Roll No. | | | | | | | | | | |

ANNA UNIVERSITY (UNIVERSITY DEPARTMENTS)

B.E. / B.Tech / B. Arch (Full Time) –END SEMESTER EXAMINATIONS, APRIL / MAY 2025

INDUSTRIAL ENGINEERING
VI Semester
IE5003 & Accounting and Finance for Management
(Regulation2019)

Time:3hrs Max. Marks: 100

CO1 Apply accounting principles in a selected enterprise
CO2 Construct the P&L A/C, Balance sheet and fund flow statements
CO3 Apply the various cost accounting methods.
CO4 Develop a budget and make investment decisions
CO5 Evaluate the investments to obtain the best returns.

BL – Bloom's Taxonomy Levels
(L1-Remembering, L2-Understanding, L3-Applying, L4-Analysing, L5-Evaluating, L6-Creating)

PART- A(10x2=20Marks)
(Answer all Questions)

Q.No	Questions	Marks	CO	BL
1	State the accounting equation.	2	1	L1
2	Define historical cost concept with an example.	2	1	L2
3	The liquidity of a business firm is measured by its ability to satisfy its long-term obligations as they become due. What are the ratios used for this purpose?	2	2	L2
4	Contrast between Cash flow statement and fund flow statement.	2	2	L2
5	Find the Break-even point (in units) from the following data. Sales Volume: 80,000 units, Selling price per unit : Rs. 20, Variable Cost per unit: Rs10. Fixed Cost: Rs. 4,00,000.	2	3	L2
6	Contrast between Marginal costing and Absorption costing.	2	3	L2
7	Define Zero based Budgeting	2	4	L2
8	Differentiate between fixed and flexible budget.	2	4	L1
9	How Benefit cost ratio method is better than Net Present Value method?	2	5	L2
10	Define internal rate of return?	2	5	L1

PART- B(5x 13=65Marks)
(Restrict to a maximum of 2 subdivisions)

Q.No	Questions	Marks	CO	BL
11 (a)	On March 1, 2022, Rina established an audit practice as a sole Proprietorship and conclude the following transaction in the first month: a) Rina brought in to the business her laptop costing Rs 50,000 b) Provided service for cash Rs 23,000 c)Brought office equipment on credit Rs 25,000 d)Billed client for services Rs 16,000 e) Paid rent deposit for office Rs 10000 f) Collected payments from clients in (d) Rs 12,300	13	1	L2

	g) Withdrew cash for personal use, Rs.9000 h) paid electricity expenses Rs.1700 i) paid Salary to office assistant Rs.2000. Analyse the effect of the transaction on the accounting equation.			
	OR			
11 (b)	The transaction of the Arun for the Month of June 2012 are as follows: June 1 Arun commence his business with capital Rs.10000 2 Bought Machines Rs. 300 3 Bought goods for cash Rs. 500 4 sold good for cash Rs. 4000 5 Purchase good from Jain Rs. 2200 6 Sales to Hari Rs. 2000 7 Bought office furniture for cash Rs. 3050 8 paid advertisement expenses Rs. 200 9 Deposit cash into bank Rs. 1000 10 Paid Rent Rs. 150 11 Paid salary Rs. 325 12 Withdrawn by Arun for his personal use Rs. 100. i. Prepare journal entries for the above transaction ii. Post the journal entries to the ledger iii. Prepare a trial balance	**13**	1	L2
12 (a)	Following is the balance sheet (table 12a) of prem chand Co & Ltd as at 31 st December 2010:Calculate Current Ratio, Liquid ratio, Absolute liquid ratio.	**8**	2	L4

Table 12a: Balance Sheet as on 31.12.2010

Liabilities	Rs	Assets	Rs
Equity Share capital	2,00,000	Cash in hand	6000
10% preference share capital	2,00,000	Cash at bank	18,000
8% Debentures	80,000	Bills Receivable	60,000
9% Public debts	40,000	Investment Short Term	40,000
Bank over draft	80,000	Debtors	1,40,000
Creditors	1,20,000	Stock	80,000
Outstanding expenses	14,000	Furniture	60,000
Proposed dividend	20,000	Machinery	2,00,000
Reserves	3,00,000	Land and Buildings	4,40,000
Provision for taxation	40,000	Good Will	70,000
Profit and loss A/c	40,000	Preliminary Expenses	20,000
	11,34,000		11,34,000

ii)Calculate Debt Equity ratio from the following data: **5**
Equity Share capital= Rs 10,00,000
10% preference share capital = Rs 5,00,000
Reserves = Rs 5,00,000
Loan from IDBI = Rs 10,00,000

