

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



M.Com. DEGREE EXAMINATION – COMMERCE

FIRST SEMESTER – APRIL 2023

PCO1MC04 – ACCOUNTING FOR DECISION MAKING

Date: 04-05-2023

Dept. No.

Max. : 100 Marks

Time: 09:00 AM - 12:00 NOON

SECTION A

Answer ALL the questions

| | | | |
|----------|--|----|-----|
| 1 | Answer the following Questions / True or False/ Fill in the blanks/ MCQ (5 x 1)= 5) | | |
| a) | ABC is better than the traditional Costing method while charging the overhead expenses to the cost of a product. T/F | K1 | CO1 |
| b) | Fixed Costs remain constant in the long run. T/F | K1 | CO1 |
| c) | Direct Material _____ Variance is used when more than one material is used | K1 | CO1 |
| d) | The transfer pricing provisions are intended to ensure that - A) Profits are not understated B) Expenses are not understated C) Both A and C D) Losses are not overstated | K1 | CO1 |
| e) | The statement of cash flow clarifies cash flows according to A) Operating and Non-operating Flows. B) Inflow and Outflow. C) Investing and Non-operating Flows. D) Operating, Investing, and Financing Activities | K1 | CO1 |
| 2 | Match the following with the most appropriate answer. (5 x 1 = 5) | | |
| a) | Standard Costing - Comparative Statement | K2 | CO1 |
| b) | Capital Budgeting - Variable Cost | K2 | CO1 |
| c) | Marginal Cost - Both fixed and Variable Cost | K2 | CO1 |
| d) | Relevant Cost - Predetermined Cost. | K2 | CO1 |
| e) | Ratio Analysis - Long-Term Investment | K2 | CO1 |

SECTION B

Answer any THREE of the following

(3 x 10 = 30)

| 3 | a) Explain the significance of Capital Budgeting b) Discuss Capital Budgeting Process. | K3 | CO2 | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|--|-------------|-----|---|---|--|----|----|----|--------------|-----|-----|-----|---------------|----|----|----|--------------------|---|---|---|---------------------------------|------|------|-----|----|-----|
| 4 | <p>A company is organized in two divisions namely A and B division A produces three products K, L, and M. Their data per unit are as follows.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Particulars</th> <th style="text-align: center;">K</th> <th style="text-align: center;">L</th> <th style="text-align: center;">M</th> </tr> <tr> <td></td> <th style="text-align: center;">Rs</th> <th style="text-align: center;">Rs</th> <th style="text-align: center;">Rs</th> </tr> </thead> <tbody> <tr> <td>Market price</td> <td style="text-align: center;">120</td> <td style="text-align: center;">115</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Variable cost</td> <td style="text-align: center;">84</td> <td style="text-align: center;">60</td> <td style="text-align: center;">70</td> </tr> <tr> <td>Direct Labour cost</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Maximum sales potential (Units)</td> <td style="text-align: center;">1600</td> <td style="text-align: center;">1000</td> <td style="text-align: center;">600</td> </tr> </tbody> </table> <p>Division B had a demand for 600 units of product L. for its use. If division A can't supply product from market at Rs. 112per unit what should be the transfer price of 600 units of L for division B, if the total direct labour hours available in division A are restricted to 15,000?</p> | Particulars | K | L | M | | Rs | Rs | Rs | Market price | 120 | 115 | 100 | Variable cost | 84 | 60 | 70 | Direct Labour cost | 4 | 5 | 3 | Maximum sales potential (Units) | 1600 | 1000 | 600 | K3 | CO2 |
| Particulars | K | L | M | | | | | | | | | | | | | | | | | | | | | | | | |
| | Rs | Rs | Rs | | | | | | | | | | | | | | | | | | | | | | | | |
| Market price | 120 | 115 | 100 | | | | | | | | | | | | | | | | | | | | | | | | |
| Variable cost | 84 | 60 | 70 | | | | | | | | | | | | | | | | | | | | | | | | |
| Direct Labour cost | 4 | 5 | 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum sales potential (Units) | 1600 | 1000 | 600 | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | |
|---|---|-------------|--------------|--------------|-------------|--------------|--------------|-----|
| 5 | Calculate all variances from the following particulars. | | | | | | K3 | CO2 |
| | Standard | | | Actual | | | | |
| | Material | Qty. Kg. | Price Rs. | Total Rs. | Qty. kg. | Price Rs. | Total Rs. | |
| | A | 500 | 6.00 | 3,000 | 400 | 6.00 | 2,400 | |
| | B | 400 | 3.75 | 1,500 | 500 | 3.60 | 1,800 | |
| | C | 300 | 3.00 | 900 | 400 | 2.80 | 1,120 | |
| | | <u>1200</u> | | | <u>1300</u> | | | |
| | Less 10% | | | | | | | |
| | Normal Loss | <u>120</u> | | | <u>220</u> | | | |
| | | 1080 | 5,400 | | 1,080 | | 5,320 | |

