

Name:  
Enrolment No:



End Semester Examination, December 2019

Course: Operations and Materials Management  
Program: BBA (Oil & Gas Marketing)  
Time: 03 Hours  
Instructions: Attempt all questions

Semester: III  
Course Code: LSCM 2001  
Max. Marks: 100

SECTION A  
(20 Marks)

	Marks	CO
<p>Q.1. Which of the following is the least likely decision to be made by Operations Managers?</p> <ul style="list-style-type: none"><li>a) How much capacity is required to balance demand</li><li>b) Deciding which market areas to manufacture products for</li><li>c) How to use quality techniques to reduce waste</li><li>d) Designing and improving the jobs of the workforce</li><li>e) Selecting the location and layout of a facility</li></ul> <p>Q.2. Productivity increases when</p> <ul style="list-style-type: none"><li>a) inputs decrease while outputs remain the same.</li><li>b) inputs increase while outputs remain the same.</li><li>c) inputs and outputs increase proportionately.</li><li>d) outputs decrease while inputs remain the same.</li></ul> <p>Q.3. An operations strategy is created directly from the _____ strategy</p> <ul style="list-style-type: none"><li>a) Corporate strategy</li><li>b) Marketing strategy</li><li>c) Business strategy</li><li>d) Human resource strategy</li></ul> <p>Q.4. An order winner is _____?</p> <ul style="list-style-type: none"><li>a) a characteristic of a product or service that will contribute directly to winning business from customers.</li><li>b) a characteristic of a product or service that a customer does not expect.</li><li>c) a characteristic present only in a high quality product or service.</li><li>d) a characteristic of a product or service that a customer expects as a minimum standard.</li></ul> <p>Q.5. Which of these layout types is most associated with a project process?</p> <ul style="list-style-type: none"><li>a) Fixed position layout</li><li>b) Process layout</li><li>c) Product layout</li><li>d) Cell layout</li></ul>	<p>(2x 10 = 20)</p>	<p>CO 1</p>

Q.6. The forecasting model that is based upon salesperson's estimates of expected sales is

- a) sales force composite.
- b) jury of executive opinion.
- c) delphi method.
- d) consumer market survey.

Q. 7. Given last period's forecast of 65, and last period's demand of 62, what is the simple exponential smoothing forecast with an alpha of 0.4 for the next period?

- a) 62
- b) 65
- c) 63.8
- d) 63.2

Q.8. A fixed-position layout

- a) addresses the layout requirements of large, bulky, projects such as ships and buildings.
- b) groups workers, their equipment, and spaces/offices to provide for movement information.
- c) seeks the best personnel and machine utilization in repetitive or continuous production.
- d) allocates shelf space and responds to customer behavior.

Q.9. Which of the following is NOT a type of inventory?

- a) finished goods
- b) MRP
- c) work-in-process
- d) raw material

Q.10. In acceptance sampling, the producer's risk is the risk of having a

- a) bad lot accepted.
- b) good lot rejected.
- c) bad lot rejected.
- d) good lot accepted.

**SECTION B**  
**(20 Marks)**

	<b>Marks</b>	<b>CO</b>
Q.11. Discuss "Value-Added" with 2 examples.	<b>5</b>	<b>CO 1</b>
Q.12. Differentiate between Prediction and Forecasting.	<b>5</b>	<b>CO 2</b>
Q.13. Give 5 examples of Short-Term Capacity decisions.	<b>5</b>	<b>CO3</b>

	Q.14. Discuss the Centre-of-Gravity Method of Facility location.	5	CO3																																												
<b>SECTION-C (30 Marks)</b>																																															
		<b>Marks</b>	<b>CO</b>																																												
	Q.15. Discuss the process of Purchasing by an organization.	15	CO4																																												
	Q.16. Discuss the costs associated with carrying inventory.	15	CO3																																												
<b>SECTION-D (30 Marks)</b>																																															
		<b>Marks</b>	<b>CO</b>																																												
	<p>Q. 17. The Supertech Comapany daily receives multiple orders by truck from its manufacturing plant in Mumbai. The company’s goal is to make all deliveries within one day, so a delivery is late if it exceeds one day. The total number of late deliveries for each of the past 20 days are as follows.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Sample</th> <th>Late Deliveries</th> <th>Sample</th> <th>Late Deliveries</th> </tr> </thead> <tbody> <tr><td>1</td><td>6</td><td>11</td><td>7</td></tr> <tr><td>2</td><td>18</td><td>12</td><td>11</td></tr> <tr><td>3</td><td>12</td><td>13</td><td>14</td></tr> <tr><td>4</td><td>7</td><td>14</td><td>11</td></tr> <tr><td>5</td><td>18</td><td>15</td><td>15</td></tr> <tr><td>6</td><td>10</td><td>16</td><td>17</td></tr> <tr><td>7</td><td>11</td><td>17</td><td>12</td></tr> <tr><td>8</td><td>13</td><td>18</td><td>14</td></tr> <tr><td>9</td><td>6</td><td>19</td><td>20</td></tr> <tr><td>10</td><td>8</td><td>20</td><td>18</td></tr> </tbody> </table> <p>Construct a <i>c</i>-chart for late deliveries with 3 sigma control limits and indicate if the delivery process was out of control at any time.</p>	Sample	Late Deliveries	Sample	Late Deliveries	1	6	11	7	2	18	12	11	3	12	13	14	4	7	14	11	5	18	15	15	6	10	16	17	7	11	17	12	8	13	18	14	9	6	19	20	10	8	20	18	15	CO5
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	<p>Q.18. Assume you have a product with the following parameters:  Demand = 360  Holding cost per year = \$1.00 per unit  Order cost:= \$100 per order</p> <p>(a) What is the EOQ?  (b) Assuming a 300-day work year; how many orders should be processed per year?</p>	5 5	CO 4																																												

	(c) What is the expected time between orders?	<b>5</b>	
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