	Current liabilities = Rs 4,00,000 6% debentures = Rs 15,00,000			
	OR			
12 (b)	From the following balance sheets (table 12) of Sun Company Ltd., as on 31st Dec 2007 and 31st Dec. 2008, Prepare a Schedule of changes in working capital and Fund flow statement.	**13**	2	L4

Table 12: Balance sheet

Liabilities	**31st Dec 2007 (Rs)**	**31st Dec 2008 (Rs)**	**Assets**	**31st Dec 2007(Rs)**	**31st Dec. 2008(Rs)**
Equity Share Capital	3,00,000	4,00,000	Furniture	1,00,000	1,20,000
Share Premium	-	10,000	Less: Depreciation	56,000	68,000
General Reserve	1,00,000	1,20,000		44,000	52,000
Profit and Loss A/c	40,000	70,000	Goodwill	20,000	16,000
Debentures	2,00,000	1,50,000	Long Term Investments	80,000	1,04,000
Bills Payable	50,000	40,000	Stock	5,08,000	5,78,000
Trade creditors	70,000	80,000	Debtors	62,000	56,000
Outstanding Expenses	4000	2000	Cash at bank	44,000	62,000
			Discount on Debentures	6000	4000

13 (a)	A product passes through 3 distinct process to completion. During the weekend, 15th jan 2021, 20,000 units are produced and following information is obtained.	**13**	3	L4

Particulars	**Total**	**Process 1**	**Process 2**	**Process 3**
Direct Materials	440000	360000	60000	20000
Direct Labour	80000	20000	40000	20000
Direct Expenses (direct)	100000	60000		40000

The overhead expenses for the period were Rs.160000 apportioned to the process as the basis of wages.
Prepare Process Cost Account

	OR			
13 (b)i)	i) The estimated material cost of job D-2 is Rs. 5,000 and direct labour cost is likely to be Rs. 1,000. In the machine shop it will require machining by Machine No. 8 for 20 hours	**7**	3	L4

	Machine No. 11 for 6 hours. Machine hour rates for Machine No. 8 and Machine No. 11 are Rs. 10 and Rs. 15 respectively. Last year, the direct wages amounted to Rs. 80,000 and factory overheads (excluding those related to Machine No. 8 and 11) amounted to Rs. 48,000. Similarly, the factory cost of all jobs last year amounted to Rs. 2,50,000 and office expenses Rs. 37,500. Prepare a statement of quotation which provides for 20% profit used on selling price ii) Compute material cost variance, Material Price variance, Material usage variance for a output of 200 units from the information given below: Standard Quantity = 3 kg per unit of output. Standard Price = Rs.2 per kg Actual Quantity Consumed =550 kg Actual Price = Rs. 3 per kg.	**6**		
14 (a)	Labour hour requirements of 3 products manufactured in a factory: Direct labour hours per unit (in minutes) Products | 1 | 2 | 3 Operation 1 | 18 | 42 | 30 2 | - | 12 | 24 3 | 9 | 6 | - The factory works 8 hours per day, 6 days in a week. Budget qtr. is 13 weeks and during a quarter lost hour due to leave etc. are 124 hrs. Budgeted hourly rates for workers for operation I, II and III are Rs. 2.00, Rs. 2.50 and Rs. 3.00. Budgeted sales: Product 1: 9,000 units; Product 2: 15,000 units; Product 3: 12,000 units. A carry over of 5,000 units of Product 2 and 4,000 units of Product 3 and stock at the end of the budget qtr.: Product 1: 1,000 units; Product 3: 2,000 units. Prepare (i) direct labour hours, (ii) direct labour cost and (iii) number of workers	**13**	4	L4
	OR			
14 (b)	ABC company Ltd. has given the following particulars. You are required to prepare a cash budget for the first Four months Months | Sales (Rs.) | Purchase (Rs.) | Wages (Rs.) | Overhead Administrative (Rs.) | Overhead Distribution (Rs.) April | 60,000 | 60,000 | 12,000 | 2000 | 1200 May | 66,000 | 42,000 | 14,000 | 2200 | 1400 June | 72,000 | 40,000 | 16,000 | 2200 | 1400 July | 78,000 | 36,000 | 18,000 | 2400 | 1600 August | 84,000 | 34,000 | 20,000 | 2600 | 1600 (i) Cash balance on 1st April was Rs.35,000 (ii) 50 percent of sales are on credit basis which are realized in the subsequent month (iii) Suppliers are paid in the month following the month of supply	**13**	4	L4