| | | | | | | | | |
|---|--|-----------|-----------|-----------|-------|--|----|-----|
| 6 | A company for which you are the cost accountant, manufacturers foods in three separate factories. The projected figures for the next year are as follows : | | | | | | K3 | CO2 |
| | Trichy | | Madurai | | Salem | | | |
| | | Rs. | Rs. | Rs. | | | | |
| | Sales | 44,00,000 | 40,00,000 | 70,00,000 | | | | |
| | Branch expenses : | | | | | | | |
| | Salaries | 4,20,000 | 3,80,000 | 6,20,000 | | | | |
| | Advertising | 80,000 | 1,50,000 | 1,00,000 | | | | |
| | Others | 1,00,000 | 80,000 | 1,10,000 | | | | |
| | There is a Central office in Madras which estimated to cost Rs. 15,40,000 and this is to apportioned to the three factories on the basis of the sales figures. Variable costs amount to 75% of sales of each factory. You are required to prepare a comparative profit and loss a/c for the next year and advise whether the Madurai factory should be closed if that would save all the Madurai branch expenses and reduce the Central office expenses from Rs. 15,40,000 to Rs. 12,40,000. | | | | | | | |

| | | | |
|---|---|----|-----|
| 7 | From the given particulars, construct the Balance Sheet of Y Ltd as on 31 st March 2022. Fixed assets (Net) Rs.10,50,000. Fixed assets turnover ratio – 2. Stock turnover ratio – 6: Gross profit ratio 25% Net profit (before interest) ratio – 8% Fixed charges cover (Debenture interest 7%) – 8 Debt collection period – 45 days; Materials consumed to sales - 30% Stock of raw materials – 8 months consumption; Current ratio – 2.4; Quick ratio – 1; Reserves and Surplus to Share capital 0 – 20 | K3 | CO2 |
|---|---|----|-----|

SECTION C

Answer any TWO of the following (2 x 12.5 = 25)

