



**PAMIBIA UNIVERSITY**  
OF SCIENCE AND TECHNOLOGY  
FACULTY OF COMMERCE, HUMAN SCIENCES AND EDUCATION  
DEPARTMENT OF GOVERNANCE AND MANAGEMENT SCIENCES

<b>QUALIFICATION: BACHELOR OF BUSINESS MANAGEMENT</b>	
<b>QUALIFICATION CODE: 07BBMN</b>	<b>LEVEL: 7</b>
<b>COURSE CODE: OPM611S</b>	<b>COURSE NAME: OPERATIONS MANAGEMENT</b>
<b>SESSION: JULY 2023</b>	<b>PAPER: PAPER 1/1</b>
<b>DURATION: 2 HOURS</b>	<b>MARKS: 100</b>

<b>SECOND OPPORTUNITY EXAMINATION QUESTION PAPER</b>	
<b>EXAMINER(S)</b>	<b>MS C KAUAMI MS B NDUNGAUA MR BRAMWELL KAMUDYARIWA</b>
<b>MODERATOR:</b>	<b>MR ERNEST MBANGA</b>

<b>INSTRUCTIONS</b>
<ol style="list-style-type: none"><li>1. Answer ALL the questions.</li><li>2. Show all formulae and calculations as marks will be awarded for them.</li><li>3. Write clearly and neatly.</li><li>4. Number the answers clearly.</li></ol>
<b>PERMISSIBLE MATERIALS</b>
<ol style="list-style-type: none"><li>1. Calculator.</li></ol>

**THIS QUESTION PAPER CONSISTS OF 7 PAGES (Including this front page)**

**Section A:**

**[20 Marks]**

(Questions are 1 mark each)

1. Supply chain plays an important role in organisational strategy and ensures all except:
  - A. Value creation
  - B. Competitiveness
  - C. Product life cycle integration
  - D. Efficient resource allocation
  - E. All of these
  
2. For each supply chain driver, managers must make tradeoffs between
  - A. Costs and benefits
  - B. Value addition
  - C. Efficiency and responsiveness
  - D. Cost and performance
  - E. Time and responsiveness
  
3. In service sector aggregate plans
  - A. Bind strategic goals and workforce schedules
  - B. Bind capacity and workforce schedules
  - C. Focuses on product families or total capacity requirements rather than individual products.
  - D. All of these
  - E. None of these
  
4. Demand forecasting in the supply chain manages inventory \_\_\_\_\_ and requires accurate picture of what demand will be in future.
  - A. Balancing
  - B. Reduction
  - C. Increase
  - D. Matching
  - E. None of these
  
5. The boundaries of a process include all but one of the following:
  - A. Definition of the good
  - B. Definition of the service
  - C. Continuous feedback
  - D. Identification of possible suppliers
  - E. Customer needs

6. Aggregate planning is about matching static demand with supply
  - A. True
  - B. False
  
7. Aggregate planning requires the manipulation of the following controllable variable to ensure that the plan meets demand, excluding:
  - A. Inventory
  - B. Employees
  - C. Idle time /over time
  - D. Pricing
  - E. Suppliers
  
8. Supply side of the supply chain is referred to as
  - A. Downstream
  - B. Vertical integration
  - C. Forward integration
  - D. Upstream
  - E. None of these
  
9. Areas that commonly feature industrial engineers include all but one of the following:
  - A. Setting parameters for bonus schemes
  - B. Total quality management
  - C. Ergonomics
  - D. Setting labour standards
  - E. Guidelines for profit sharing.
  
