Paper – 8: Cost Accounting & Financial Management

Full Marks: 100 **Time Allowed: 3 Hours**

This paper contains 3 questions. All questions are compulsory, subject to instruction provided against each question. All workings must form part of your answer. Assumptions, if any, must be clearly indicated.

1. Answer all questions: **[2×10=20]**

(a) Define Cost Apportionment.

(b) List the two objective of CAS-4.

(c) In a workshop the normal working hours is 8 hours for which ₹450 is paid as wages. However, calculation of wages payable is made on piece rate basis that 30 pieces will be produced per hour. When a worker produces below standard, 90% of the piece rate is paid but when he produces above standard, 110% of piece rate is paid. On a particular day, a worker produces 260 pieces in the allotted time of 8 hours. What will be his earning?

(d) State the treatment of Bad Debts in Cost record.

(e) A concern producing a single product estimates the following expenses for a production period.

Particulars	₹
Direct Material	25,000
Direct Labour	25,000
Direct Expenses	2,500
Overhead Expenses	1,05,000

What will be the overhead recovery rate based on prime cost?

(f) State the cost units applicable to the following industries:
Cement, Goods Transport, Education, BPO

(g) Calculate the future value of ₹1,000 invested in State Bank Cash Certificate scheme for 2 years @5.5% p.a., compounded semi-annually.

(h) The capital of PQR Limited is as follows :
9% preference shares of ₹10 each ₹3,00,000
Equity shares of ₹10 each ₹8,00,000
Following further information is available:
Profit after Tax ₹2,70,000
Equity Dividend paid 20%
The market price of equity shares ₹40 each
Then the EPS and PE ratio are:

(i) Cactus Limited paid a dividend of ₹5 per share for 2013-14. The company follows a fixed dividend payout ratio of 60%. The company earns a return of 20% on its investment. The cost of capital to the company is 14%. What would be the expected market price of its share, using the Walter Model?

(j) X owns a stock portfolio equally invested in a risk free asset and two stocks. If one of the stocks has a beta of 0.8 and the portfolio is as risky as the market what must be the beta of the other stocks in the portfolio?

2. Answer any three questions from a, b, c and d. [3×16=48]

(a)

(i) The following details are available in respect of a Consignment of 1,250 kgs. of materials 'X':
- Invoice price-₹20 per kg.
- Excise duty-25% of invoice price.
- Sales Tax-8% on Invoice price including Excise Duty
- Trade discount-10% on Invoice price
- Insurance-1% of aggregate net price
- Delivery charges-₹250
- Cost of containers @₹60 per container for 50 kg. of material. Rebate is allowed @ ₹40 per container if returned within six weeks, which is a normal feature.
- One container load of material was rejected on inspection and not accepted.
- Cost of unloading and handling @ 0.25% of the cost of materials ultimately accepted.

On the basis of above you are required to find out the landed cost per kg. of material 'X'. [8]

(ii) The following details have been obtained from the cost records of Comet Paints Limited:

	(₹)
Stock of raw materials on 1st Sept. 2014	75,500
Stock of raw materials on 30th Sept. 2014	91,500
Direct Wages	52,500
Indirect wages	2,750
Sales	2,11,000
Work-in-progress on 1st Sept. 2014	28,000
Work-in-progress on 30th Sept. 2014	35,000
Purchase of raw materials	66,000
Factory rent rates and power	15,000
Depreciation of plant and machinery	3,500
Expenses on purchases	1,500
Carriage outwards	2,500
Advertising	3,500
Office rent and taxes	2,500
Travelers wages and commission	6,500
Stock of finished goods on 1st Sept. 2014	54,000
Stock of finished goods on 30th Sept. 2014	31,000

Prepare a Cost Sheet giving the maximum possible break up of costs and profits. [8]

(b)

(i) Distinguish between "Incentives to indirect workers" and "Indirect incentives to direct workers". [6]

(ii) The following is an extract of stores ledger of a particular item of stock with incomplete information for September 2014. You are required to fill in the rate column of issues correct to two decimal places. Also fill in the values under the 'Balance column' wherever indicated with a "?". Identify the method of stock issue followed by the company. How would you treat the value of the shortages on 30th September in Cost Accounts?

Date	Receipts		Issues		Balance	
September 2014	Quantity (Kg)	Rate (₹/Kg)	Quantity (Kg)	Rate (₹/Kg)	Quantity (Kg)	Value (₹)
1					50,000	1,25,000
7	5,000	2.4				
10			30,000			62,000
15			20,000			
20	15,000	2.6				
25	10,000	2.5				
29			20,000			
30 shortage-abnormal loss			200			?
30 shortage-abnormal loss			400			?
31					9,400	?

