

**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034****M.Com. DEGREE EXAMINATION – COMMERCE****FIRST SEMESTER – NOVEMBER 2022****PCO1MC04 – ACCOUNTING FOR DECISION MAKING**

Date: 28-11-2022

Dept. No. 

Max. : 100 Marks

Time: 01:00 PM - 04:00 PM

**SECTION A****Answer ALL the questions**

<b>1</b>	<b>Answer the following Questions / True or False/ Fill in the blanks/ MCQ</b>	<b>(5 x 1)= 5)</b>										
a)	Ratio analysis is a tool of management for measuring efficiency and guiding business policies T/F	K1	CO1									
b)	Purchase managers are not responsible for material price variances. T/F	K1	CO1									
c)	In relevant cost, while pricing under normal situations _____ Plus is applied	K1	CO1									
d)	From the following particulars calculate the fixed cost <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Capacity</td> <td>60%</td> <td>100%</td> </tr> <tr> <td>Units produced</td> <td>600 units</td> <td>1,000 units</td> </tr> <tr> <td>Power and fuel</td> <td>Rs.1,600</td> <td>Rs.2,000</td> </tr> </table> A)Rs 1,600. B) Rs. 1,000. C) Rs. 600. D) Rs. 2,000	Capacity	60%	100%	Units produced	600 units	1,000 units	Power and fuel	Rs.1,600	Rs.2,000	K1	CO1
Capacity	60%	100%										
Units produced	600 units	1,000 units										
Power and fuel	Rs.1,600	Rs.2,000										
e)	Which of the following can be a criterion for the acceptance of a project? A)The Profitability Index should be greater than the unity B)The Internal Rate of Return should be greater than the cost of capital C)The Net Present Value should be greater than zero D) All of the above	K1	CO1									
<b>2</b>	<b>Match the following with the most appropriate answer.</b>	<b>(5 x 1 = 5)</b>										
a)	Activity-Based Costing = Break Even Point.	K2	CO1									
b)	Cash Flow Statement = Marginal Cost Method.	K2	CO1									
c)	Marginal Costing = Discounted Cash Flow Method.	K2	CO1									
d)	Transfer Pricing = Overhead Distribution.	K2	CO1									
e)	Capital Budgeting = AS-3.	K2	CO1									

**SECTION B**

	<b>Answer any THREE of the followings</b>	<b>(3 x 10 = 30)</b>	
<b>3</b>	What do you mean by ratio analysis? Examine its significance and utility.	K3	CO2
<b>4</b>	a) Mention the reason for using the Relevant Cost. b) A machine that originally cost Rs.1,20,000, has an estimated life of 10 years and is depreciated at the rate of Rs.12,000 per year. It has been unused for some time as expected production orders did not materialize. A special order has now been received which would require the use of the machine for two months. The current cost realizable value of the machine is Rs.80,000. It is used for the job, its value is expected to fall to Rs.75,000 The net book value of the machine is Rs.84,000 Routine maintenance of the machine currently costs Rs.400 per month. With use, the cost of maintenance and repairs would increase to Rs.600 per month. What would be the relevant cost of using the machine for the order so that the minimum price for the order can be ascertained?	K3	CO2

