Name: Enrolment No:	UPES UNIVERSITY WITH A PURPOSE

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2019

Course: Cost Accounting **C Code: FINC 1007**
Program: B. Com (Hons)/Banking Insurance **Semester: II**
Max. Marks: 100 **Time: 03 hrs.**
Instructions: Scientific Calculator is allowed **No of Pages : 5** **Attempt All Questions**

SECTION A

S. No.	**Multiple Choice Questions**	**Marks**	**CO**
Q 1	Angle of incidence is the angle between the a. Total cost line and the x-axis b. Sales line and the y-axis c. Sales line and the total variable cost line d. Sales line and the total cost line	**1**	**3**
Q 2	Usher Ltd. manufactures and sells two products – X and Y. The following data are estimated for the year 2018-2019. The annual fixed costs are estimated at Rs.93,750. The break-even point in sales value with the current sales mix is a. Rs.5,10,000 b. Rs.4,44,444 c. Rs.4,47,115 d. Rs.4,20,200	**1**	**4**

Particulars	Product X	Product Y
Sales (Units)	25,000	40,000
Sales price per unit (Rs.)	30.00	20.00
Variable cost per unit (Rs.)	23.40	16.00

	Differentiate the following		
Q 3	Cash Budget and Flexible Budget	**1**	**4**
Q4	Standard Sales and Budget Sales	**1**	**5**
Q 5	Cost Center and Sub Cost Center	**1**	**3**
Q 6	Opportunity Cost and Marginal Cost	**1**	**1**
Q 7	Material Mix Variance and Material Yield Variance	**1**	**1**
Q 8	Cost Allocation and Cost Apportionment	**1**	**2**
Q 9	Direct Cost and Indirect Cost	**1**	**4**
	Fill in the Blanks		
Q 10	Budget is defined as……...	**1**	**5**
Q 11	Merrick Differential Piece Rate System is defined as ……	**1**	**1**
Q 12	A cost that remains unchanged on a per unit basis in a given time period despite changes in the level of production is called as ……..	**1**	**2**
Q 13	Overhead Cost Variance is total of =……+……..	**1**	**3**
Q 14	Cost of Goods Sold is Defined as……	**1**	**2**
Q 15	Contribution per unit of Key Factor is calculated as …….	**1**	**1**
Q 16	Sales of Wastage of Material is subtracted from which cost in cost sheet……	**1**	**5**
Q 17	The total sales of X ltd. is Rs.300 lakhs and the margin of safety is 200% of break even sales. The break-even sale is…….	**1**	**2**
Q 18	P/V ratio is Change in Contribution/ Change in……	**1**	**3**
Q 19	Profit at desired sales is calculated as …….	**1**	**4**
Q 20	Variable Cost Ratio is 40%, P/V ratio will be……	**1**	**5**
SECTION B			
Q 21	Write Short Notes on the Following: a. Costing Methods 3 Marks b. Key Factor 3 Marks	**5**	**4**
Q 22	Briefly Explain Budgetary Control System and various steps in Budgetary Control System?	**5**	**4**

Q 23 — **5** — **4**

BTC ltd has 4 production Departments-A, B, C ,D . Apportion the overheads to the production departments

Overheads:

Rent	Rs. 36,000
Power	Rs. 8,250
Indirect Wages	Rs. 5,200
Depreciation on Machinery	Rs. 22,000
Electricity	Rs. 5,600
Canteen Expenses	Rs. 6,500

Additional Information:

BASIS	A	B	C	D
Light Point (Nos.)	7	7	9	5
Floor Space (Sq. mts.)	300	250	450	200
Horse Power of Machines (Hp)	65	30	30	40
No of Workers	2	3	6	2
Direct Wages	12,000	14,000	18,000	8,000
Cost of Machine	50,000	60,000	80,000	10,000

Q 24: — **5** — **3**

With the help of following information, ascertain the wages paid to workers Somu and Balu under Taylor's Differential Piece Rate System:

Standard Time Allowed: 40 Units per hour
Standard Time Rate wage: Rs 4 per hour

Differential Piece Rate to be applied:
75% of piece rate when below standard
125% of piece rate when above standard

The workers have produced in a day of 8 hours as follows:
Somu- 240 Units
Balu- 400 Units

SECTION-C

Q 25 — **10** — **3**

Following information are available for the year 2018 and 2019 of PIX Limited

Year	2018	2019
Sales	Rs. 32,00,000	Rs. 57,00,000
Profit/Loss	(Rs. 3,00,000)	Rs. 7,00,000

Calculate

(i) P/V Ratio **3 Marks**
(ii) Total Fixed Cost **4 Marks**
(iii) Sales required to earn a profit of Rs. 12,00,000 **3 Marks**