[10]

(c)

(i) Distinguish between Financial Accounting and Cost Accounting. [8]

(ii) ABC Ltd. company having 25 different types of automatic machine, furnishes you the following data for 2013-2014 in respect of machine B:

I.	Cost of machine	₹50,000
	Life-10 years	Scrap value is nil
II.	Overhead expenses are:	
	Factory rent	₹50,00 p.a
	Heating & lighting	₹40,000
	Supervision	₹1,50,000 p.a
	Reserve equipment of machine B	₹6,000 p.a
	Area of the factory	80,000 sq.ft.
	Area occupied by machine B	3,000 sq.ft.
III.	Wages of operator is ₹24 per day of 8 hours including all fringe benefits. He attends to one machine when it is under set up and two machines while under operation.	
IV.	Estimated production hours	3,600 p.a.
	Estimated set up time	400 hrs. p.a.
	Power 0.5 per hour	

Prepare a schedule of comprehensive machine hour rate and find the cost of the following jobs:

	Job 1002	Job 1008
Set up time (hrs.)	80	40
Operation time (hrs.)	130	160

[6+2]

(d)

(i) The details of present output of a manufacturing department are given below:

Average output per week from 160 employees	48,000 units
Saleable value of output	₹6,00,000
Contribution made by output towards fixed expenses and profit	₹2,40,000

The Board of Directors plans to introduce more mechanization into the department at a capital cost of ₹1,60,000. The effect of this will be to reduce the number of employees to 120, and increasing the output per individual employees by 60%.

To provide the necessary incentive to achieve the increased output, the Board intends to offer a 1% increase on the piece work rate of ₹1 per unit for every 2% increase in average individual output achieved.

To sell the increased output, it will be necessary to decrease the selling price by 2%.

Calculate the extra weekly contribution resulting from the proposed change and evaluate for the Board's information, the desirability of introducing the change. [10]

(ii) How do you treat Idle Time in Cost Accounting? [6]

3. Answer any two questions from a, b and c **[2×16=32]**

(a)

(i) Indicate the important accounting ratios that would be used by each of the following:

I. A long–term creditor interested in determining whether his claim is adequately secured.

II. A bank that has been approached by a company for short-term loan / overdraft.

III. A Shareholder who is examining his portfolio and who is to decide whether he should hold or sell his shares in a company. [3]

(ii) What do you understand by 'Trading on Equity'? State the limitations of Trading on Equity? [1+4]

(iii) A firm's sales, variable costs and fixed cost amount to ₹75,00,000, ₹42,00,000 and ₹6,00,000 respectively. It has borrowed ₹45,00,000 at 9 per cent and its equity capital totals ₹55,00,000.

I. What is the firm's ROI?

II. Does it have favourable financial leverage?

III. If the firm belongs to an industry whose asset turnover is 3, does it have high or low asset leverage?

IV. What are the operating, financial and combined leverages of the firm?

V. If the sales drop to ₹50,00,000, and variable cost is ₹28,000, what will the new EBIT be?

VI. At what level will the EBT of the firm equal to zero? [1+1+1+3+1+1]

(b)

(i) AMRITAM Ltd. has a total saleof ₹3.2 crores and its average collection period is 90 days. The past experience indicates that bad debts losses are 1.5% on sales. The expenditure incurred by the firm in administering its receivable collection efforts is ₹5,00,000. A factor is prepared to buy the firm's receivables by charging 2% commission. The factor will pay advance on receivables to the firm at an Interest rate of 18% per annum after withholding 10% as reserve. Assume 360 days in a year. Calculate the effective cost of factoring to the firm. [8]

(ii) A company is considering, purchase of a new machinery which costs ₹8,00,000 and which has an estimated life of 10 years. This machine will generate additional sales of ₹4,00,000 per year, while increased cost of maintenance will be ₹1,00,000 per year. The cost of the machine is depreciated on a straight line and has no salvage value at the end of its 10 year life. The company has a cost of capital of 12 per cent and a corporate tax rate of 40 per cent.

You are required to calculate:

I. Annual Cash Flow
II. Net Present Value (NPV)
III. Payback period
IV. Internal Rate of Return. Should the Company purchase the new machine?

Note: The present value Factors are as follows:

	At the end of 10 years
Present value of annuity of Re.1@ 12%	5.651
Present value of annuity of Re. 1 @ 23%	3.799
Present value of annuity of Re. 1 @ 24%	3.682

[8]

(c)
(i) Describe the features of Venture Capital. [6]

(ii) The Balance – Sheet of XYZ Ltd. for the year ended 31.03.2014 is given below:

Balance Sheet as at 31.03.2014

Liabilities	₹	Assets	₹
Equity Share Capital	5,00,000	Land & Building	1,00,000
Preference Share Capital	2,00,000	Machinery	4,00,000
General Reserve	1,00,000	Furniture	50,000
Secured Loans	3,00,000	Inventory	3,00,000
Sundry Creditors	1,00,000	Sundry Debtors	3,00,000
		Cash/Bank Balances	50,000
Total	12,00,000		12,00,000

Calculate the following ratios from the given Balance Sheet

I. Current Ratio
II. Proprietory Ratio
III. Debt-Equity Ratio
IV. Capital Gearing Ratio [10]