



PAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF COMMERCE, HUMAN SCIENCES, AND EDUCATION

DEPARTMENT OF MARKETING, LOGISTICS AND SPORT MANAGEMENT

QUALIFICATION: BACHELOR OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT BACHELOR OF PROCUREMENT AND SUPPLY CHAIN MANAGEMENT	
QUALIFICATION CODE: 07 BLSC 07 BPSM	LEVEL: 7
COURSE CODE: GSC711S	COURSE NAME: GLOBAL LOGISTICS AND SUPPLY CHAIN MANAGEMENT
SESSION: JULY 2025	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

SECOND OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER(S)	MS. E JESAYA (FM & PM) MR. P SHIFETA (EF) MS. E ELAGO (DI)
MODERATOR:	MS. T A SHIKESHO

INSTRUCTIONS	
<ol style="list-style-type: none">1. Answer all questions.2. Read all the questions carefully before answering.3. Make sure your name and surname, question number and the date appear on the answer script.4. Please ensure that your writing is legible, neat and presentable.	

THIS QUESTION PAPER CONSISTS OF 5 PAGES (Including this front page)

SECTION A: MULTIPLE CHOICE AND TRUE/FALSE QUESTIONS

40 MARKS

QUESTION 1: MULTIPLE CHOICE

20 MARKS

There are 10 Multiple-choice questions with several possible choices each. Choose the best possible answer, for example, 1A. Each question is equivalent to 2 marks.

- 1.1. Which heuristic approach builds a tour by always visiting the nearest unvisited node next?
 - a) Nearest Neighbour Procedure (NNP)
 - b) Cluster First, Route Second
 - c) Clark and Wright
 - d) Minimal Cost Flow

- 1.2. In the *Clark and Wright Savings Heuristic*, what does the savings value (S_{ij}) represent?
 - a) The distance saved by linking two nodes
 - b) The total fuel savings
 - c) The salary of the driver
 - d) The number of vehicles needed

- 1.3. What is the purpose of the *Bill of Materials (BOM)* in MRP?
 - a) To list all raw materials and components needed for production
 - b) To track financial transactions
 - c) To schedule maintenance activities
 - d) To monitor sales trends

- 1.4. What distinguishes *dependent demand* in MRP?
 - a) It fluctuates randomly
 - b) It applies to final products
 - c) It is determined by demand for finished goods
 - d) It occurs only in the service industry

- 1.5. What is the purpose of cross-docking in a transportation network?
 - a) To store goods for long periods
 - b) To delay deliveries for consolidation
 - c) To move products from inbound to outbound transport with minimal storage
 - d) To break bulk shipments into retail-ready packaging

- 1.6. Which of the following is a characteristic of a tailored transportation network?

- a) One transportation method for all customers
 - b) The use of only cross-docking centers
 - c) A mix of multiple transportation and distribution methods
 - d) Elimination of intermediaries
- 1.7. What does *postponement* in production primarily aim to reduce?
- a) Number of workers
 - b) Raw material costs
 - c) Finished goods inventory
 - d) Factory size
- 1.8. Which of the following best describes the *Order Penetration Point (OPP)*?
- a) The first customer touchpoint on the website
 - b) The point where customer order triggers production or customisation
 - c) The last stage of inventory restocking
 - d) The end of the product life cycle
- 1.9. Which of the following best describes *sourcing* in supply chain operations?
- a) A method for tracking inventory
 - b) A set of business processes required to purchase goods and services
 - c) The process of selling finished goods
 - d) The transportation of products to retailers
- 1.10. What is the main goal of *supplier development*?
- a) Increase the number of suppliers
 - b) Monitor supplier emails
 - c) Improve a supplier's cost, quality, and delivery performance
 - d) Reduce supplier collaboration

QUESTION 2: TRUE/FALSE

20 MARKS

Please state whether the following statements are true or false.

2x10= 20 MARKS

- a) In routing and scheduling problems, arcs can represent time, cost, or distance.
- b) Vehicle routing and scheduling systems do not account for driver schedules or vehicle capacities.
- c) In a process-oriented layout, products move through a set of specialised, fixed workstations.
- d) MRP is a manual planning system for managing independent demand.
- e) REL charts are used to show the proximity relationships between different activities in a facility.

- f) The goal of linear programming in aggregate planning is to maximise profit or minimise cost under constraints.
- g) Cross-docking reduces the need for long-term storage.
- h) A factory's layout never needs to change after initial setup.
- i) Postponement involves delaying product differentiation until customer demand is known.
- j) Make-to-Order (MTO) production involves zero customisation for the end user.

QUESTION 3: SHORT CASE STUDY

20 MARKS

Assess the following case studies and identify the types of layout involved in each scenario. Please give a justification for your answer!

- a) A company builds helicopters. Each unit remains stationary while teams bring in tools, equipment, and materials to assemble it on-site.
- b) A car manufacturer uses a conveyor belt system where vehicles pass through a series of stations for welding, painting, and testing.
- c) A tech company has distinct spaces for coding, graphic design, meetings, and administrative tasks, allowing departments to focus on their specific tasks.
- d) A supermarket organises its aisles into categories such as produce, dairy, meat, and canned goods, aiming to optimise customer flow.
- e) An e-commerce company's warehouse has clearly marked receiving, storage, picking, packing, and shipping zones, with both manual and automated processes.
- f) In a hospital, departments are arranged based on their functions—surgery, radiology, pediatrics—with specialised staff and equipment in each area.
- g) Each furniture item is made to customer order, with different tools and materials brought to a fixed location for assembly.
- h) A clothing retailer arranges items by category (men's, women's, shoes, accessories) and places promotional items near the entrance.
- i) A factory produces various electronic devices. Each product requires a unique set of processes like soldering, assembly, and testing. Products move based on their process path.
- j) A warehouse stores perishable goods with temperature-zoned sections. Automated systems handle sorting, retrieval, and dispatching.

QUESTION 4

20 MARKS

Supply chain design involves a range of interconnected elements that shape the structure, configuration, and efficiency of a supply chain network. Identify and discuss any ten key components of supply chain design, highlighting their roles and interdependencies.

QUESTION 5

Compare and contrast the following retailing strategies by assessing their definitions, benefits, risks and costs of operation?

20 MARKS

- a) Quick Response
- b) Automatic Replenishment
- c) Efficient Consumer Response
- d) Collaborative Planning, Forecasting and Replenishment (CPFR)

SECTION B TOTAL MARKS: 60

TOTAL MARKS: 100

THE END