Q1= A manufacturer buys certain equipment from outside suppliers at rs. 30 per Unit. Total annual needs are 1,600 units.

 The following further data are available:

 Annual return on investment 10%

 Rent, Insurance, tax per unit per year, rs.1.

 Cost of placing an order rs.50

 Determine the Economic Order Quantity.

Q 2= Find out the EOQ and order schedule for raw material and packing

 Materials with the following data given to you.

1. Cost of holding :

 Raw materials rs.1000 per order, packing materials rs.5000 per order.

2. Cost of holding inventory:

 Raw materials 1 ps. per unit p.m. packing materials 5 ps. per unit p.m.

3. Production rate: 2, 00,000 units per month.

Q3= Determine the EOQ from the following particulars.

 Annual consumption : 675 units

 Cost of material : rs. 30 per unit

 Cost of placing an order : rs. 18

 Annual carrying cost of one unit : 10% of inventory value

Q4: M/s Sandhu Brothers Dhulia supplies you the following information.

 Annual consumption : 15,000 kg.

 Cost of raw materials : rs 48

 Cost of raw materials : rs 2 per kg.

 Storage cost : 8% of average Inventory

You are required to ascertain Economic Order Quantity.

Q5= A company manufactures a special product which requires component Alpha.

 1) Annual demand 8000 units

 2) Cost of placing an Order rs. 200 per Order

 3) Cost per unit rs. 400

 4) Carrying cost % p.a. 20%

 The company has been offered a quantity discount of 4% on the purchase of

 Alpha provided order size is 4,000 units at a time.

 Compute EOQ.

 Advise whether quantity discount offer can be accepted.

Q6= A Manufacturer buys certain essential spares from outside suppliers at 40

 Per set. Total annual requirement are 45,000 sets. The annual cost of

 Investment in inventory is 10% and cost like rent, stationery, insurance, taxes

 Ect.. Per unit per year works out to be rs. 1. Cost of placing an order is rs. 5.

 Calculate: 1) the EOQ

 2) no. of orders to be placed.

Q7= from the following information, Calculate Economic order Quantity by using

 Formula and tabulation method.

 Annual requirement (units) 6,400

 Ordering cost (per order rs.) 100

 Carrying cost per unit (rs) 8

 Per unit price (rs) 80

The firm can procure inventories in various lost such as (i) 6,400 units (ii) 3,200 units (iii) 1,600 units (4)800 units (5) 200 units and (6) 100 units.

Q8= The following information relates to year 2013-2014.

 Details Material-1 Material-2

 Opening stock 5, 00,000 20, 00,000

 Closing stock 3, 00,000 16, 00,000

 Net purchases 42, 00,000 50, 00,000

 Calculate the material turnover ratios regarding each of these materials and

 Express in number of days the average inventory held.

Q9= inventory records of sunlight ltd. Shows the following information:

|  |  |  |  |
| --- | --- | --- | --- |
|   | Material A | Material B | Material C |
| Opening Stock | 700 Kg | 200 liters | 100 Kg |
| Purchases | 11.500 Kg | 11.00 liters | 1800 Kg |
| Closing Stock | 200 Kg | 1200 liters | 1200 Kg |

The inventory is valued @ rupee 1 per kg or liter.

Calculate material turnover ratio for each of the material.

Q10= The following information is available from the books of ramesh enterprise for the year 2012.

|  |  |  |
| --- | --- | --- |
|  | Material A | Material B |
| Opening stock  | 2,000 | 3,000 |
| purchases | 26,000 | 7,000 |
| Closing stock | 3,000 | 3,500 |

 Calculate the material turnover ratio and determine which material is fast moving.

Q11= prepare Stores Ledger Accounts on the basis of the FIFO methods of pricing the issue of stores using the following information.

2014

March 1 Opening Stock 300 units @9.70 per unit

Purchases:

March 3 250 units @9.80 per unit

March 15 300 units @10.05 per unit

March 25 150 units @10.30 per unit

Issues:

March 11 400 units

March 20 210 units

March 29 100 units

Q12= Prepare a Stores Ledger Account from the following transactions assuming that issues of stores have been made on the principle of ‘First In First Out’.

2014

July 1 Received 1000 units at Rs. 20 per unit.

July 3 Received 350 units at Rs. 21 per unit.

July 5 Issued 700 units.

July 7 Issued 400 units.

July 12 Received 550 units at Rs. 22 per unit.

July 16 Issued 350 units.