| 8 | a) What is the Relevant Cost? b) Discuss characteristics of Relevant Cost. | K4 | CO3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---------------------|-----------------|-----|-------------------------------------|--|--|--|-------------|--------|-------------|--------|------------------|--------|-------------------|--|--------------|----------|---------------------|----------|-----------------|----------|------------------|----------|--|-----------------|--|-----------------|------------------------|--|-----------------|----------|-----------------------|--|------------------|--|-------------|--|---------|--|---------------------|--|----------------|--|----------------------|--------|-------------------|--|--|
| 9 | The following figures relate to Nirmal Traders Ltd. for the year ended 31 st March 2000. | | K4 | CO3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1" style="width: 100%;"> <thead> <tr> <th colspan="4" style="text-align: center;">Trading and Profit and Loss Account</th> </tr> <tr> <th style="width: 25%;">Particulars</th> <th style="width: 15%;">Amount</th> <th style="width: 25%;">Particulars</th> <th style="width: 35%;">Amount</th> </tr> </thead> <tbody> <tr> <td>To Opening Stock</td> <td>75,000</td> <td>By Sales 5,20,000</td> <td></td> </tr> <tr> <td>To Purchases</td> <td>3,25,000</td> <td>Less: Return 20,000</td> <td>5,00,000</td> </tr> <tr> <td>To Gross Profit</td> <td>2,00,000</td> <td>By Closing Stock</td> <td>1,00,000</td> </tr> <tr> <td></td> <td><u>6,00,000</u></td> <td></td> <td><u>6,00,000</u></td> </tr> <tr> <td>To operating Expenses:</td> <td></td> <td>By Gross profit</td> <td>2,00,000</td> </tr> <tr> <td>Administration 40,000</td> <td></td> <td>By Non-operating</td> <td></td> </tr> <tr> <td>Selling and</td> <td></td> <td>Income;</td> <td></td> </tr> <tr> <td>Distribution 25,000</td> <td></td> <td>Dividend 9,000</td> <td></td> </tr> <tr> <td>To Non-operating Exp</td> <td>65,000</td> <td>Profit on sale of</td> <td></td> </tr> <tr> <td></td> <td></td> <td>Shares 11,000</td> <td></td> </tr> </tbody> </table> | | | | Trading and Profit and Loss Account | | | | Particulars | Amount | Particulars | Amount | To Opening Stock | 75,000 | By Sales 5,20,000 | | To Purchases | 3,25,000 | Less: Return 20,000 | 5,00,000 | To Gross Profit | 2,00,000 | By Closing Stock | 1,00,000 | | <u>6,00,000</u> | | <u>6,00,000</u> | To operating Expenses: | | By Gross profit | 2,00,000 | Administration 40,000 | | By Non-operating | | Selling and | | Income; | | Distribution 25,000 | | Dividend 9,000 | | To Non-operating Exp | 65,000 | Profit on sale of | | |
| Trading and Profit and Loss Account | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Particulars | Amount | Particulars | Amount | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| To Opening Stock | 75,000 | By Sales 5,20,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| To Purchases | 3,25,000 | Less: Return 20,000 | 5,00,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| To Gross Profit | 2,00,000 | By Closing Stock | 1,00,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <u>6,00,000</u> | | <u>6,00,000</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| To operating Expenses: | | By Gross profit | 2,00,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Administration 40,000 | | By Non-operating | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Selling and | | Income; | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Distribution 25,000 | | Dividend 9,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| To Non-operating Exp | 65,000 | Profit on sale of | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Shares 11,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | |
|------------------------|----------|--|----------|
| Loss on sale of assets | 5,000 | | 20,000 |
| To Net profit | 1,50,000 | | |
| | 2,20,000 | | 2,20,000 |

Balance Sheet on 31st March 2000

| Liabilities | Amount | Assets | Amount |
|--|----------|---------------------|----------|
| Issued capital: 2,000 Equity shares of Rs.100 each | 2,00,000 | Land and Building | 2,00,000 |
| Reserves | 90,000 | Plant and Machinery | 1,25,000 |
| 10% Debenture | 1,00,000 | Stock | 1,00,000 |
| Current Liabilities | 1,50,000 | Debtors | 1,40,000 |
| Profit and Loss a/c. | 60,000 | Cash and Bank | 30,000 |
| | | Prepaid expenses | 5,000 |
| | 5,00,000 | | 5,00,000 |

Calculate (1) Gross profit ratio (2) Operating ratio (3) Operating profit ratio (4) Net profit ratio (5) Expenses ratio (6) Stock turnover ratio (7) Return on total resources (8) Turnover of fixed assets (9) Turnover to total assets. 10) Current Ratio 11) Liquid ratio

A company has a machine that has been in operation for 2 years and the remaining estimated life is 10 years with no salvage value. Its current market value is Rs 1,00,000. The management is considering a proposal to replace its machine with a new machine. The relevant particulars are as follows.

