has two divisions, X and Y. Division X manufactures a component which is used by Division Y to produce a finished product. For the next period, output and costs have been budgeted as follows:

Particulars	Division X	Division Y
Component units	50,000	---
Finished units	---	50,000
Total variable costs – Rupees	2,50,000	6,00,000
Fixed Costs Rupees	1,50,000	2,00,000

The fixed costs are separable for each division. You are required to advise on the transfer price to be fixed for Division X's component under the following circumstances.

A. Division A can sell the component in a competitive market for ₹ 10 per unit. Division Y can also purchase the component from the open market at that price.

B. As per the situation mentioned in (A) above, and further assume that Division Y currently buys the component from an external supplier at the market price of ₹ 10 and there is reciprocal agreement between the external supplier and another Division Z, within the same group. Under this agreement, the external supplier agrees to buy one product unit from Division Z at a profit of ₹ 4 per unit to that division, for every component which Division B buys from the supplier. [10]

(b) Write a note on Responsibility Accounting. [5]

3. (a) A company manufactures scooters and sells it at `3,000 each. An increase of 17% in cost of materials and of 20% of labour cost is anticipated. The increased cost in relation to the present sales price would cause at 25% decrease in the amount of the present gross profit per unit. At present, material cost is 50%, wages 20% and overhead is 30% of cost of sales.

You are required to:

(i) Prepare a statement of profit and loss per unit at present and;

(ii) Compute the new selling price to produce the same percentage of profit to cost of sales as before. [5+5]

(b) Difference between Standard Costing and Budgetary Control. [5]

II. Answer any two Questions from Q. No 4, 5 and 6. Each Question carries 10 Marks

4. (a) State the factors affecting Learning Curve. [5]

(b) Write the advantages of Uniform Costing . [5]

5. Budgeted and actual sales for the month of December, 2012 of two products A and B of M/s. XY Ltd. were as follows:

Product	Budgeted Units	Sales Price/Unit (₹)	Actual Units	Sales Price / Unit (₹)
A	6,000	₹5	5,000	5.00
			1,500	4.75
B	10,000	₹2	7,500	2.00
			1,750	8.50

Budgeted costs for Products A and B were ₹4.00 and ₹1.50 unit respectively. Work out from the above data the following variances.

Sales Volume Variance, Sales Value Variance, Sales Price Variance, Sales Sub Volume Variance, Sales Mix Variance. [10]

6. The standard set for material consumption was 100kg @₹2.25 per kg. In a cost period:

Opening stock was 100 kg @₹2.25 per kg. Purchase made 500 kg @₹2.15 pe kg consumption 110 kg.

Calculate: a) usage b) Price variance

(i) When variance is calculated at point of purchase

(ii) When variance is calculated at point of issue on FIFO basis

(iii) When variance is calculated at point of issue on LIFO basis. [10]

Section C

Answer any two Questions from Q. No 7, 8 and 9. Each Question carries 20 Marks

7. (a) A Company provided the following data:

	Cost per unit (₹)
Raw materials	52.00
Direct labour	19.50
Overheads	39.00
Total Cost	110.50
Profit	19.50
Selling Price	130.00

The following additional information is available:

(i) Average raw materials in stock: one month.

(ii) Average materials in process: half-a-month

(iii) Average finished goods in stock: one month

(iv) Credit allowed by suppliers: one month

(v) Credit allowed to debtors: two months.

(vi) Time lag in payment of wages: one and a half weeks.

(vii)Overheads: one month

(viii) One-fourth of sales are on cash basis.

(ix) Cash balance is expected to be ₹1,20,000.

You are required to prepare a statement showing the Working Capital needed to finance a level of activity of 70,000 units of annual output. The production is carried throughout the year on even basis and wages and overheads accrue similarly. (Calculation be made on the basis of 30 days a month and 52 weeks a year).