	(iv) Delay in payment of wages and overheads is 30 days (v) Dividends on investments amounting Rs.10,000 may be received in April and July. (vi) Company plans to purchase a machine for Rs. 60,000 for which it has to pay the consideration in three equal instalments in the month of April, June and July.			
15 (a)	A Company has to make a choice between three possible investments projects A, B and C. The immediate capital outlays on each being is Rs 11,000. Each will continue for 5 years and it has been decided that a discount rate of 10% is acceptable for all three. The cash flows for these projects are shown In Table 15a. Table 15a: Cash in flows Which Project would you recommend and why?	**13**	5	L3

	A(Rs)	B (Rs.)	C (Rs.)
First Year	1000	2000	3000
Second Year	2000	3000	4000
Third Year	3000	5000	3500
Fourth Year	4000	3000	2500
Fifth Year	5000	2000	2000

OR

15 (b)	Determine the average rate of return from the following data of two machines A and B. Depreciation has been charged on a straight-line basis. Table 15b: Details of Machine	**13**	5	L3

	Machine A	Machine B
Cost	Rs.56,125	Rs 56,125
Annual estimated income after depreciation and income tax First year	3375	11375
Second Year	5375	9375
Third Year	7375	7375
Fourth Year	9375	5375
Fifth Year	11375	3375
	36875	36875
Estimated life in years	5	5
Estimated Salvage value	3000	3000
Average income tax rate	55%	55%
Additional working capital	Rs 5000	Rs 6000

PART- C(1x 15 = 15Marks)

(Q.No.16 is compulsory)

<table>
<tr><th>Q.No</th><th>Questions</th><th>Marks</th><th>CO</th><th>BL</th></tr>
<tr><td>16.</td><td>Following Information's was extracted from the books of Sudha ltd (Table 16). Prepare finance Account statements on 31 march 2010. Closing stock : Rs. 45,000.

Table16: Balances extracted from the book of Mrs Sudha
<table>
<tr><th>Particular</th><th>Debit (Rs)</th><th>Credit (Rs)</th></tr>
<tr><td>Opening stock</td><td>12500</td><td></td></tr>
<tr><td>Depreciation</td><td>7000</td><td></td></tr>
<tr><td>Carriage inwards</td><td>700</td><td></td></tr>
<tr><td>Furniture</td><td>8000</td><td></td></tr>
<tr><td>Carriage outwards</td><td>500</td><td></td></tr>
<tr><td>Plant &machinery</td><td>2,00;000</td><td></td></tr>
<tr><td>Cash</td><td>8900</td><td></td></tr>
<tr><td>Salaries</td><td>7500</td><td></td></tr>
<tr><td>Debtors</td><td>19000</td><td></td></tr>
<tr><td>Discount allowed</td><td>1500</td><td></td></tr>
<tr><td>Bills Receivable</td><td>17,000</td><td></td></tr>
<tr><td>Wages</td><td>16,000</td><td></td></tr>
<tr><td>Sales return</td><td>14,000</td><td></td></tr>
<tr><td>Purchase</td><td>86000</td><td></td></tr>
<tr><td>Sales</td><td></td><td>1,89,000</td></tr>
<tr><td>Commission received</td><td></td><td>2000</td></tr>
<tr><td>Capital</td><td></td><td>1,71,300</td></tr>
<tr><td>Creditor</td><td></td><td>17,500</td></tr>
<tr><td>Bills payable</td><td></td><td>5000</td></tr>
<tr><td>Return outward</td><td></td><td>13,800</td></tr>
<tr><td></td><td>3,98,600</td><td>3,98,600</td></tr>
</table></td><td>15</td><td>2</td><td>L5</td></tr>
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ADDITIONAL CONTROLLER OF EXAMINATIONS * AU CHENNAI 600 025