



**FACULTY OF ENGINEERING AND BUILT ENVIRONMENT**  
**DEPARTMENT OF QUALITY AND OPERATIONS MANAGEMENT**

**SUPPLEMENTARY EXAMINATION**

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<b>PROGRAMME</b>	<b>:</b>	<b>DIPLOMA</b>
		<b>OPERATIONS MANAGEMENT</b>
		<b>MANAGEMENT SERVICES</b>
		<b>TRANSPORTATION MANAGEMENT</b>
<b>SUBJECT</b>	<b>:</b>	<b>OPERATIONS MANAGEMENT 1B</b>
<b>CODE</b>	<b>:</b>	<b>OPM11B1/ BPJ11B1</b>
<b>DATE</b>	<b>:</b>	<b>8<sup>TH</sup> JANUARY 2020</b>
<b>DURATION</b>	<b>:</b>	<b>3 HOURS</b>
<b>TIME</b>	<b>:</b>	<b>11H30 – 14:30</b>
<b>TOTAL MARKS</b>	<b>:</b>	<b>100</b>
<b>WEIGHTS</b>	<b>:</b>	<b>50%</b>

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<b>EXAMINER(S)</b>	<b>:</b>	<b>MR X. DYONASE</b>
<b>MODERATOR(S)</b>	<b>:</b>	<b>MR. S. MOKOELE</b>
<b>NUMBER OF PAGES</b>	<b>:</b>	<b>3 PAGES (including cover page)</b>

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**INSTRUCTIONS TO CANDIDATES:**

- Answer ALL questions and use annexure A to answer Question 7.1.
- This is a closed book assessment.
- Leave margins and spaces between the questions.
- Show all your calculations.
- Unless otherwise indicated, express your answers correct to two (2) decimal places.
- Where appropriate, indicate the units of your answer. (e.g. Hour, R, Units/hour)
- Number your answers clearly.
- Write neatly and legibly
- The general University of Johannesburg policies, procedures and rules pertaining to written assessments apply to this assessment.

**Question 1****12 Marks**

- 1.1 Describe the five ideas that are helpful for determining the overall arrangement for retail layout. (5)
- 1.2 Mention the advantages of work cells. (7)

**Question 2****15 Marks**

- 2.1 Define the term "supply chain management". (5)
- 2.2 List and briefly describe the five main supply chain strategies. (10)

**Question 3****8 Marks**

- 3.1 Differentiate the four different types of inventory. (8)

**Question 4****5 Marks**

- 4.1 Name any five advantages of Enterprise Resource Planning (ERP)? (5)

**Question 5****6 Marks**

- 5.1 Define the term Kanban (2)
- 5.2 What are the four advantages of the Kanban system (4)

**Question 6****4 Marks**

- 6.1 Name four tactics for maintenance and reliability. (4)

**Question 7****30 Marks**

- 7.1 Identify the range over which each location is best **(Show the range graphically).**  
**USE THE GRAPH PAPER PROVIDED**

Alberton (A)

Benoni (B)

Cresta (C)

Fixed Cost:

Fixed Cost:

Fixed Cost:

R265000 + R435000

R247000 + R653000

R295000 + R705000

Variable cost:

Variable Cost:

Variable Cost:

R12.00 + R18.00

R13.00 + R7.00

R7.50 + R7.50

- 7.2 What would you say if the group executive officer asked which location would be best for production level of 20000 units annually?

**Question 8****20 Marks**

- 8.1 Identify at least four reasons that lead to the make-or-buy decision (4)
- 8.2 Name the tactics for maintenance and reliability. (8)
- 8.3 Identify and differentiate the two types of maintenance. (8)

**END OF ASSESSMENT****TOTAL 100 Marks****GOOD LUCK**

