

VPM's
DR VN BRIMS, Thane
Programme: MMS (2021-23)
First Semester Examination April 2022

Course Name:	Managerial Economics	Course Code	C105
Roll No.		Marks	60
Total No. of Questions	6	Duration	3 Hours
Total No. of printed pages	4	Date	07.04.2022

Course Outcome Statements:

- CO1.** RECALL basic terminologies related to Managerial Economics
CO2. DISCUSS the concepts used in Managerial Economics
CO3. MAKE USE OF various formulas and models pertaining to Consumer Behaviour PPC, Supply Functions, Market Equilibrium, Economic Surplus, Production functions, Revenue, Cost & breakeven analysis, Types of Markets, Pricing Practices & Profitability
CO4. EXAMINE the results of managerial economics-related frameworks for making industry-relevant inferences
CO5. ASSESS information related to PPC, Consumer behavior, Economic Surplus, Production Functions, Markets, Revenue Cost Breakeven Analysis for taking effective business decisions

Instructions: -		Marks	BL	CO																								
Q. No 1 (All Questions are Compulsory)																												
Q. No.	Questions																											
Q. 1	Case/Case-let Study (500-800 words)																											
a.	<p>In 2015, Tommy Shelby set up a business called as ‘Shelby Corporations Ltd.’ for the manufacturing of Auto parts and spares.</p> <p>By November 2021, the Electronic Vehicle (EV) segment was booming in the UK with a lot of requirements for EV spares. Shelby wanted to make the most of this market opportunity. It was necessary that he acted quickly before any of his competitors would get into this business. He had been contemplating to start the manufacturing of EV parts but he needed to do some proper planning before he could begin.</p> <p>The next day Shelby was sitting in his office discussing with his operations head Arthur, preparing the plans for the year 2022. “I had asked you to find out the cost structure for producing the Electronic Power Control Unit (EPCU), show me that data,” Shelby said to Arthur. Arthur quickly rushed through his folder and handed a piece of paper that contained the info he had collected:</p> <p>(All figures are in Great Britain Pound [GBP])</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Units</th> <th style="text-align: center;">Variable Cost (total)</th> <th style="text-align: center;">Fixed Cost (total)</th> </tr> </thead> <tbody> <tr><td style="text-align: center;">0</td><td style="text-align: center;">0</td><td style="text-align: center;">30</td></tr> <tr><td style="text-align: center;">1</td><td style="text-align: center;">20</td><td style="text-align: center;">30</td></tr> <tr><td style="text-align: center;">2</td><td style="text-align: center;">30</td><td style="text-align: center;">30</td></tr> <tr><td style="text-align: center;">3</td><td style="text-align: center;">34</td><td style="text-align: center;">30</td></tr> <tr><td style="text-align: center;">4</td><td style="text-align: center;">36</td><td style="text-align: center;">30</td></tr> <tr><td style="text-align: center;">5</td><td style="text-align: center;">52</td><td style="text-align: center;">30</td></tr> <tr><td style="text-align: center;">6</td><td style="text-align: center;">88</td><td style="text-align: center;">30</td></tr> </tbody> </table> <p>After Arthur left, Shelby called in Ms. Polly to give an update on the marketing side of the business and an estimate on-demand. Polly had conducted market</p>	Units	Variable Cost (total)	Fixed Cost (total)	0	0	30	1	20	30	2	30	30	3	34	30	4	36	30	5	52	30	6	88	30	6	Level 4	CO4
Units	Variable Cost (total)	Fixed Cost (total)																										
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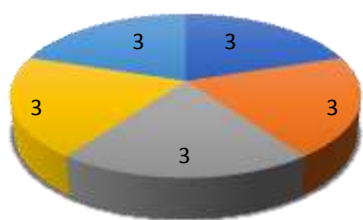
	<p>research and informed Shelby “Sir, according to my market survey, the EPCUs have a high demand in the market and could be sold at a constant selling price of 25 GBP per Unit at all levels of production”. Shelby said fine and discussed some other minor details regarding marketing strategy with her. After Polly went out of the cabin Shelby invited John, the economist, in order to make some more sense of the information presented so far. He immediately handed a task to John as he entered, “John, we have the data now I want you to.</p> <p>Examine the Values of Total Cost, Average Variable Cost, Average Fixed Cost, Average Total Cost, Marginal Cost, and Total Revenue and also draw Inference on the output which indicates the lowest cost of production per unit, no need for graphs. You may assume that Price=Marginal Revenue=Average Revenue”</p>																															
	<p>b. Once John was able to do the work assigned, Shelby gave one final task to John “Fine work John! Now the most critical task of all.</p> <p>Determine the optimum quantity at which our plant should work and the reason why that would be the optimum quantity. You may only draw the graphs necessary for you to conclude”</p>	6	Level 5	CO5																												
Q. 2	Answer Any one from the following.																															
	<p>a. Based on the following Isoquant data:</p> <table border="1"> <thead> <tr> <th>Units of Steel Rod</th> <th>Units of Steel Roll</th> </tr> </thead> <tbody> <tr> <td>200</td> <td>0</td> </tr> <tr> <td>120</td> <td>20</td> </tr> <tr> <td>60</td> <td>40</td> </tr> <tr> <td>20</td> <td>60</td> </tr> <tr> <td>0</td> <td>80</td> </tr> </tbody> </table> <p>Additional Details: The cost of producing one Steel Rod is Rs.200 and that of one Steel Roll is 500 Decide whether the production budgets i.e., Budget 1- Rs.20,000 and Budget 2- Rs.40,000 are sufficient or not also Determine any of the budgets is optimum or not (make use of graphs)</p>	Units of Steel Rod	Units of Steel Roll	200	0	120	20	60	40	20	60	0	80	6	Level 5	CO5																
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0	80																															
	<p>b.</p> <table border="1"> <thead> <tr> <th>Quantity of Pizza</th> <th>Marginal Utility (Pizza)</th> <th>Quantity of Burger</th> <th>Marginal Utility (Burger)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>800</td> <td>1</td> <td>600</td> </tr> <tr> <td>2</td> <td>700</td> <td>2</td> <td>500</td> </tr> <tr> <td>3</td> <td>500</td> <td>3</td> <td>400</td> </tr> <tr> <td>4</td> <td>400</td> <td>4</td> <td>300</td> </tr> <tr> <td>5</td> <td>300</td> <td>5</td> <td>200</td> </tr> <tr> <td>6</td> <td>200</td> <td>6</td> <td>100</td> </tr> </tbody> </table> <p>Price of Pizza per unit: Rs.200 and Price of Burger per unit: Rs.100</p>	Quantity of Pizza	Marginal Utility (Pizza)	Quantity of Burger	Marginal Utility (Burger)	1	800	1	600	2	700	2	500	3	500	3	400	4	400	4	300	5	300	5	200	6	200	6	100	6	Level 5	CO5
Quantity of Pizza	Marginal Utility (Pizza)	Quantity of Burger	Marginal Utility (Burger)																													
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3	500	3	400																													
4	400	4	300																													
5	300	5	200																													
6	200	6	100																													