5	<p>The standard material cost for 100kg. of chemical D is made up of:          Chemical A - 30 kg. @ Rs. 4 per kg.          Chemical B - 40 kg. @ Rs. 5 per kg.          Chemical C - 80 kg. @ Rs. 6 per kg.</p> <p>In a batch, 500 kg. of chemical D were produced from a mix of          Chemical A - 140 kg. at a cost of Rs. 588          Chemical B - 220 kg. at a cost of Rs. 1,056          Chemical C - 440 kg. at a cost of Rs. 2,860</p> <p>How do the yield, mix and the price factors contribute to the variance in the actual cost per 100kg. of chemical D over the standard cost?</p>	K3	CO2																				
6	<p>A company producing 40,000 units of X product working at 80% capacity receives an order from a foreign dealer for 10,000 units at Rs. 50 per unit although the local price is Rs. 90 per unit.</p> <table border="0" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding-right: 20px;">Material</td> <td style="text-align: right;">Rs. 20</td> </tr> <tr> <td colspan="2">Labour :</td> </tr> <tr> <td style="padding-right: 20px;">    Skilled ( fixed )</td> <td style="text-align: right;">10</td> </tr> <tr> <td style="padding-right: 20px;">    Unskilled labour</td> <td style="text-align: right;">10</td> </tr> <tr> <td style="padding-right: 20px;">    Variable Overhead</td> <td style="text-align: right;">10</td> </tr> <tr> <td style="padding-right: 20px;">    Fixed Overhead</td> <td style="text-align: right; border-bottom: 1px solid black;">20</td> </tr> <tr> <td style="padding-right: 20px;">        Total</td> <td style="text-align: right; border-bottom: 1px solid black;">70 per unit</td> </tr> </table> <p>1) Advice the management whether to accept the order or not.          2) What will be your advice if the order has come from the local merchant?          3) If there is temporary fall in demand what will be minimum price to be charged?</p>	Material	Rs. 20	Labour :		Skilled ( fixed )	10	Unskilled labour	10	Variable Overhead	10	Fixed Overhead	20	Total	70 per unit	K3	CO2						
Material	Rs. 20																						
Labour :																							
Skilled ( fixed )	10																						
Unskilled labour	10																						
Variable Overhead	10																						
Fixed Overhead	20																						
Total	70 per unit																						
7	<p>X Ltd. is considering to purchase of a computer for its Research &amp; Development. It will cost Rs.35,00,000. The operating cost [excluding depreciation ] would be Rs. 7,00,000 p.a. The system has an useful life of 6 years at the end of which the salvage value of Rs. 1,00,000 is expected. The system would reduce deciding cost by Rs. 12,00,000 p .a. The existing drawing office which is presently being used would be sold for Rs. 9,00,000. Being capital expenses for R &amp; D, the proposed will attract 100% write off the cost of the computer for tax purpose. The gain from disposing the old equipment and its salvage value may be considered to be tax free. The COC is 12%. Tax Rate 50%. Advice the company.</p>	K3	CO2																				
<b>SECTION C</b>																							
<b>Answer any TWO of the followings (2 x 12.5 = 25)</b>																							
8	a) What is Transfer pricing? b) Discuss the objectives and methods of Transfer Pricing.	K4	CO3																				
9	<p>The following ratios and other data relate to the financial statements of SKF Ltd., for the year ended 31. 03. 2022.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding-right: 20px;">Working capital ratio</td> <td style="text-align: right;">1.75</td> </tr> <tr> <td style="padding-right: 20px;">Acid test ratio</td> <td style="text-align: right;">1.27</td> </tr> <tr> <td style="padding-right: 20px;">Working capital</td> <td style="text-align: right;">Rs.33,000</td> </tr> <tr> <td style="padding-right: 20px;">Fixed assets to shareholders' equity ratio</td> <td style="text-align: right;">0.625 to 1</td> </tr> <tr> <td style="padding-right: 20px;">Inventory turnover (based on closing stock)</td> <td style="text-align: right;">4 times</td> </tr> <tr> <td style="padding-right: 20px;">Gross profit ratio</td> <td style="text-align: right;">40%</td> </tr> <tr> <td style="padding-right: 20px;">Earnings per share</td> <td style="text-align: right;">Rs.0.50</td> </tr> <tr> <td style="padding-right: 20px;">The average age of accounts receivable (based on the calendar year of 365 days)</td> <td style="text-align: right;">73 days</td> </tr> <tr> <td style="padding-right: 20px;">Share capital – Number of shares</td> <td style="text-align: right;">20,000</td> </tr> <tr> <td style="padding-right: 20px;">Earning for the year as a percentage of share capital</td> <td style="text-align: right;">25%</td> </tr> </table>	Working capital ratio	1.75	Acid test ratio	1.27	Working capital	Rs.33,000	Fixed assets to shareholders' equity ratio	0.625 to 1	Inventory turnover (based on closing stock)	4 times	Gross profit ratio	40%	Earnings per share	Rs.0.50	The average age of accounts receivable (based on the calendar year of 365 days)	73 days	Share capital – Number of shares	20,000	Earning for the year as a percentage of share capital	25%	K4	CO3
Working capital ratio	1.75																						
Acid test ratio	1.27																						
Working capital	Rs.33,000																						
Fixed assets to shareholders' equity ratio	0.625 to 1																						
Inventory turnover (based on closing stock)	4 times																						
Gross profit ratio	40%																						
Earnings per share	Rs.0.50																						
The average age of accounts receivable (based on the calendar year of 365 days)	73 days																						
Share capital – Number of shares	20,000																						
Earning for the year as a percentage of share capital	25%																						

The company had no prepaid expenses, deferred revenue expenses, intangible assets or long-term liabilities. Prepare Profit and Loss Account and Balance Sheet.

Loyola College incurred the following expenses on its visiting faculty during the previous year.

<b>SALARY</b>	<b>2,50,000</b>
TRAVEL	1,50,000
ACCOMMODATION	6,00,000
BOARDING	2,00,000

The accommodation expenses are expected to increase by Rs 1,00,000 every year.

