

# KIBABII UNIVERSITY COLLEGE

## DPM 101: LOGISTICS AND DISTRIBUTION (2 HOURS)

### SEPTEMBER –DECEMBER 2013 MAIN EXAM MARKING SCHEME

Date; \_\_\_\_\_

Time: 2 Hrs

#### INSTRUCTIONS:

Answer Question ONE (COMPULSORY) and any other two

#### QUESTION ONE

(a) What is logistics? (5 marks)

##### Answer

Logistics is the management of the flow of goods, information and other resources in a repair cycle between the point of origin and the point of consumption in order to meet the requirements of customers. Logistics involves the integration of information, transportation, inventory, warehousing, material handling, and packaging, and occasionally security. Logistics is a channel of the supply chain which adds the value of time and place utility. Today the complexity of production logistics can be modeled, analyzed, visualized and optimized by plant simulation software. ( 5 Marks)

(b) Briefly describe the Components of Logistics System (20 marks)

##### Answer

The student should highlight and describe at least four components each carrying 5 marks

#### QUESTION TWO

Briefly describe the Functions of packaging (15 marks)

##### Answer

The student to give both the secondary and primary functions and discuss the other two as follows:

- Primary functions
  - Protective function
  - Storage function
  - Loading and transport function

- Secondary functions
  - Sales function
  - Promotional function
  - Service function
  - Guarantee function
  - Tertiary functions
- Additional function
- Protective function

### QUESTION THREE

**Briefly describe the various types of Transport Modes highlight the characteristics of each.  
(15 marks)**

#### Answer

##### 1. Air Transport:

- Although air transportation is considered as expensive, it offers long-distance transportation in short time periods.
- Air transportation depends heavily on weather conditions and delays schedule deviations may occur.

##### 2. Sea Transportation:

- Sea Transportation offers the ability to carry large quantities of commodities (.000 tones) using
- Specialized cargo ships.
- Sea Transportations offers low flexibility in determining routes and schedules.
- Depends on weather conditions (not as hard as in air transportation)

##### 3. Rail transport:

- Rail transportation is considered as a slow transport mode.
- Low cost materials and Raw Materials are usually transferred.
- Weather conditions do not influence rail operations.
- Many stops in local areas can be made in order to load / unload commodities.

##### 4. Road transport:

- Offers lower capacity and quantity capabilities in comparison with rail transportation
- Advantage of road transportation is the ability to offer door-to-door services and the existence of many different and specialized vehicles

##### 5. Pipeline Transport:

- Used to transport Liquids and Gases (i.e. Oil, Natural Gas)
- Although transportation is slow (3-4 miles per hour), the ability to operate 24 hours a day makes it an efficient transportation mode of these product types.

- As in rail transportation, offers a specific network with specific stops, intersections, etc.
- Weather conditions do not influence rail operations and limited technical problems may occur.

#### **QUESTION FOUR**

**What are the key components of logistic? (15 marks)**

These are mentioned below:

1. Customer service (typically defined by marketing)
2. Transportation
3. Inventory management
4. Information flows and order processing

END