		Determine the sequence of purchases that the consumer will follow, based on the law of Equi-marginal utility assuming the consumer's total income is Rs.800? Also, determine the quantity purchased by the consumer of both the items and the Total Utility that would be achieved in that case?																		
Q. 3		Answer Any one from the following.																		
	a.	<p>Examine the impact of the following 2 scenarios on the Equilibrium Price with the help of diagrams (no need for values on the axis of graphs)</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Demand Curve</th> <th>Supply Curve</th> </tr> </thead> <tbody> <tr> <td>i)</td> <td>Shifts Right</td> <td>Shifts Right</td> </tr> <tr> <td>ii)</td> <td>Shifts Left</td> <td>Shifts Right</td> </tr> </tbody> </table>	No.	Demand Curve	Supply Curve	i)	Shifts Right	Shifts Right	ii)	Shifts Left	Shifts Right	6	Level 4 CO4							
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i)	Shifts Right	Shifts Right																		
ii)	Shifts Left	Shifts Right																		
	b.	<p>Analyse the impact of 'Decrease in Price' on 'Total Revenue' in the case of the following 3 data points using the concept of 'Elasticity along a demand curve' while identifying reasons behind the impact.</p> <table border="1"> <thead> <tr> <th>Point</th> <th>%Change in Price</th> <th>% Change in Quantity Demanded</th> </tr> </thead> <tbody> <tr> <td>P</td> <td>-5%</td> <td>+20%</td> </tr> <tr> <td>Q</td> <td>-20%</td> <td>+20%</td> </tr> <tr> <td>R</td> <td>-45%</td> <td>+30%</td> </tr> </tbody> </table>	Point	%Change in Price	% Change in Quantity Demanded	P	-5%	+20%	Q	-20%	+20%	R	-45%	+30%	6	Level 4 CO4				
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Q. 4		Answer Any two from the following.																		
	a.	<p>Apply the following data to develop Total Product, Average Product, and Marginal Product Curves based on the following data:</p> <table border="1"> <thead> <tr> <th>Input</th> <th>Total Product</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0</td> </tr> <tr> <td>1</td> <td>5</td> </tr> <tr> <td>2</td> <td>15</td> </tr> <tr> <td>3</td> <td>35</td> </tr> <tr> <td>4</td> <td>40</td> </tr> <tr> <td>5</td> <td>40</td> </tr> <tr> <td>6</td> <td>35</td> </tr> </tbody> </table>	Input	Total Product	0	0	1	5	2	15	3	35	4	40	5	40	6	35	6	Level 3 CO3
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0	0																			
1	5																			
2	15																			
3	35																			
4	40																			
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6	35																			
	B	<p>Solve Consumer Surplus, Producer Surplus, Total Surplus, and Deadweight loss, if any, using the following details related to a particular market (make use of a graph to calculate and highlight the relevant portions):</p>	6	Level 3 CO3																

