



SUPPLIMENTARY UNIVERSITY EXAMINATIONS 2015/2016  
EXAMINATION FOR Y2S1  
DEGREE OF PURCHASING AND SUPPLIES MANAGEMENT

COURSE CODE: HPS 2212

COURSE TITLE: INVENTORY MANAGEMENT

DATE: TIME: 2 HOURS

**INSTRUCTION TO CANDIDATES**

Question one (1) is compulsory and carries (30 marks)

Answer **any other two** (2) questions each question has 20 marks)



**MRUC IS ISO 9001:2008 CERTIFIED**

### **QUESTION ONE**

a). During an interview in supplies department the interviewee is expected to explain to the panel meaning and applicability of the terms highlighted below.

i)Branch stores

ii)Stock ledger

iii)Bin card

iv) Gate pass

v) Inventory cost

(

(Each 4marks total, 20mks)

b) Discuss the advantages you would derive from use of computer applications in inventory management. (10 mrks)

### **QUESTION TWO**

a). Outline and briefly discuss 4 models of material requirement planning that company management considers before adopting the model. (16mks)

b).Evaluate why it's important as a head to carry out periodic verifications in the stores department. (4mks)

### **QUESTION THREE**

a). During an interview John the interviewee was asked to elaborate on material requirement planning and just-in-time. Briefly discuss the two methods of planning in relation to their functioning and benefits. (15mks)

b). A company supervisor and general manager are considering setting up the company store and the supervisor recommends centralized store system. Discuss the possible benefits that he could be taking into account. (5mks)

### **QUESTION FOUR**

a) Being a store controller you are expected to monitor store documents. Identify 3 documents you require in material control & comment on their application. (6mks)

**b).** As a specialist in purchasing discuss the ideal bases on which you establish demand forecasting.

(10 mrks)

**c).** Despite the contributions of Information Technology in inventory management implementers are still faced with some risks. Discuss these risks you experience as an implementer.

(4mrks)

## **MARKING SCHEME**

### **QUESTION ONE**

#### **i) Branch stores.**

- Located in each section, unit, department or branch
- Draws its requirements from main stores.
- Issued materials by central stores for a certain period of time.
- Recommended for big businesses or industrial houses.

#### **ii). Stock ledger**

- A book containing individual accounts of each item of materials in storehouse.
- A document necessary in stores recording.
- Shows different levels of replenishment
- Shows value of materials received.
- Facilitates ascertainment of cost of materials.

#### **iv). Bin Card**

- A mirror of bin
- Depicts quantity & quality of materials stored in a bin.
- Tells history of the bin
- Functions as a material movement record
- It's a document used in stores recording.

#### **v). Gate pass**

- A document issued by stores department to authorize the gatekeeper allow the holder of stores materials to leave.
- Gate pass prevent pilferage & theft from stores department.
- It's a control device on ne & materials.

#### **vi). Inventory cost-**

- Costs related to storing & maintaining inventory over a certain period of time.
- Described as percentage of inventory level.
- Categorize into; ordering costs, carrying costs, stock out costs.

### **b)Benefits of computer application in inventory management**

- Accurate information
- Timely and accessible information
- Right kind of information
- Information sharing
- Increased efficiency

### **QUESTION TWO**

#### **a)Material requirement planning.**

##### **Gross requirement model**

- Business lists each materials or resources to complete a product over a specified period.
- Determine how many of each tee materials needed to produce the desired number of units.

- Company orders the quantity of materials regardless of resource they may have.

#### **Net requirement model.**

- Business lists each materials or resources to complete a product over a specified period of time.
- Determines how many of each material or resource is needed to produce the desired number of units.
- Lesser parts or resources already in inventory, then place order of the balance.

#### **Project based system.**

- Used for single production run or custom orders.
- Used on single line that may not be repeated for some time.
- Calculates total number of units needed to complete a run.
- Then makes material based on calculation
- Helps ensure business is not left with unwanted materials.

#### **Reverse planning system**

- Used when a company has fixed end date or sensitive products
- Starts by determining no of units required by a specific dente.
- Worked backwards to determine material needed to each final stage.
- Then calculate raw materials & inputs
- May require expediting or special orders to ensure completion date is met.

#### **b) Objectives of periodic verification**

- -Check stores records
- -Establish accuracy of stores records being maintained
- Establish accuracy of number /weight of materials stored
- Prepare staff for inspection and material audit
- Prevent pielferage, waste, spoilage & maintain quality of stores

### **QUESTION THREE**

a) -MRP projected usage of parts or material during predetermined time period.

- Suitable for discrete manufacturing in which production lines operate on a batch basis & produce output that is countable in discrete units. Identifiable with serial numbers.
- JIT focal point is the current/real usage of parts in production system which makes it appropriate for a repetitive manufacturing environment. Series of products pass through the same machinery & same sequence of operations in a continuous flow over an extended period of time.

#### **Advantages of JIT & MRP**

- JIT focuses on company manufacturing line on the products its customers want.
- Materials are made available as needed
- Inventory shrinkage & redundant function including inspections are reduced.
- Reliability of material availability is increase. MRP reduces work in process inventory, eliminates material shortage & increases material reliability
- MRP maintains constant supply of critical materials.
- MRP minimizes risk reduction.
- Implementations are forward planning & diagnostic functions.

**b) Advantages of centralized storage system**

- Minimum possible stock, thus avoiding unnecessary blockage of money.
- Range of goods become wider & benefits the user
- Scientific method of stock control
- Reduction of storage.
- Economy through bulk purchases
- Efficient and successful organization of inspection & verification becomes easier
- Standardization is easier
- Minimization of deterioration
- Improve coordination between store & other department (10mrks)

**QUESTION FOUR**

**a) Material control documents**

**Stock day sheet:-**

- A statement prepared daily by stores department for submission to management giving details of daily operations.
- Helps management to know activities of stores department.
- Helps compare programmes & policies laid down & their implementation.

**Stock ledger card**

- Eliminates stock ledger book
- Provides helpful information regarding day to day affairs of stores
- Provides a system for review of stock position.
- Enables stores management to expedite the delivery thus strict adherence to different replenishment levels.

**Kadrex**

- A recent introduction in the annals of material control devices.
- Offers knowledge of an up to date stock position & action taken in connection with its replenishment.
- This is possible to replace stock ledger & stock ledger card.

**b)**

Records of past consumption  
Production plan for future  
Normal consumption per unit of output

**c). 2 key areas of risk in IT**

- (I) Installation Of new IT systems.
- (II) Any sort of problem glitches to power outages to viruses. can completely shut down firms operations.