10. The following are service demand management strategies except,
  - A. Customer segmentation for different times/days
  - B. Difference in pricing during peak and slack times
  - C. Make use of a reservation system
  - D. encourage customer participation in the rendering of service
  
11. If an organisation manufactures 480 hats per week that they plan to sell at N\$150 per hat and the total cost to produce the hats is N\$38200, what will the productivity ratio be?
  - A. 1.884
  - B. 18.84
  - C. 188.4
  - D. 0.188

12. Among services supply management strategies, there is need to use .....  
that can be called in any time
- A. Contingent employees
  - B. Shared capacity
  - C. Management
  - D. Suppliers
13. Strategic partners like suppliers, distributors and customers allow for operational improvements
- A. True
  - B. False
14. Cementing gains in the stabilisation strategy refers to
- A. Making the wins gained concrete
  - B. Not degenerating to previous wasteful methods
  - C. Rewarding those who have contributed to the gains
  - D. All of these
  - E. None of these
15. Process thinking alludes to:
- A. Planning in view of aggregated products
  - B. Careful consideration of individual products
  - C. Examining diversified systems as one
  - D. A&C
  - E. None of the above
16. One of success process strategies philosophies is the process foundation, which:
- A. Fulfils process characteristics and strategic match
  - B. Creates the supply chain of organisation to satisfy and enhance competitiveness
  - C. Includes subcontractors due to their link to organisational processes
  - D. All of the above
  - E. None of the above
17. One of the advantages of lean methodology is combining craft and mass production and this means:
- A. Combining quality and remedy of inefficiencies
  - B. Combining old ways and large-scale production
  - C. Combining art and technology
  - D. None of these
  - E. All of these

18. The following are pillars of world-class performance, except:
- A. Outstanding leadership
  - B. Continuously challenge as status quo
  - C. Meticulous (thorough) measurement of results
  - D. Thorough recruitment process
  - E. High premium placed on employee education
19. Customer satisfaction is important for an organisation to retain and increase business. Among important principles to be adhered to is to consider flexible, movable, simple and low-cost equipment.
- A. True
  - B. False
20. Productivity is the ratio of input vs. output. Among the factors influencing productivity are methods an organisation uses and capital available for investment
- A. True
  - B. False

**Section B:**

**[54 Marks]**

**Question 1: Operations Management**

**(10)**

The importance of operations management lies in the value added to inputs that are transformed into outputs. Distinguish between **order qualifiers** and **order winners**. Use a relevant example.

**Question 2: Design of goods and services**

**(12)**

Namibian companies are not affected by the international/ global markets when it comes to the design of their products.

- i. Do you think this statement is true? Your answer should include how globalization impacts Namibian designs. (6)
- ii. Briefly list and discuss three core competency characteristics of design as the basis of competitiveness. (6)

**Question 3: Forecasting**

**(12)**

Qualitative forecasting is among the forecasting methods utilized by businesses. You are required to briefly:

- a. outline the characteristics of qualitative forecasts, when they can/should be used. (4)
- b. explain any 4 qualitative forecasting of these methods. (8)

**Question 4: Lean Systems Strategy**

**(8)**

Profitability in the long term is the main objective of any business. What are the specific objectives of a lean organization strategy. Explain.

**Question 5: Quality management**

**(12)**

Define quality and briefly discuss 3 reasons why quality has become a priority in today's business environment. (definition - 3 marks; reasons - 3 marks each)

**Section C:****[26 Marks]****Question 6: Economic Order Quantity****(17)**

Kavango Spares Centre sells 33 000 cans of Premium Oil per year. The holding costs are estimated to be N\$ 5.50 per can and the costs of placing an order amount to N\$ 8 per order.

The business is open for 320 days per year.

Determine:

- i. the optimal economic order quantity (EOQ) (3)
- ii. the number of orders per year (2)
- iii. the length of the ordering cycle (3)
- iv. the total annual inventory costs (4)
- v. if the demand for Premium Oil decreases to 30 000 cans per year and ordering cost increases to 8.5, what will be the effect on the total annual inventory costs? (5)

**Question 7: Capacity Planning****(9)**

Smarts Elementary School opened its doors in January 2022. Being a private school, it wanted to have the best teacher – learner ratio. The facilities were designed to accommodate 275 learners. Due to some challenges, they found that their effective capacity is 230 learners. As a result of the current economic conditions, their enrolment was 205 learners. Each teacher marks 18 tests in one hour. There are currently 8 tests to still be marked.

Determine:

- i. Efficiency (3)
- ii. utilisation of the school facilities (3)
- iii. The load (in minutes), given the backlog of 8 scripts (3)

**-END-**