Price	Quantity Demanded	Quantity Supplied
4	0	160
3	40	120
2	80	80
1	120	40
0	160	0

c.	<p>Apply the following data to construct the Production Possibility Curve (PPC), also highlight efficient, inefficient, and unattainable areas of PPC also mention the important characteristics of a standard PPC</p> <table border="1"> <thead> <tr> <th>Alpha A1</th> <th>Omega B3</th> </tr> </thead> <tbody> <tr> <td>20</td> <td>0</td> </tr> <tr> <td>18</td> <td>2</td> </tr> <tr> <td>15</td> <td>4</td> </tr> <tr> <td>11</td> <td>6</td> </tr> <tr> <td>6</td> <td>8</td> </tr> <tr> <td>0</td> <td>10</td> </tr> </tbody> </table>	Alpha A1	Omega B3	20	0	18	2	15	4	11	6	6	8	0	10	6	Level 3	CO3
		Alpha A1	Omega B3															
		20	0															
		18	2															
		15	4															
		11	6															
		6	8															
0	10																	
Q. 5 Answer Any two from the following.																		
a.	Explain the concept of Short-run and long-run along with the profitability under various types of markets in the short-run and long-run with appropriate reason for the same (no graphs necessary)	6	Level 2	CO2														
b.	Summarize the concept of Economies and Diseconomies of scale along with mention internal and external classification	6	Level 2	CO2														
c.	Explain Monopoly, Monopolistic Competition, and Oligopoly markets with their Characteristics (no graphs required)	6	Level 2	CO2														
Q. 6 Answer Any two from the following.																		
a.	Define Price Elasticity of Supply and list 5 types of elasticities with their values of elasticities (graphs required)	6	Level 1	CO1														
b.	List any 6 Pricing Practices with their brief meaning	6	Level 1	CO1														
c.	What do you mean by - i) Capital Budgeting ii) Economic Profit and Accounting Profit iii) Indifference Curve	6	Level 1	CO1														

Level Wise count of Questions

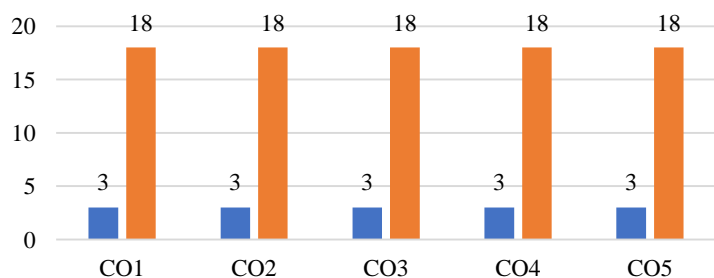


■ Level 1 ■ Level 2 ■ Level 3 ■ Level 4 ■ Level 5

Bloom's Taxonomy Levels

Level Name	Level Number	Level Wise count of Questions
Remember	Level 1	3
Understand	Level 2	3
Apply	Level 3	3
Analyse	Level 4	3
Evaluate	Level 5	3

CO Wise Marks Distribution



■ CO wise Number of Questions ■ CO wise Marks Distribution

Course Outcomes	CO wise Number of Questions	CO wise Marks Distribution
CO1	3	18
CO2	3	18
CO3	3	18
CO4	3	18
CO5	3	18