(b) From the following Balance Sheet of PKJ Ltd., Prepare Funds Flow Statement for 2016.[10]

(`'000)

Liabilities	31-3-15	31-3-16	Assets	31-3-15	31-3-16
Equity Share	150	200	Goodwill	50	40
9% Redeemable	75	50	Land & Buildings	100	85
Capital Reserve	—	10	Plant & Machinery	40	100
General Reserve	20	25	Investments	10	15
Profit & Loss	15	24	Sundry Debtors	70	85
Proposed	21	25	Stock	39	55
Sundry Creditors	13	24	Bills Receivable	10	15
Bills Payable	10	8	Cash in hand	7	5
Liability for	15	18	Cash at bank	5	4
Provision for tax	20	25	Preliminary Exp.	8	5
	339	409		339	409

Additional information:

(i) A part of land was sold out in 2016, and the profit was credited to Capital Reserve.

(ii) A machine has been sold for ₹5,000 (written down value of the machinery was ₹6,000).Depreciation of ₹5,000 was charged on plant in 2016.

(iii) An interim dividend of ₹10,000 has been paid in 2016.

(iv) An Amount of ₹1,000 has been received as dividend on investment in 2016. [10]

8. (a) Explain the scope of Financial Management. [6]

(b) A chemical company is considering replacing an existing machine with one costing ₹65,000. The existing machine was originally purchased two years ago for ₹28,000 and is being depreciated by the straight line method over its seven-year life period. It can currently be sold for ₹30,000 with no removal costs. The new machine would cost ₹10,000 to install and would be depreciate over five years. The management believes that the new machine would have a salvage value of ₹5,000 at the end of year 5. The management also estimates an increase in net working capital requirement of ₹10,000 as a result of expanded operations with the new machine.

The firm is taxed at a rate of 55% on normal income and 30% on capital gains. The company's expected after-tax profits for next 5 years with existing machine and with new machine are given as follows:

Year	Expected after-tax profits	
	With existing machine (₹)	With new machine (₹)
1	2,00,000	2,16,000
2	1,50,000	1,50,000
3	1,80,000	2,00,000
4	2,10,000	2,40,000
5	2,20,000	2,30,000

(i) Calculate the net investment required by the new machine.

(ii) If the company's cost of capital is 15%, determine whether the new machine should be purchased. [4+6]

(c) Write a note on Capital Asset Pricing Model. [4]

9. (a) The Balance Sheet of JK Limited as on 31st March, 2015 and 31st March, 2016 are given below:

Balance Sheet as on

(₹'000)

Liabilities	31.03.15	31.03.16	Assets	31.03.15	31.03.16
Share Capital	1,440	1,920	Fixed Assets	3,840	4,560
Capital Reserve	----	48	Less: Depreciation	1,104	1,392
General Reserve	816	960	Net Fixed asset	2,736	3,168
Profit & Loss A/c	288	360	Investment	480	384
9% Debenture	960	672	Cash	210	312
Current Liabilities	576	624	Other Current Assets		
Proposed Dividend	144	174	(Including Stock)	1,134	1,272
Provision for Tax	432	408	Preliminary Expenses	96	48
Unpaid Dividend	----	18			
	4,656	5,184		4,656	5,184

Additional Information:

1. During the year 2015-2016, Fixed Assets with a book value of ₹2,40,000 (accumulated depreciation ₹84,000) was sold for ₹1,20,000.
2. Provided ₹4,20,000 as depreciation.
3. Some investments are sold at a profit of ₹48,000 and profit was credited to Capital Reserve.
4. It decided that stocks be valued at cost, whereas previously the practice was to value stock at cost less 10 per cent. The stock was ₹2,59,200 as on 31.03.15. The stock as on 31.03.16 was correctly valued at ₹3,60,000.
5. It decided to write off Fixed Assets costing ₹60,000 on which depreciation amounting to ₹48,000 has been provided.
6. Debentures are redeemed at₹105.

Required:

Prepare a Cash Flow Statement. [10]

(b) Explain the procedure involved in the 'Forfeiting' Financial Service. [5]

(c)Discuss about the Venture Capital. [5]