| Particulars | Existing Machine | New Machine |
|------------------------|------------------|-------------|
| Purchase Price | 2,40,000 | 4,00,000 |
| Estimated Life | 12 Years | 10 Years |
| Annual Operating Hours | 2,000 | 2,000 |
| Selling Price Per Unit | 10 | 10 |
| Output Per Hour | 15 Units | 30 Units |
| Material Per Unit | Rs 2 | Rs 2 |
| Labour Per Hour | 20 | 40 |
| Other Expenses | 11,000 | 11,000 |
| Working Capital | 25,000 | 40,000 |

Tax rate is 40% and COC is 15%. Loss on sale of asset is tax deductible. Should the machine be replaced?

From the following data, calculate 1, Labour cost variance 2. Rate variance 3. Efficiency variance 4. Mix variance 5. Labour sub - efficiency variance.

| | Standard | | Actual | |
|----------------|----------|------|--------|------|
| | Hours | Rate | Hours | Rate |
| Skilled labour | 10 | 3.00 | 9,000 | 4.00 |
| Semi - skilled | 8 | 1.50 | 8,400 | 1.50 |
| Un - skilled | 16 | 1.00 | 20,000 | 0.90 |

The actual production was 1000 articles.

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K4 CO3

11

K4 CO3

SECTION D

Answer any ONE of the following

(1 x 15 = 15)

The following information provides details of costs volume and cost drivers for a particular period in respect of XYZ Ltd for Products X, Y and Z.

| Particulars | Product X | Product Y | Product Z | Total |
|------------------------------|-----------|-----------|-----------|------------|
| Production and sales (units) | 30,000 | 20,000 | 8,000 | |
| Raw material usage (units) | 5 | 5 | 11 | |
| Direct material cost (Rs.) | 25 | 20 | 11 | 12,38,000 |
| Direct labour hours | 1-1/3 | 2 | 1 | 88,000 |
| Machine hours | 1-1/3 | 1 | 2 | 76,000 |
| Direct labour cost | 8 | 12 | 6 | |
| Number of production run | 3 | 7 | 20 | 30 |
| Number of deliveries | 9 | 3 | 20 | 32 |
| Number of receipts | 15 | 35 | 220 | 270 |
| Number of production orders | 15 | 10 | 25 | 50 |
| OVERHEAD COSTS | | | | Rs. |
| Set ups | | | | 30,000 |
| Machine | | | | 7,60,000 |
| Receiving | | | | 4,35,000 |
| Packing | | | | 2,50,000 |
| Engineering | | | | 3,73,000 |
| Total of overhead costs | | | | 18,48,000 |

12

K5

CO4

In the past, the company has allocated overheads to products on the basis of direct labour hours. However, the majority of overheads are related to machine hours rather than direct labour hours. The company has recently redesigned its costs system by recovering overheads using two volumes related based (a) Machine hours and (b) materials handling overhead rate of recovering overheads of the receiving departments. Both the current and the previous cost systems reported low-profit margins for product X, which is the company's highest-selling product. The management accountant has recently attended a conference on 'Activity Based Costing', and the overhead costs for the last period have been analysed by the major activities in order to compute activity-based costing.

From the above information, you are required to

- A) Old product costing system: Compute the costs of the product using a traditional volume-related costing system based on the assumption that all overheads are recovered on the basis of direct labour hours.
- B) New product costing system: The overheads of the receiving department are recovered by materials handling overhead rate and the remaining overheads are recovered using a machine hour rate.
- C) ABC method.

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The following particulars are obtained from costing records of a factory.

| | Product A (Per unit) | Product B (Per unit) |
|----------------------------------|---------------------------|--------------------------|
| | Rs. | Rs. |
| Selling price | 200 | 500 |
| Material (Rs. 20 per kg.) | 40 | 160 |
| Labour (Rs. 10. per hour) | 50 | 100 |
| Variable overhead | 20 | 40 |
| Total fixed overheads Rs. 15,000 | | |

K5

CO4

Comment on the profitability of each product when :

- (a) Raw material is in short supply ;
- (b) Production capacity is limited ;
- (c) Sales quantity is limited ;
- (d) Sales value is limited ;

Only 1,000 kgs. of raw material is available for both types of products in total and the maximum sales quantity of each product is 300 units.

