



DIPLOMA UNIVERSITY EXAMINATIONS
SCHOOL OF MANAGEMENT AND LEADERSHIP
DIPLOMA IN SUPPLY CHAIN MANAGEMENT

DSM 100: WAREHOUSING AND INVENTORY MANAGEMENT

DATE: 9TH APRIL 2026

DURATION: 2 HOURS

MAXIMUM MARKS: 70

INSTRUCTIONS:

1. Write your registration number on the answer booklet.
2. **DO NOT** write on this question paper.
3. This paper contains **SIX (6)** questions.
4. Question **ONE** is compulsory.
5. Answer any other **FOUR** questions.
6. Question **ONE** carries **30 MARKS** and the rest carry **10 MARKS** each.
7. **Write all your answers in the Examination answer booklet provided.**

QUESTION ONE

Read the Case Study below carefully and answer the questions that follow:

SOLUTIONS COMPANY

Solutions Company is a logistics company that has specialized in the provision of tailor made services for business in Africa and the far East that require end-to-end product life cycle management. Solutions Company has a warehouse situated in South Africa that is a 750,000-square-foot warehouse. This warehouse serves as a main hub for storing and distributing of Aviation Parts that include complete assemblies like Turbo Compressors and Landing Gears. It also has copper communication cables and other networking assets for communications network providers in the whole of Africa and some other cities outside Africa. Most major components like engines weigh up to six tons. And each type of part has its own unique characteristics, which make it suitable for a certain type of transport network.

The Warehouse contains over 10,000 different types of parts, and it can store as many as 2,500 major ratable components. These materials need to be stored, managed and redistributed as per requirement; very efficiently and effectively where warehouse functions can play a vital role in adding value to the supply chain. Primarily the focus of the Solutions Company on computerization is now centered among its other sub-warehouses. The focus for Solutions Company is increasingly on reducing the operating costs to delighting the customer stocking policy; physical storage and distribution and warehouse management has a crucial role in helping to deliver this objective. In such set up distribution of goods and handling plays a major role in helping to deliver this objective.

At the dispatch point serving the next customer in the chain is critical to providing high customer service levels. Warehousing management is concerned with ensuring that all the activities involved in warehousing are carried out efficiently and effectively by seeking to eliminate wastes

from activities that add cost to supply chain while maximizing those areas that add value.

Required:

- a) Analyse five types of inventory that you may find at Solutions Company

(10

Marks)

- b) Explain to Solutions Company Management carrying costs they should monitor to avoid tying up capital that can be used elsewhere. **(10 marks)**

- c) Evaluate five various factors that Solutions company need to consider before setting up warehouses

(10 marks)

QUESTION TWO

- a) A distributor expects to sell approximately 9600 tyres next year. The annual carrying cost is sh.16 per tyre and the ordering cost is sh. 75. The distributor operates in 288 days. Taking lead time as 15 days: calculate EOQ **(5 marks)**

- b) Explain five reasons why a company might choose to hold stocks of different products.

(5 Marks)

QUESTION THREE

- a) Explain five alternative reasons for existence of stock

(5 Marks)

- b) Evaluate five Indicators of Poor Material Handling

(5

Marks)

QUESTION FOUR

- a) Explain five principal assumptions of EOQ approach
(5 marks)
- b) Elaborate any five ways organizations implement to Improve Warehouse Efficiency
(5 marks)

QUESTION FIVE

- a) Discuss five methods organizations can adopt for safe use of Fork-lift trucks (FLT)
(5 marks)
- b) Explain any five methods used to dispose redundant stocks **(5 marks)**

QUESTION SIX

- a) Analyse five advantages achieved when organizations undertake Variety reduction of stocks.
(5 marks)
- b) Explain five Effects of Good Material Handling (Benefits)
(5 marks)