10 The college plans to construct a building to take care of the accommodation of such faculty. This building will save Rs 80,000 in boarding charges and Rs 2,70,000 in the cost of training .

To construct the building the college will use its existing land which was bought some years back at a cost of Rs 80,000. The building will cost Rs 16,00,000 and the annual maintenance is expected to be Rs 1,00,000. The cost of construction will write off equally over 5 years. The tax rate is 40% and the cost of capital is 12%. Should the college construct the building?

K4 CO3

A company produces three products A, B and C, with standard costs and quantities per unit are as follows:

	<b>Product A</b>	<b>Product B</b>	<b>Product C</b>
Quantity Produced	10,000 Nos	20,000 Nos	30,000 Nos.
Direct material per unit	Rs.50	Rs.40	Rs.30
Direct labour per unit	Rs.30	Rs.40	Rs.50
Labour hours required per unit	3 hours	4 hours	5our hs
Machine hours required per unit	4 hours	4hours	7 hours
Number of purchase requisitions	1,200 Nos	1,800 Nos.	2,000 Nos.
Number of setups	240 Nos.	260 Nos.	300 Nos

11 i)Production overhead split by department: department 1- Rs.11,00,000 and department 2 - Rs. 15,00,000  
 ii)Department 1 is labour-intensive and department 2 is machine intensive  
 iii)Total labour hours in department 1 - 1,83,333 while total machine hours In department 2 - 5,00,000.  
 iv)Product overhead split by activity: receiving / inspecting = Rs.14,00,000  
 v)Production scheduling / machine set up = Rs.12,00,000  
 vi)Number of batches for scheduling and set up = 800  
 You are required to prepare a Cost Statement under  
 a) Traditional Absorption Costing, b) Activity Based Costing Method.

K4 CO3

**SECTION D**

**Answer any ONE of the followings**

**(1 x 15 = 15)**

12	<p>A highly profitable company plans to put up a windmill to generate electricity. The details of which are as follows:                  The cost of windmill Rs 4,00,00,000 with 10 years life and no residual value .                  The cost of land Rs 15,00,000 which will appreciate to 60,00,000 at the end of 10 years.                  Subsidy of government Rs 15,00,000 will be received at the end of one year.                  Electricity will be sold at Rs 2.50 per unit in year 1, increasing by 0.50 paise per year up to 5<sup>th</sup> year and thereafter by Re. 1 till the 10<sup>th</sup> year.                  The cost of capital is 12% and tax rate is 40%. Ignore tax on capital profit.                  Maintenance cost is Rs 10,00,000 in the first year and will increase by 10,00,000 per year thereafter.                  Windmill is subject to depreciation on straight line method as per the income tax act.                  Electricity generated will be Rs 25,00,000 units per annum , 4% of which will be given free to the state electricity board.                  Ascertain the viability of the project.</p>	K5	CO4																																																	
13	<p>13a) The costs per unit of the three products A, B &amp; C of a company are given below :</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="text-align: left;">Particulars</th> <th colspan="3" style="text-align: center;">Products</th> </tr> <tr> <th style="text-align: center;">A</th> <th style="text-align: center;">B</th> <th style="text-align: center;">C</th> </tr> <tr> <th></th> <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>Direct Materials</td> <td style="text-align: center;">20</td> <td style="text-align: center;">16</td> <td style="text-align: center;">18</td> </tr> <tr> <td>Direct Labour</td> <td style="text-align: center;">12</td> <td style="text-align: center;">14</td> <td style="text-align: center;">12</td> </tr> <tr> <td>Variable overhead</td> <td style="text-align: center;">8</td> <td style="text-align: center;">10</td> <td style="text-align: center;">6</td> </tr> <tr> <td>Fixed Expenses</td> <td style="text-align: center;">6</td> <td style="text-align: center;">6</td> <td style="text-align: center;">4</td> </tr> <tr> <td>Total Cost</td> <td style="text-align: center;">46</td> <td style="text-align: center;">46</td> <td style="text-align: center;">40</td> </tr> <tr> <td>Profit</td> <td style="text-align: center;">18</td> <td style="text-align: center;">14</td> <td style="text-align: center;">12</td> </tr> <tr> <td>Selling Price</td> <td style="text-align: center;">64</td> <td style="text-align: center;">60</td> <td style="text-align: center;">52</td> </tr> <tr> <td>No. of units produced</td> <td style="text-align: center;">10,000</td> <td style="text-align: center;">5,000</td> <td style="text-align: center;">8,000</td> </tr> </tbody> </table> <p>Production arrangements are such that if one product is given up the production of the others can be raised by 50% so the directors propose that C should be given up.</p> <p>13b) A gang of workers normally consists of 30 men, 15 women and 10 boys. They are paid at standard hourly rates as under :</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding-left: 20px;">Men</td> <td style="padding-left: 20px;">Rs.0.80</td> </tr> <tr> <td style="padding-left: 20px;">Women</td> <td style="padding-left: 20px;">Rs.0.60</td> </tr> <tr> <td style="padding-left: 20px;">Boys</td> <td style="padding-left: 20px;">Rs.0.40</td> </tr> </table> <p>In a normal working week of 40 hours, the gang is expected to produce 2,000 units of output. During the week ending 30<sup>th</sup> September 2000, the gang consisted of 40 men, 10 workers and 5 boys. The actual wages paid were Rs.0.70, Re. 0.65 and Re.0.30 respectively. 4 hours were lost due to abnormal idle time and 1,600 units were produced.</p> <p>Calculate (i) wage variance, (ii) wage rate variance, (iii) labour efficiency variance, (iv) labour idle time variance and (v) gang composition variance (i.e. labour mix variance).</p>	Particulars	Products			A	B	C		Rs.	Rs.	Rs.	Direct Materials	20	16	18	Direct Labour	12	14	12	Variable overhead	8	10	6	Fixed Expenses	6	6	4	Total Cost	46	46	40	Profit	18	14	12	Selling Price	64	60	52	No. of units produced	10,000	5,000	8,000	Men	Rs.0.80	Women	Rs.0.60	Boys	Rs.0.40	K5	CO4
Particulars	Products																																																			
	A	B	C																																																	
	Rs.	Rs.	Rs.																																																	
Direct Materials	20	16	18																																																	
Direct Labour	12	14	12																																																	
Variable overhead	8	10	6																																																	
Fixed Expenses	6	6	4																																																	
Total Cost	46	46	40																																																	
Profit	18	14	12																																																	
Selling Price	64	60	52																																																	
No. of units produced	10,000	5,000	8,000																																																	
Men	Rs.0.80																																																			
Women	Rs.0.60																																																			
Boys	Rs.0.40																																																			