Q 26	Prepare Cost Sheet for year ending 31st March 2019 with the following particulars: **Particulars** / **Rs.** Raw Materials: Opening Stock 10,000 Purchases 85,000 Closing Stock 4,000 Direct Wages 20,000 Direct Expenses 10,000 Factory Overheads 100% of Direct Wages Office and Administration Overheads 10% of Factory Cost Selling and Distribution Overheads Rs 2 per Unit sold Finished Goods: Opening Stock (1000 units) 16,000 Produced During the Year (10,000 Units) Closing Stock (2000 Units) 31,020 Sales 1,97,600	**10**	**5**
Q 27	A factory is currently running at 50% capacity and produces 5000 units at a cost of Rs. 90 per Unit as per details given below: Material Rs. 50 Per Unit Labour Rs. 15 Per Unit Factory Overheads Rs. 15 Per unit (Rs. 6 per unit- Fixed- Rs. 30,000) Administrative Overhead Rs. 10 Per Unit (Rs. 5 per unit- Fixed- Rs. 25,000) The current selling price is Rs. 100 per unit. At 60% capacity, material cost per unit increases by 2%, selling price per unit falls by 2%. At 80% capacity, material cost per unit increases by 5%, selling price per unit falls by 2.5%. Prepare a flexible budget showing profits of the factory ant 50%, 60% and 80% Capacity.	**10**	**5**

SECTION-D

Q 28 — **15** — **4**

Given the following Particulars, Calculate the Overhead Variances:

Standard Rate per Hour	Rs. 6
Actual Hours	40,000
Standard Hours for Actual Output	42,000
Budgeted Overheads	Rs. 1,40,000
Actual Overheads	Rs. 1,44,000

Q 29 — **15** — **5**

Given the following Particulars, Calculate the Sales Variances:

Standard

Product	Units	Rate (Rs.)
A	5,000	5
B	4,000	6
C	3,000	7

Actual

Product	Units	Rate (Rs.)
A	6,000	6
B	5,000	5
C	4,000	8

OR

Explain Material Variances and Labour Variances with example

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SECTION A

S. No.	**Multiple Choice Questions**	**Marks**	**CO**
Q 1	Excellent Company earned a profit of Rs.10,00,000 on a sale of Rs.2,00,00,000. In the next period the sale fell by 50% and the profit by 60%. The P/V ratio is e. 6% f. 50% g. 60% h. 5%	**1**	**3**
Q 2	If at a production level of 30,000 units, the production, selling and distribution expenses paid amount to Rs. 1,20,000 and at a level of 50,000 units, the amount is Rs. 1,80,000, then the fixed cost is a. Rs. 60,000 b. Rs. 50,000 c. Rs. 40,000 d. Rs. 30,000	**1**	**4**
	Differentiate the following		
Q 3	Sales Budget and Production Budget	**1**	**4**
Q4	Actual Quantity and Standard Quantity for Actual Output	**1**	**5**
Q 5	Unit Costing and Marginal Costing	**1**	**3**
Q 6	Normal Cost and Abnormal Cost	**1**	**1**
Q 7	Responsibility of Budget Controller and Budget Committee	**1**	**1**
Q 8	Cost and Expenses	**1**	**2**
Q 9	Contribution and Profit	**1**	**4**
	Fill in the Blanks		
Q 10	Budgetary Control System is defined as……..	**1**	**5**

<table>
<tr><td>Q 11</td><td>Time rate System is defined as ……</td><td>1</td><td>1</td></tr>
<tr><td>Q 12</td><td>Fixed Cost is defined as …….</td><td>1</td><td>2</td></tr>
<tr><td>Q 13</td><td>Operating Budget is defined as……..</td><td>1</td><td>3</td></tr>
<tr><td>Q 14</td><td>Net Factory Cost is Defined as…….</td><td>1</td><td>2</td></tr>
<tr><td>Q 15</td><td>Labour Efficiency Variance is calculated as …….</td><td>1</td><td>1</td></tr>
<tr><td>Q 16</td><td>Purchases of Material is added in which part of cost sheet……..</td><td>1</td><td>5</td></tr>
<tr><td>Q 17</td><td>I had a chance to rent my shop for Rs.50,000 for three months, but I didn’t want a stranger to live in there so I left it vacant’. …… term can be used to describe the amount of Rs.50,000</td><td>1</td><td>2</td></tr>
<tr><td>Q 18</td><td>A budget that is prepared for more than one level of activity is called as……..</td><td>1</td><td>3</td></tr>
<tr><td>Q 19</td><td>Sales Budget is defined as ……</td><td>1</td><td>4</td></tr>
<tr><td>Q 20</td><td>Budget Manual is defined as …….</td><td>1</td><td>5</td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
<tr><td colspan="4">SECTION B</td></tr>
<tr><td>Q 21</td><td>Lotas ltd. manufactures three products X, Y & Z. The Unit Selling prices of these three products are Rs. 100, Rs. 160 and Rs. 75 respectively. The corresponding unit variable costs are Rs. 50, Rs. 80 and Rs. 30 respectively. The proportions (quantity wise) in which these products are manufactured and sold are 20%, 30%and 50%respectively. Total Fixed Cost is Rs. 14, 80,000. Calculate the overall Breakeven Quantity and product wise breakup of such quantity</td><td>5</td><td>4</td></tr>
<tr><td>Q 22</td><td>What is meant by Budget ? State the benefits of a budgetary control system</td><td>5</td><td>4</td></tr>
<tr><td>Q 23</td><td>Moremoney Ltd. manufactures 2 products A & B, and the following data is available
<table>
<tr><td></td><td>A</td><td>B</td></tr>
<tr><td>Output(units)</td><td>2,000</td><td>1,500</td></tr>
<tr><td>Direct. Labour hrs. per unit.</td><td>6</td><td>4</td></tr>
<tr><td>No. of orders handled</td><td>16</td><td>4</td></tr>
<tr><td>Machine hrs per unit</td><td>4</td><td>3</td></tr>
<tr><td>No. of set-ups</td><td>8</td><td>10</td></tr>
</table></td><td>5</td><td>4</td></tr>
</table>