July21 Received 100 units at Rs. 23 per unit.

July 24 Issued 500 units.

July 27 Received 200 units at Rs. 20 per unit.

July 31 Issued 180 units.

Q13= Prepare a Stores Ledger Account from the following transactions assuming that issues of stores have been made on the principle of ‘First In First Out’.

2014

January 2 Purchased 2000 units at Rs. 4.00 per unit

January 20 Purchased 250 units at Rs. 5.00 per unit

February 5 issued 250 units

February 10 Purchased 3000 units at Rs.6.00 per unit

February 12 issued 2000 units

March 2 issued 500 units

March 5 issued 1000 units

March 15 purchased 2250 units at rs 5.50 per unit

March 20 issued 1500 units

Q14= The following is an extract of the record of receipts and issues of component in a factory during June. 2015

2015

June 1 opening balances 100 tons @ rs. 200

June 8 issued: 50 tons

June 14 received from supplier 40 tons @ rs 190

June 17 issued: 36 tons

June 21 received from supplier 48 tons @ rs 180

June 24 issued: 60 tons

June 25 returned to suppliers 10 tons out of goods received on 21st June

June 26 received from supplier 64 tons @ rs 190

June 29 issued: 40 tons

June 30 returned from department 6 tons @ rs 190

The stock verifier of the factory had found a shortage of 2 tons on 23rd June and left a note accordingly you are required to prepare stores ledger account under FIFO method.

Q15= Enter the following transactions in the stores ledger of material Y using FIFO Method.

2014

January 1 balance 250 units @rs 10 per unit.

January 3 issued 50 units on M.R.No. 61.

January 6 received 800 units vide G.R. No. 13 @rs 11per unit.

January 7 issued 300 units on M.R.No.63.

January 8 returned to stores 20 units on M.R.No.6

January 12 received to stores 20 units per G.R. No.15 @rs 12 per unit.

January 15 issued 320 units M.R.No.83.

January 18 received 100 units, vide G.R. Note No.77 @ rs 12 per unit.

January 20 issued 120 units M.R.No.102.

January 23 returned to vendor’s 40 units from G.R.No.77 received on 18th in instant.

January 26 received 200 units on G.R. No.96 @ rs 10 per unit.

January 30 Issued 250 units on M.R. No.113.

Note: M.R. = Material requisition

 M.R. = Goods received Note

Q16= form the following particulars, prepare stores ledger account

 Showing the pricing of material issue under weighted average:

2014 December 1 opening stock 500 units at rs 2 each.

December 3 purchased 400 units at rs 2.10 each.

 December 5 issued 600 units, vide M.R.No.15.

 December 7 purchased 800 units at rs 2.40 each.

 December 9 issued 501 units, vide M.R.No.22.

 December 12 returned from issue on 5th, 12 units.

 December 17 purchased 400 units at rs 2.50 each.

 December 25 issued 600 units, vide M.R.No.30.

Q17 In a company, weekly minimum and maximum consumption of material A are 25 and 75 units respectively. The reorder quantity as fixed by the company is 300 units. The material is received within 4 to 6 weeks from issue of supply order. Calculate minimum level and maximum level of material A.

Q18 The following information is available in respect of material:

 Re –order quantity =1,500 units

 Re- order period =4-6 week

 Maximum consumption = 400 units per week

 Normal consumption = 300 units per week

 Minimum consumption = 250 units per week

 Calculate:

 (a) Re-order level, (b) minimum level,

 (c) Maximum level, and (d) Average stock level.

 Q19 for the manufacture of a certain product two components A and B are used. The following particulars about these components are available: A B

Normal usage (per week) 60 nos. 60 nos.

Maximum usage (per week) 80 nos. 80 nos.

Minimum usage (per week) 30 nos. 30 nos.

Reorder quantity 400 nos. 600 nos.

Reorder period 4 to 6 weeks 2 to 4 weeks

You are required to calculate for each component :

(i) re ordering level

(ii) minimum level

(iii) maximum level

(iv) Average Stock level.

Q20) shriram enterprise manufactures a special product “ZWD”. The following particulars were collected for the year 1986.

(a) monthly demand of ZED-1,000 units.

(b) cost of placing an order rs 1000

(c) annual carrying cost per unit rs 15.

(d) normal usage 50 units per week

(e) minimum usage 25 units per week.

(f) maximum range 75 units per week.

(g) Re-order period 4 to 6 weeks.