SECTION E

Answer any ONE of the followings

(1 x 20 = 20)

The following are the summarised Balance Sheets of Alacrity & Co. as on 31st March 2021 and 2022

Balance Sheets

| Liabilities | 2021 Rs. | 2022 Rs. | Assets | 2021 Rs. | 2022 Rs. |
|------------------------|-----------------|-----------------|------------------|-----------------|-----------------|
| Share capital | 2,00,000 | 2,50,000 | Land & Buildings | 2,00,000 | 1,90,000 |
| General reserve | 50,000 | 60,000 | Machinery | 1,50,000 | 1,69,000 |
| P & L A/c | 30,500 | 30,600 | Stock | 1,00,000 | 74,000 |
| Bank loan (long-term) | 70,000 | - | Debtors | 80,000 | 64,200 |
| Sundry creditors | 1,50,000 | 1,35,200 | Cash | 500 | 600 |
| Provision for taxation | 30,000 | 35,000 | Bank | - | 8,000 |
| | | | Goodwill | - | 5,000 |
| | <u>5,30,500</u> | <u>5,10,800</u> | | <u>5,30,500</u> | <u>5,10,800</u> |

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Additional Information:

- a. Dividend of Rs. 23,000 was paid
- b. Assets of another company were purchased for a consideration of Rs. 50,000 payable in shares. The following assets purchased Stock – Rs. 20,000. Machinery Rs. 25,000.
- c. Machinery was further purchased for Rs. 8,000.
- d. Depreciation written off on machinery Rs. 8,000.
- e. Income tax provided during the year Rs. 33,000.
- f. Loss on sale of machinery Rs. 200 was written off to general reserve.

K6

CO5

You are required to prepare the cash flow statement.as per AS-3 Working notes form part of your answer.

The following are the summarised balance sheet of ABC Ltd. as on 31st March 2018 and 2019.

| Liabilities | 2018 (Rs.) | 2019 (Rs.) | Assets | 2018 (Rs.) | 2019 (Rs.) |
|-----------------------------------|-----------------------|-------------------|----------------------|-----------------------|-----------------------|
| Share Capital | 5,00,000 | 5,00,000 | Land & building | 2,00,000 | 2,50,000 |
| Profit & Loss | 1,50,000 | 2,52,000 | Plant & Machinery | 3,50,000 | 3,60,000 |
| Debentures | 2,00,000 | 2,00,000 | Sundry debtors | 1,47,000 | 1,38,000 |
| Sundry creditors | 1,20,000 | 1,05,000 | Stock | 2,50,000 | 2,74,000 |
| Provision for doubtful debts | 5,000 | 4,000 | Bank | 83,000 | 1,01,000 |
| Provision For Depreciation | | | Preliminary expenses | 5,000 | 4,000 |
| Land & building | | | | | |
| Plant & machinery | 30,000 | 34,000 | | | |
| | 30,000 | 32,000 | | | |
| | 10,35,000 | 11,27,000 | | 10,35,000 | 11,27,000 |

15

K6 CO5

The following additional information are available:

- The net profit for the year ending 31st March 2019 was Rs. 1,52,000 and is arrived at after charging loss on sale of machinery, writing off preliminary expenses and adjusting provision for doubtful debts.
- During the year, part of the machinery costing Rs.7,000, accumulated depreciation thereon being Rs. 1,000 was sold for Rs. 5,000.
- Dividend of Rs. 50,000 was paid during the year ended 31st March 2019.
Prepare cash flow statement for the year 2019 as per AS – 3 through Indirect Method.
