

# Managing Inventory

## Aim

To provide an understanding of the methods used by organisations to obtain the right quantities of stock or inventory.

## Rationale

The holding of stock can be a large financial burden upon an organisation and needs to be carefully controlled. It is important that purchasing and supply professionals understand the methods and techniques for reducing the cost of holding goods while providing an efficient and effective service to their customers.

### 1. The costs of holding stock

- a) Supply and demand
- b) Holding costs
- c) Stock evaluation methods

### Learning outcomes

In the assessment the candidate may be required to:

- 1.1 Demonstrate an understanding of the effect of customer demand
- 1.2 Describe the different costs involved in holding stock
- 1.3 Explain the different stock evaluation methods LIFO, FIFO, average cost, standard cost, replacement cost

### 2. Stock control methods

- a) Determination of demand
- b) Forecasting techniques
- c) Stock replenishment systems
- d) Determination of safety and service levels
- e) Inventory monitoring and control
- f) Stock classification and coding

### Learning outcomes

In the assessment the candidate may be required to:

- 2.1 Explain ways in which demand can be affected (i.e. seasonal demand)

2.2 Explain the need for forecasting and demonstrate a knowledge of the different demand forecasting techniques

2.3 Show an understanding of stock replenishment systems and the use of economic order quantities

2.4 Define the terms 'safety' and 'service levels' and describe their effect on order quantities

2.5 Describe the different ways in which stock can be classified and the coding systems available

### **3. Other inventory management techniques**

a) Material requirements planning (MRP)

b) Manufacturing resource planning (MRP2)

c) Distribution resource planning

d) Just in Time stocking systems

### **Learning outcomes**

In the assessment the candidate may be required to:

3.1 Describe the systems for determining dependent demand - MRP and MRP2

3.2 Demonstrate an understanding of how the MRP system works

3.3 Explain distribution resource planning and the importance of this system in managing the supply chain

3.4 Outline the Just in Time philosophy and the requirements for its success

### **4. Physical stock management**

a) Stores/warehouse location

b) Stores/warehouse design

c) Stockyard design

d) Stores/warehouse layout

e) Materials handling

f) Stock transaction recording

### **Learning outcomes**

In the assessment the candidate may be required to:

4.1 Outline the requirements for the location of a stores or warehouse

4.2 Identify the factors which should be taken into account when designing a stores/warehouse

4.3 Identify the factors which should be taken into account when designing a stockyard

4.4 Describe the general principles of stores/warehouse layout (i.e. flow, space utilisation and flexibility)

4.5 Explain the principles of efficient materials handling

4.6 Explain the advantages and disadvantages of the different types of materials handling equipment

4.7 Outline the different stock recording and stocktaking methods