



UNIT-II			
4.	Explain Law of variable proportion in details. Also explain its various stages.	CO3	L5
5.	Examine how changes in income levels can affect the demand for normal and inferior goods.	CO2	L4
UNIT-III			
6.	Classify how price and output are determined under Monopoly.	CO4	L4
7.	Explain Consumption function, Aggregate supply and Aggregate demand.	CO5	L2
UNIT-IV			
8.	Explain the various methods of measuring national income.	CO4	L5
9.	List the characteristics of monopolistic competition? How price and output decisions are made in the short run under monopolistic competition?	CO5	L4
SECTION-C			
10.	<p>Green Harvest Organic Foods, a retailer specializing in organic produce in India, has noticed a growing consumer interest in organic products. To take advantage of this trend and attract more customers, Green Harvest decides to reduce the price of its range of organic vegetables by 10%.</p> <p>Details:</p> <ol style="list-style-type: none"> <li>1. Pre-Price Change: Organic vegetables were priced at ₹200 per kilogram.</li> <li>2. Post-Price Change: After a 10% reduction, the new price is ₹180 per kilogram.</li> <li>3. Observed Change: Green Harvest sees a 20% increase in the quantity of organic vegetables sold.</li> </ol> <p>Questions:</p> <ol style="list-style-type: none"> <li>a. Make use of this information and prepare demand schedule.</li> <li>b. Estimate the Price Elasticity of Demand and interpret the results.</li> </ol>	CO3	L5

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2|M-75334



UNIT-IV			
8.	Identify the redressal machinery in which a customer can file the complaint.	CO5	L3
9.	Analyse the terms and condition of License to issue Digital Signature and also tell what is Electronic signature.	CO5	L4
SECTION-C			
10.	<p>The Government instead of bringing an amendment in the 1986 Act. enacted a new Act altogether so as to provide enhanced protection to the consumers taking into consideration the booming e-commerce industry and the modern methods of providing goods and services such as online sales, tele-shopping, direct selling and multi-level marketing in addition to the traditional methods. The 2019 Act has brought in some major changes and provides for more protection to the consumers in parimateria to the earlier 1986 Act which can be seen from the comprehensive definition provided for the term 'Consumer' and 'Unfair Trade Practice'. The 2019 Act expands the scope of the definition of Consumer so as to include the consumers involved in online transactions and it now squarely covers the E-commerce businesses within its ambit. The 2019 Act has also widened the definition of Unfair Trade Practices as compared to the 1986 Act which now includes within its ambit online misleading advertisements; the practice of not issuing bill/memo for the goods and services; failing to take back defective goods or deactivate defective services and refund the amount within the stipulated time mentioned in the bill or memo or within 30 days in the absence of such stipulation; and disclosing personal information of a consumer unless such disclosure is in accordance with law.</p> <p>Answer the following questions:</p> <p>a) Select the central theme of the case study.</p> <p>b) Identify the Act and expands the scope of the definition of Consumer.</p> <p>c) How the definition of Unfair Trade Practices has widened now.</p>	CO5	L3

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Roll No. 

Total No. of Pages: 2

Total No. of Questions: 10

**M.Com, Semester-1st**  
**QUANTITATIVE TECHNIQUES**  
**Subject Code: MCOP-103-18**  
**M.Code: 79081**  
**Date of Examination: 10-12-2025**

Time: 3 Hrs.

Max. Marks: 60

**INSTRUCTIONS TO CANDIDATES:**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B consists of FOUR subsections: Units-I, II, III & IV. Each subsection contains TWO questions, each carrying TEN marks each and student has to attempt any ONE question from each subsection.
3. SECTION-C is COMPULSORY and consists of ONE Case study carrying TWELVE marks.

Q. No.	Question	Course Outcome	Bloom's Level																				
<b>SECTION-A</b>																							
1.	Answer Briefly:																						
a.	List any two drawbacks of statistics.	CO 1	L 1																				
b.	What is stratified sampling?	CO 2	L1																				
c.	Outline the concept of Skewness.	CO 1	L2																				
d.	Explain four merits of descriptive statistics.	CO 1	L1																				
e.	Compare median deviation and mode deviation.	CO 2	L2																				
f.	Explain activity and event.	CO 3	L 2																				
g.	Who is maximizing player?	CO4	L1																				
h.	Define cost matrix in transportation.	CO 3	L1																				
<b>SECTION-B</b>																							
<b>UNIT-I</b>																							
2.	Identify various nature and objectives of statistics with examples.	CO 1	L 3																				
3.	Given the marks data of students, evaluate median of following data :	CO 1	L 5																				
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Marks</td> <td>10</td> <td>20</td> <td>30</td> <td>40</td> <td>50</td> <td>60</td> <td>70</td> <td>80</td> <td>90</td> </tr> <tr> <td>No. of students</td> <td>10</td> <td>13</td> <td>15</td> <td>27</td> <td>34</td> <td>84</td> <td>2</td> <td>9</td> <td>12</td> </tr> </table>			Marks	10	20	30	40	50	60	70	80	90	No. of students	10	13	15	27	34	84	2	9	12
Marks	10			20	30	40	50	60	70	80	90												
No. of students	10	13	15	27	34	84	2	9	12														
<b>UNIT-II</b>																							
4.	From the following observations, evaluate Karl Pearson's coefficient of correlation	CO 2	L 5																				
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Price</td> <td>40</td> <td>60</td> <td>20</td> <td>100</td> <td>100</td> <td>80</td> <td>50</td> <td>30</td> </tr> <tr> <td>Sales</td> <td>24</td> <td>36</td> <td>12</td> <td>6</td> <td>18</td> <td>50</td> <td>28</td> <td>16</td> </tr> </table>			Price	40	60	20	100	100	80	50	30	Sales	24	36	12	6	18	50	28	16		
Price	40			60	20	100	100	80	50	30													
Sales	24	36	12	6	18	50	28	16															
5.	Categorize various methods of finding the value of probability.	CO 2	L 4																				

1|M-79081

UNIT-III													
6.	Compare three types of Probability Distribution in detail with examples.			CO 3	L 4								
7.	Evaluate value of game using:			CO 3	L 5								
	Firm B	1	2			3	4						
	1	5	6			2	5						
	2	3	2			1	6						
	3	4	5			3	2						
	4	5	6	1	1								
UNIT-IV													
8.	Explain the concept of network analysis and techniques of PERT & CPM.			CO 4	L 5								
9.	A director in a management institute has the problem of assigning courses to teachers with a view to maximizing educational quality in his institute. He has available to him one professor, two associate professors and one teaching assistance. Four courses must be cleared and after appropriate evaluation, has arrived at the following relative ratings (100= best rating) regarding the ability of each instructor to teach each of the four courses			CO 4	L 3								
		Course 1	Course 2			Course 3	Course 4						
	Prof 1	60	40			60	70						
	Prof 2	20	60			50	70						
	Prof 3	20	30			40	70						
	TA	30	10	30	40								
	Plan how assignment of staff should be done.												
SECTION-C													
10.	The scores of two batsman A and B in ten innings during a certain season are :			CO 2	L 5								
	A	32	28			47	63	71	39	10	60	96	14
	B	19	31			48	51	67	0	10	62	40	80
	Evaluate (using coefficient of variation) which of the two batsmen, A or B, is more consistent in scoring.												

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2|M-79081