PAPER – 8: COST ACCUNTING & FINANCIAL MANAGEMENT

The following table lists the learning objectives and the verbs that appear in the syllabus learning aims and examination questions:

	Learning objectives	Verbs used	Definition
LEVEL B	KNOWLEDGE What you are expected to know	List	Make a list of
		State	Express, fully or clearly, the details/facts
		Define	Give the exact meaning of
	COMPREHENSION What you are expected to understand	Describe	Communicate the key features of
		Distinguish	Highlight the differences between
		Explain	Make clear or intelligible/ state the meaning or purpose of
		Identity	Recognize, establish or select after consideration
		Illustrate	Use an example to describe or explain something
	APPLICATION How you are expected to apply your knowledge	Apply	Put to practical use
		Calculate	Ascertain or reckon mathematically
		Demonstrate	Prove with certainty or exhibit by practical means
		Prepare	Make or get ready for use
		Reconcile	Make or prove consistent/ compatible
		Solve	Find an answer to
		Tabulate	Arrange in a table
	ANALYSIS How you are expected to analyse the detail of what you have learned	Analyse	Examine in detail the structure of
		Categorise	Place into a defined class or division
		Compare and contrast	Show the similarities and/or differences between
		Construct	Build up or compile
		Prioritise	Place in order of priority or sequence for action
		Produce	Create or bring into existence

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) The following data relating to a machine is available:
Cost of the machine is ₹80,000; estimated scrap value is ₹10,000. Working life = 8 years. The machine had to be discarded at the end of 4th year due to obsolescence and was sold for ₹ 10,000. Calculate the resultant loss. (Use straight line depreciation on net value).

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

Particulars	₹
Direct Material	68,750
Direct Labour	68,750
Direct Expenses	6,875
Overhead Expenses	2,88,750

Estimate the overhead recovery rate based on prime cost.

(c) A work measurement study was carried out in a firm for 25 hours and the following information was generated:

Units produced	400
Idle time	10%
Performance rating	125%
Allowance time	10% of standard time

Estimate the standard time for task.

(d) Calculate the total wages earned by a workman for a working day of 8 hours under Rowan plan:

- Standard production per hour 110 units
- Actual production of the day 1,100 units
- Wages rate per hour ₹ 30

(e) Effective Production hrs loss = 50,000 hrs
Sales = 80 lakhs for 4,00,000 hrs
P/v ratio = 20%
Calculate the total loss due to labour turnover.

(f) Re-order quantity of material 'A' is 5,000 kg.; Maximum level 8,000 kg.; Minimum usage 50 kg. per hour; minimum re-order period 5 days; daily working hours in the factory is 8 hours. You are required to calculate the re-order level of material 'A'.

(g) Find out operating leverage from the following data:

Sales	₹1,00,000
Variable Costs	75%
Fixed Costs	₹18,000

(h) 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.

(i) Cactus Limited paid a dividend of ₹ 10 per share for 2014-15. 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 12%. Calculate the expected market price of its share, using the Walter Model.

(j) A company has a profit margin of 25% and asset turnover of 3.5 times. What is the company's return on investment, if the profit margin is decreased by 5% and asset turnover is increase to 4 times?

2. (Answer any three questions) **[3×16=48]**

(a)

(i) "The more kilometers you travel with your own vehicle, the cheaper it becomes." Comment briefly on this statement. [2]

(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
Purchase of primary packing material	15,000
Opening stock of primary packing material	7,000
Closing Stock of Primary packing material	3,000
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
wages and commission to delivery man	6,500
Opening Stock of Secondary Packing Material	5,000
Purchase of Secondary Packing material	16,000
Closing Stock of Secondary Packing Material	4,000
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]

(iii) A manufacturing unit produces two products X and Y. The following information is furnished:

Particulars	Product X	Product Y
Units Produced (Qty)	57,000	42,750
Units Sold (Qty)	42,750	34,200
Machine Hours Utilised	28,500	14,250
Design Charges	42,750	51,300
Software development charges	85,500	1,08,300

Royalty paid on sales ₹1,92,375 [@ ₹2.5 per unit sold, for both the products]; Royalty paid on units produced ₹99,750 [@ ₹1 per unit purchased, for both the products], Hire charges of equipment used in manufacturing process of Product X only ₹21,375, Compute the Direct Expenses as per CAS 10. [6]

(b)

(i) List the items to be included and to be excluded while measuring the employee cost as per CAS – 7. [5]

(ii) In a factory bonus to workman is paid according to Rowan Plan. Time allotted for a job is 40 hours and the normal rate of wages is ₹ 1.25 per hour. The factory overhead charges are 50 paise per hour for the hours taken. The factory cost of a work order, executed by a worker is ₹161.875. The cost of material in each case is ₹ 100. Calculate the hours of time taken by the workman to complete the work order. [6]

(iii) Explain Blanket (Single) Overhead Rate. [5]

(c)

(i) Describe about Generally Accepted Cost Accounting Principles (GACAP). [5]

(ii) A machinery was purchased from a manufacturer who claimed that his machine could produce 142.35 tonnes in a year consisting of 365 days. Holidays, breakdown, etc, were normally allowed in the factory for 65 days. Sales were expected to be 97.5 tonnes during the year and the plant actually produced 98.28 tonnes during the year.
You are required to state the following figures: Rated Capacity; Practical Capacity Normal Capacity; Actual Capacity. [1+2+1+1=5]

(iii) Discuss the treatment of :—

- "Interest on Borrowing for Working Capital"
- "Cost of Containers Relating to Materials Purchased" [3+3=6]

(d)

(i) In a manufacturing unit, overhead was recovered at a predetermined rate of ₹ 25 per man-day. The total factory overhead incurred and the man-days actually worked were ₹3,63,12,500 and 13,12,500 respectively. Out of the 40,000 units produced during a period 30,000 units were sold. There were also 30,000 uncompleted units which may be reckoned at 66.67% complete.