<table>
<tr><td></td><td>Overhead costs activity wise:

Machine activity Rs.87,500
Order handling Rs.25,000
Production run set-ups Rs.27,000
Compute the overheads to be absorbed per unit of products A & B</td><td></td><td></td></tr>
<tr><td>Q 24:</td><td>Explain Merrick's Differential Piece Rate System with Example</td><td>5</td><td>3</td></tr>
<tr><td colspan="4">SECTION-C</td></tr>
<tr><td>Q 25</td><td>Alpha ltd. manufactures and markets a single product. The following data is available:

<table><tr><td></td><td>Per unit (Rs.)</td></tr><tr><td>Material</td><td>16</td></tr><tr><td>Conversion cost (var)</td><td>12</td></tr><tr><td>Dealer margin</td><td>10% of selling price</td></tr><tr><td>Selling price</td><td>40</td></tr></table>
Fixed cost = Rs.5 lacs
Present sales = 90,000 units
Capacity utilization = 60%.
There is stiff competition. Extra efforts are required to sell.
Following suggestions are made to increase sales:
i. By reducing sales price by 5%.
ii. By increasing dealer margin by 25% over existing rate.
Which of the 2 suggestions would you recommend to maintain the present profit</td><td>10</td><td>3</td></tr>
</table>

Q 26	The following extract of information of costing information relates to commodity X for the half year ending 31st March 2019: Rs. Purchase of Raw Materials — 2,40,000 Factory Rent, Rates and Insurance — 16,000 Carriage Inwards — 2880 Other Factory Overheads — 80,000 Direct Wages — 2,00,000 Stock (Opening) Raw Material — 40,000 Finished Products (2000 Tones) — 30,000 Stock (Closing) Raw Material — 44,480 Finished Products (4000 Tones) — 64,000 Work in Progress (Opening) — 9600 Work in Progress (Closing — 40,000 Sales (Finished Product) — 5,98,000 Administration Overheads — 8,000 Advertising, discounts allowed and selling costs are Rs. 1 per tonne. 32,000 tonns of commodity were produced during the period. You are required to prepare Cost Sheet	**10**	**5**

<table>
<tr><td>Q 27</td><td>The company has existing capacity of 50% (500 Units). Prepare a flexible budget for the production of 80% and 100% capacity on the basis of the Following information:

Raw Material – Rs. 80 per unit
Direct labour- Rs. 50 per unit
Direct Expenses- Rs. 15 per unit
Factory Expenses- Rs. 50,000 (of which 50% are fixed)
Administration Expenses- Rs. 60,000(of which 40% are fixed)</td><td>10</td><td>5</td></tr>
<tr><td colspan="4">SECTION-D</td></tr>
<tr><td>Q 28</td><td>Briefly Explain Labour Variances with Example</td><td>15</td><td>4</td></tr>
<tr><td>Q 29</td><td>Given the following Particulars, Calculate the Material Mix, Price, Usage a d Cost Variances:

Standard
<table><tr><td>Material</td><td>Quantity (Kilos)</td><td>Unit Price (Rs.)</td><td>Total(Rs.)</td></tr><tr><td>A</td><td>10</td><td>2</td><td>20</td></tr><tr><td>B</td><td>20</td><td>3</td><td>60</td></tr><tr><td>C</td><td>20</td><td>6</td><td>120</td></tr><tr><td>Total</td><td>50</td><td></td><td>200</td></tr></table>
Actual
<table><tr><td>Material</td><td>Quantity (Kilos)</td><td>Unit Price (Rs.)</td><td>Total(Rs.)</td></tr><tr><td>A</td><td>5</td><td>3</td><td>15</td></tr><tr><td>B</td><td>10</td><td>6</td><td>60</td></tr><tr><td>C</td><td>15</td><td>5</td><td>75</td></tr><tr><td>Total</td><td>30</td><td></td><td>150</td></tr></table>
OR

Explain Sales Variances with example</td><td>15</td><td>5</td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
</table>