


Name:	 <b>UPES</b> UNIVERSITY WITH A PURPOSE
Enrolment No:	

<b>UNIVERSITY OF PETROLEUM AND ENERGY STUDIES</b> <b>End Semester Examination, Dec 2021</b>	
<b>Course: Logistics and Supply Chain Management</b> <b>Program: BBA OG</b> <b>Course code: LSCM 2002</b>	<b>Semester: III</b> <b>Time: 03 hrs.</b> <b>Max. Marks: 100</b>

<b>SECTION A</b> <b>1. Each Question will carry 2 Marks</b> <b>2. Instruction: Complete the statement / Select the correct answer(s)</b>	
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S.No	Questions 1 to 10 (Total 20 marks)	CO
Q.	1) The TBL (Triple Bottom Line) dimensions commonly called the three Ps: _____. 2) A _____ type of products is something you cannot touch them like tickets, banks, dry cleaners, amusement parks, trademarks, brands, etc. 3) Write the full form of TPL _____ 4) Where you can use quasi-manufacturing technology? 5) What is the concept of BEP? 6) Inventory holding cost is associated with the chase type of aggregate planning (True/False) 7) “Quality and productivity applications from Japan: robotics, CAD-CAM and introduced PDCA cycle concept” (Name the author/contributor) 8) How to measure the production service level? 9) “The concept of Cause and Effect diagram is one of the most important tool out of seven quality tools and the father of Quality Control Circle (QCC)” (Name the author/contributor) 10) In six-sigma process, DMAIC stands for _____.	<b>CO1</b>

<b>SECTION B</b> <b>1. Each question will carry 5 marks</b> <b>2. Instruction: Write short / brief notes in your own words only.</b>	
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Q 11	Draw the diagram of typical warehouse layout.	CO2
Q 12	Explain Square Root Law of Inventory. What are the assumptions for SRL?	CO2
Q 13	Explain the use of LPP approach in aggregate planning.	CO3
Q 14	How histogram are different from bar charts? Give examples in support of your answer.	CO4

<b>SECTION C</b> <b>1. Each Question carries 10 Marks.</b> <b>2. Instruction: Write long answer.</b>	
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Q 15	Explain 80/20 rule with an example.	CO1
Q 16	Explain any two latest technologies in logistics with an example.	CO2

Q 17	How and where to use ISO 9000 and ISO 14000? Discuss briefly. <b>OR</b> What are the benefits of quality circles?	<b>CO4</b>
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**SECTION D**

- 1. Each Question carries 15 Marks.**
- 2. Instruction: Write long answer.**

Q 18	<p>The new healthcare facility is targeted to serve seven census tracts in Delhi. Two locations are considered for a new facility at (5.5, 4.5) and (7, 2). Find target areas center of gravity for the health care medical facility.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>SNo.</th> <th>Census tract</th> <th>(x, y)</th> <th>Population (l)</th> </tr> </thead> <tbody> <tr><td>1</td><td>A</td><td>(2.5, 4.5)</td><td>2</td></tr> <tr><td>2</td><td>B</td><td>(2.5, 2.5)</td><td>5</td></tr> <tr><td>3</td><td>C</td><td>(5.5, 4.5)</td><td>10</td></tr> <tr><td>4</td><td>D</td><td>(5, 2)</td><td>7</td></tr> <tr><td>5</td><td>E</td><td>(8, 5)</td><td>10</td></tr> <tr><td>6</td><td>F</td><td>(7, 2)</td><td>20</td></tr> <tr><td>7</td><td>G</td><td>(9, 2.5)</td><td>14</td></tr> </tbody> </table> <p style="text-align: center;"><b>OR</b></p> <p>A manufacturer of garments is actively considering 5 alternative locations for setting up its factory. The locations vary in terms of their advantages to the firm. Hence, the firm requires a method of identifying the most appropriate location. Based on a survey, the firm had arrived at 6 factors considered for the final state selection. The ratings of each factor on a scale of 1 to 100. Using below information to obtain a ranking of the alternative solutions.</p> <p style="text-align: center;">Table-1: Factor ratings</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>SNo.</th> <th>Factors</th> <th>Rating</th> </tr> </thead> <tbody> <tr><td>1</td><td>Availability of infrastructure</td><td>90</td></tr> <tr><td>2</td><td>Size of the Market</td><td>60</td></tr> <tr><td>3</td><td>Industrial relations climate</td><td>50</td></tr> <tr><td>4</td><td>Tax benefits and concessions</td><td>30</td></tr> <tr><td>5</td><td>Availability of cheap labor</td><td>30</td></tr> <tr><td>6</td><td>Nearness to port</td><td>65</td></tr> </tbody> </table> <p style="text-align: center;">Table 2: Rating of each location against each factor</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Factors</th> <th>Location 1</th> <th>Location 2</th> <th>Location 3</th> <th>Location 4</th> <th>Location 5</th> </tr> </thead> <tbody> <tr><td>1</td><td>20</td><td>40</td><td>60</td><td>35</td><td>55</td></tr> <tr><td>2</td><td>30</td><td>30</td><td>40</td><td>60</td><td>80</td></tr> <tr><td>3</td><td>80</td><td>30</td><td>50</td><td>60</td><td>50</td></tr> <tr><td>4</td><td>80</td><td>20</td><td>10</td><td>20</td><td>20</td></tr> <tr><td>5</td><td>70</td><td>70</td><td>45</td><td>50</td><td>50</td></tr> <tr><td>6</td><td>20</td><td>40</td><td>90</td><td>50</td><td>60</td></tr> </tbody> </table>	SNo.	Census tract	(x, y)	Population (l)	1	A	(2.5, 4.5)	2	2	B	(2.5, 2.5)	5	3	C	(5.5, 4.5)	10	4	D	(5, 2)	7	5	E	(8, 5)	10	6	F	(7, 2)	20	7	G	(9, 2.5)	14	SNo.	Factors	Rating	1	Availability of infrastructure	90	2	Size of the Market	60	3	Industrial relations climate	50	4	Tax benefits and concessions	30	5	Availability of cheap labor	30	6	Nearness to port	65	Factors	Location 1	Location 2	Location 3	Location 4	Location 5	1	20	40	60	35	55	2	30	30	40	60	80	3	80	30	50	60	50	4	80	20	10	20	20	5	70	70	45	50	50	6	20	40	90	50	60	<b>CO3</b>
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Q 19	What are the components of pricing and sourcing decisions? Support with an example. Explain the use of cross-dock terminals in Walmart.	<b>CO4</b>
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