



**FINAL EXAMINATION**  
**MARCH 2024**

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<b>COURSE TITLE</b>	<b>PRODUCTION AND OPERATIONS MANAGEMENT</b>
<b>COURSE CODE</b>	<b>RMGT2313</b>
<b>DATE/DAY</b>	<b>24 JUNE 2024 / MONDAY</b>
<b>TIME/DURATION</b>	<b>09:00 AM - 11:00 AM / 02 Hour(s) 00 Minute(s)</b>

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**INSTRUCTIONS TO CANDIDATES:**

1. Please read the instruction under each section carefully.
2. Candidates are reminded not to bring into examination hall/room any form of written materials or electronic gadget except for stationery that is permitted by the Invigilator.
3. Students who are caught breaching the Examination Rules and Regulation will be charged with an academic dishonesty and if found guilty of the offence, the maximum penalty is expulsion from the University.

(This Question Paper consists of 4 Printed Pages including front page)

**\*\*\*DO NOT OPEN THE QUESTION PAPER UNTIL YOU ARE TOLD TO DO SO\*\*\***

**This question paper consists of TWO (2) sections. Answer ALL questions in the answer booklet provided. [50 MARKS]**

**SECTION A**

**(10 Marks)**

**There are TEN (10) questions in this part. Answer ALL questions in the answer booklet.**

1. Which of the following is a key consideration in supply chain risk management?
  - A. Increasing reliance on a single supplier
  - B. Ignoring potential disruptions
  - C. Reducing supply chain complexity
  - D. Improving supplier relationships
  
2. How does effective supply chain management contribute to operational efficiency?
  - A. By reducing inventory costs
  - B. By increasing lead times
  - C. By decreasing customer satisfaction
  - D. By creating bottlenecks in production
  
3. ABC analysis categorizes inventory items based on what criteria?
  - A. Alphabetical order
  - B. Size and weight
  - C. Value and usage
  - D. Color and shape
  
4. How does effective inventory management contribute to cost reduction?
  - A. By increasing stock levels
  - B. By reducing stockouts
  - C. By decreasing order frequency
  - D. By ignoring demand variability
  
5. How does Material Requirements Planning (MRP) help in managing inventory costs?
  - A. By increasing stockouts
  - B. By reducing order frequency
  - C. By improving inventory turnover
  - D. By minimizing data accuracy

6. What is the primary goal of Enterprise Resource Planning (ERP) implementation?
- A. Quantities and required delivery dates of all subassemblies.
  - B. Quantities and required delivery dates of final products.
  - C. The capacity needed to provide the projected output rate.
  - D. Inventory on hand for each final product.
7. Which of the following is a key principle of the Toyota Production System (TPS) related to production flexibility?
- A. High batch production
  - B. Low inventory turnover
  - C. Just-in-Case inventory
  - D. Just-in-Time production
8. Which of the following term reflects Japanese view of continuous improvement?
- A. Kaizen
  - B. Poka-yoke
  - C. Control limits
  - D. Six Sigma
9. Which among the following system deals with defining a well-defined process or procedure to manage distribution?
- A. Logistics system
  - B. Pull distribution system
  - C. Inventory management system
  - D. Push distribution system
10. Why is maintenance management important in manufacturing operations?
- A. To increase equipment downtime
  - B. To decrease equipment reliability
  - C. To improve equipment performance
  - D. To ignore equipment failures.

**SECTION B**

**(40 Marks)**

**There are FOUR (4) questions in this section. Answer ALL questions in the answer booklet.**

1. Six sourcing strategies refer to different approaches that organizations can use to procure goods and services from suppliers. These strategies are designed to help organizations optimize their supply chain operations and achieve various objectives such as cost savings, risk mitigation, and flexibility. Explain the concept of **SIX (6)** sourcing strategies. (18 marks)
  
2. Tony Beville's computer training school, in Richmond, stocks workbooks with the following characteristics:  

Demand D	=	19,500 units/year
Ordering cost S	=	\$25/order
Holding cost H	=	\$4/unit/year

  - a) Calculate the EOQ for the workbooks. (3 marks)
  - b) What are the annual holding costs for the workbooks? (3 marks)
  - c) What are the annual ordering costs? (3 marks)
  - d) Define inventory management (1 mark)
  
3. State **TWO (2)** functions of Material Requirement Planning (MRP). (2 marks)
  
4. The goal of Just-in-Time (JIT) is a management philosophy aimed at reducing waste and improving efficiency by receiving goods only as they are needed in the production process, thereby minimizing inventory costs. Elaborate **FOUR (4)** expected benefits of JIT. (10 marks)

**\*\*\* END OF QUESTION PAPER \*\*\***