On analyzing the reasons, it was found that 40% of the unabsorbed overheads were due to defective planning and the rest were attributable to increase overhead costs.

How would unabsorbed overhead be treated in Cost Account? [5]

(ii) Purchase of Materials ₹ 12,70,000 (inclusive of Trade Discount ₹ 19,050); Fee on Board ₹ 63,500; Import Duty paid ₹ 95,250; Freight inward ₹ 1,27,000 ; Insurance paid for import by sea ₹ 69,850; Rebates allowed ₹ 25,400; Cash discount ₹ 19,050; CENVAT Credit refundable ₹ 44,450; Subsidy received from the Government for importation of these materials ₹ 1,27,000. Compute the landed cost of material (i.e. value of receipt of material). [6]

(iii) Basic pay ₹3,75,000; Accommodation provided to employee free of cost [this accommodation is owned by the employer, depreciation of accommodation ₹67,500, maintenance charges of the accommodation ₹48,750 and municipal tax paid for this accommodation ₹3,750], Employer's Contribution to P.F. ₹56,250, Employee's Contribution to P.F. ₹56,250; Reimbursement of Medical expenses ₹48,750, Festival Bonus ₹15,000, Festival Advance ₹22,500. Compute the Employee cost. [5]

3. (Answer any two questions) **[2×16=32]**

(a)

(i) Explain the GATT. [3]

(ii) List out the needs of Capital Budgeting Decisions. [6]

(iii) 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]

(b)

(i) A company operates at a production level of 10,000 units. The contribution is ₹68 per unit, operating leverage is 7.5, and combined leverage is 30. If tax rate is 30%. Estimate the earnings after tax. [5]

(ii) 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%

[3]

(iii) Sampa Ltd is evaluating a project costing ₹20 lakhs. The Project generates savings of ₹2.95 lakhs per annum to perpetuity. The business risk of the project warrants a rate of return of 15%.

- Calculate Base case NPV of the project assuming no tax.
- Assuming Tax Rate of 30% with 14% Cost of Debt constituting 30% of the cost of the

project, determine Adjusted Present Value.

- Find out minimum acceptable Base Case NPV, as well as Minimum IRR.

[2+3+3=8]

(c)

(i) Ambar Limited had the following ledger balances as on 31.03.2015:

	Amount (₹)
Current Liabilities (Cr.)	15,000
Long-Term Notes Payable (Cr.)	25,500
Bonds Payable (Cr.)	35,000
Capital stock (cr.)	85,000
Retaining Earning (Cr.)	24,500
Cash (Dr.)	7,500
Accounts Receivable (Dr.)	30,000
Investments (Dr.)	20,000
Plant assets (Dr.)	67,500
Land (Dr.)	60,000

During 2014-2015, the following transactions took place:

- A tract of land was purchased for ₹ 7,750 cash.
- Bonds payable in the amount of ₹ 6,000 were retired for cash at face value.
- An additional ₹ 20,000 equity shares were issued at par for cash.
- Dividends totalling ₹ 9,375 were paid.
- Net income for 2014-2015 was ₹ 28,450 after allowing for depreciation of ₹ 9,500.
- Land was purchased through the issuance of ₹ 22,500 in bonds.
- Ambar Ltd. sold a part of its investments portfolio for ₹ 12,875 cash. The transaction resulted in a gain of ₹ 1,375 for the firm.
- Current liabilities increased to ₹ 18,000 at 31-3-2015.
- Accounts receivable at 31-3-2015 total ₹ 38,000.

Prepare a statement of cash flows for 2014-2015, under indirect method. [8]

(ii) The directors of Virat Limited are contemplating the purchase of a new machine to replace a machine which has been in operation in the factory for the last 5 years.

Ignoring interest but considering tax at 30% of net earnings, suggest which of the two alternatives should be preferred. The following are the details:

Particulars	Existing Machine	New Machine
Purchase price	₹1,40,000	₹2,10,000
Estimated life of machine	10 years	10 years
Machine running hours per annum	2,000	2,000
Units per hour	12	18
Wages per running hour	3	5.25
Power per annum	2,000	4,500
Consumables stores per annum	6,000	7,500
All other charges per annum	8,000	9,000

Materials cost per unit	1.00	1.00
Selling price per unit	2.50	2.50

You may assume that the above information regarding sales and cost of sales will hold good throughout the economic life of each of the machines. Depreciation has to be charged according to straight-line method. [8]