**SECTION E**

**Answer any ONE of the followings**

**(1 x 20 = 20)**

14	Prepare Cash Flow Statement.						K6	CO5
	Liabilities	2012(Rs.)	2011 (Rs.)	Assets	2012 (Rs.)	2011 (Rs.)		
	Equity share capital	2,00,000	2,00,000	Land	10,000	10,000		
	Profit & Loss	52,000	23,500	Building	90,000	75,000		
	Debentures	35,000	40,000	Machinery	40,000	25,000		
	Provision for bad debts	3,000	2,000	Investments	30,000	50,000		
	Provision for Dep on Machinery	7,500	3,000	Prepaid Expenses	2,000	2,000		
	Provision for Dep on Building	18,000	12,000	Debtors	90,000	80,000		
	Creditors	40,000	33,000	Stock	40,000	32,000		
	Outstanding Expenses	4,500	3,500	Cash	58,000	43,000		
		3,60,000	3,70,000		3,60,000	3,70,000		
<p>Additional Information</p> <p>Dividend paid during the year Rs.25,000.</p> <p>Investment costing Rs.20,000 sold in 2012 for Rs.25,000.</p> <p>Machinery costing Rs.5,000 (Accumulated depreciation Rs.1,000) was sold for Rs.6,000.</p> <p>Provision for doubtful debts charged on P/L is Rs.1,500</p> <p>Income Tax paid was Rs.10,000</p>								
15	Prepare Cash Flow Statement.						K6	CO5
	Liabilities	2021 (Rs.)	2022 (Rs.)	Assets	2021 (Rs.)	2022 (Rs.)		
	Share Capital	1,00,000	4,00,000	Goodwill	NIL	20,000		
	8% debenture	NIL	2,00,000	Machinery	1,25,000	4,75,000		
	Retained Earnings	60,000	90,000	Stock	20,000	80,000		
	Creditors	40,000	1,00,000	Debtors	30,000	1,00,000		
	Bills payable	20,000	40,000	Cash at Bank	50,000	1,50,000		
	Provision for tax	30,000	40,000	Cash in Hand	25,000	45,000		
		2,50,000	8,70,000		2,50,000	8,70,000		
<p>Additional Information</p> <p>During 2022, the business of a sole trader was purchased by issuing shares of Rs.2,00,000. The assets acquired from him were Machinery - Rs.1,00,000; Stock - Rs.50,000 and Debtors - Rs.30,000.</p> <p>Provision for tax charged in 2022 was Rs.35,000.</p> <p>Debentures were issued at a premium of 5% which is included in retained earnings.</p> <p>Depreciation charged on machinery was Rs.30,000.</p>								

\*\*\*\*\*