



**SECTION - B (35 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks (5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO																														
1	11.(a).	A calculate mean from the following data. <table border="1"> <tr> <td>Roll No.</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> </tr> <tr> <td>Marks</td> <td>40</td> <td>50</td> <td>55</td> <td>78</td> <td>58</td> <td>60</td> <td>73</td> <td>35</td> <td>43</td> <td>48</td> </tr> </table>	Roll No.	1	2	3	4	5	6	7	8	9	10	Marks	40	50	55	78	58	60	73	35	43	48	K1	CO1								
		Roll No.	1	2	3	4	5	6	7	8	9	10																						
Marks	40	50	55	78	58	60	73	35	43	48																								
(OR)																																		
	11.b.	Explain Karl Pearson's skewness.																																
2	12.a.	What are the Properties of the coefficient of correlation?	K2	CO2																														
		(OR)																																
	12.b.	Explain the meaning of Regression lines.																																
3	13.a.	Write a short note on students t distribution.	K1	CO3																														
		(OR)																																
	13.b.	Explain the Applications of F-Distribution.																																
4	14.a.	Solve the following transportation problem. <table border="1"> <tr> <td></td> <td colspan="4">To</td> <td>Supply</td> </tr> <tr> <td></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>6</td> </tr> <tr> <td>From</td> <td>4</td> <td>3</td> <td>2</td> <td>0</td> <td>8</td> </tr> <tr> <td></td> <td>0</td> <td>2</td> <td>2</td> <td>1</td> <td>10</td> </tr> <tr> <td>Demand</td> <td>4</td> <td>6</td> <td>8</td> <td>6</td> <td></td> </tr> </table>		To				Supply		1	2	3	4	6	From	4	3	2	0	8		0	2	2	1	10	Demand	4	6	8	6		K1	CO4
			To				Supply																											
	1	2	3	4	6																													
From	4	3	2	0	8																													
	0	2	2	1	10																													
Demand	4	6	8	6																														
(OR)																																		
	14.b.	What do you mean by transportation model?																																
5	15.a.	Write a short note on decision theory.	K2	CO5																														
		(OR)																																
	15.b.	Consider the following payoff matrix with respect to player A and solve it optimally. <table border="1"> <tr> <td></td> <td colspan="2">Player B</td> </tr> <tr> <td>Player A</td> <td>9</td> <td>7</td> </tr> <tr> <td></td> <td>5</td> <td>11</td> </tr> </table>		Player B		Player A	9	7		5	11																							
		Player B																																
Player A	9	7																																
	5	11																																

**SECTION - C (30 Marks)**

Answer ANY THREE questions

ALL questions carry EQUAL Marks (3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO																									
1	16	Explain the mean, median and mode.	K1	CO1																									
2	17	Find the coefficient of correlation from the following data. <table border="1"> <tr> <td>X</td> <td>78</td> <td>36</td> <td>98</td> <td>25</td> <td>75</td> <td>82</td> <td>90</td> <td>62</td> <td>65</td> <td>39</td> </tr> <tr> <td>Y</td> <td>84</td> <td>51</td> <td>91</td> <td>60</td> <td>68</td> <td>62</td> <td>86</td> <td>58</td> <td>53</td> <td>47</td> </tr> </table>	X	78	36	98	25	75	82	90	62	65	39	Y	84	51	91	60	68	62	86	58	53	47	K2	CO2			
		X	78	36	98	25	75	82	90	62	65	39																	
Y	84	51	91	60	68	62	86	58	53	47																			
3	18	Explain the test of independence of Attributes.	K2	CO3																									
4	19	Solve the following transportation problem <table border="1"> <tr> <td></td> <td colspan="3">To</td> <td>Available</td> </tr> <tr> <td></td> <td>7</td> <td>3</td> <td>2</td> <td>2</td> </tr> <tr> <td>From</td> <td>2</td> <td>1</td> <td>3</td> <td>3</td> </tr> <tr> <td></td> <td>3</td> <td>4</td> <td>6</td> <td>5</td> </tr> <tr> <td>Demand</td> <td>4</td> <td>1</td> <td>5</td> <td>10</td> </tr> </table>		To			Available		7	3	2	2	From	2	1	3	3		3	4	6	5	Demand	4	1	5	10	K1	CO4
			To			Available																							
	7	3	2	2																									
From	2	1	3	3																									
	3	4	6	5																									
Demand	4	1	5	10																									
5	20	State the Dominance Principle.	K1	CO5																									