Compute from the above

(1) re-order quantity (EOQ)

(2) re-order level

(3) minimum level

(4) maximum level

(5) average stock level

**Mumbai university exam questions:**

Q.21 **Oct 2015**

Following are the purchase and sales in the month of December 2014. Prepare the stores ledger on the basis of (i) FIFO and (ii) Weighted average method.

|  |  |  |  |
| --- | --- | --- | --- |
| Date  | Purchases(units) | Rate | Sales (units) |
| Dec 1 | 1200 | 4.00 | - |
|  4 | - | - | 600 |
|  5 | 600 | 3.80 | - |
|  10  | - | - | 400 |
|  18 | 400 | 4.20 | - |
|  23 | - | - | 800 |
|  29 | 800 | 4.40 | - |
|  31 | - | - | 600 |

Out of purchases on dec. 5th, 100 units were returned to the supplier on dec. 8th

Q.22 **April 2015**

Following are the purchase and sales in the month of December 2014. Prepare the stores ledger on the basis of (i) FIFO and (ii) Weighted average method.

|  |  |  |  |
| --- | --- | --- | --- |
| Date  | Purchases(units) | Sales ( units) | Price per (units) |
| March 1  | Balance 400  | - | 14 |
|  2 | 300 | - | 15 |
|  4 | 200 | - | 15 |
|  5  | - | 400 | 19.5 |
|  10 | - | 100 | 20.5 |
|  17 | 300 | - | 16 |
|  20 | - | 250 | 21 |

On March 18th 40 units were found damage and had to be discarded.

Q. 23 **April 2016**

 The following information relates to year 2014-2015

|  |  |  |
| --- | --- | --- |
|  | Material X | Material Y |
| Opening stock  | 1,60,000 | 2,80,000 |
| Closing stock | 90,000 | 1,20,000 |
| Purchases | 10,00,000 | 5,00,000 |

 Calculate

1. Material turnover ratio

2. Express in No. of days the average inventory held.

3. state Which of the material is slow moving material.

Q.24 **April 2016**

Determine the EOQ and no. of days from the following particulars according to formula method and tabular method

 Annual consumption : 6,000 kgs.

 Cost Per kg. : Rs 5

 Cost of placing an order : Rs. 60

 Storage and Carrying cost : 10% on Average Inventory.

Q.25 **April 2016**

Determine the EOQ and from the following particulars according to formula method and tabular method

 Annual consumption : 4,000 units

 Cost of material : Rs 20 per unit

 Cost of placing an order : Rs. 250

 Annual Carrying cost : Rs. 2 per unit

 **MATERIALS COST**

 **1) Multiple Choice Questions**

1) Continuous stock taking is part of

 (a) Annual stock taking (b) Perpetual inventory

 (c) ABC analysis (d) None of the above

2) Which of the following is considered to be a normal loss of material

 (a) Loss due to accidents

 (b) Pilferage

 (c) Loss due to careless handing of material

 (d) Loss due to breaking the bulk

3) Bin card is maintained by the

 (a) Accounting department (b) Costing department

 (c) Stores (d) None of the above

4) Which of the following assumptions are made for the calculation of economic Order

 Quantity

 (a) Anticipated usage of material in units is Known

 (b) Cost per units of material is constant and Known

 (c) Ordering cost per order is fixed

 (d) All the above

5) Which of the following is an accounting record

 (a) Bill of Materials (b) Bin card

 (c) Stores ledger (d) All of these

6) Which of the following documents is used for issuing materials to production departments

 (a) Purchase requisition note (b) Stores requilistion Note

 (c) Goods received Note (d) Stores Credit Note

7) Which of the following methods of stock control aims at concentrating efforts on selected

 items of materials?

 (a) Perpetual inventory system

 (b) Materials turnover

 (c) Maximum, minimum and re-order level setting

 (d) ABC analysis

8) The storekeeper should initiate a purchase requisition when reaches

 (a) Minimum level (b) Maximum level

 (c) Re-order level (d) Average level

9) A Written request to a supplier for specified goods at an agreed upon price is called a:

 (a) Purchase order (b) Receiving report

 (c) Purchase requisition (d) Materials requisition form

10) A Purchase requisition is raised

 (a) To intimate to the supplier the quantity and quality of material required

 (b) When the stock of raw material has fallen to the recorder level

 (c) When goods are received from a supplier

 (d) To let the accounts department know that an invoice should be expected from a supplier

11) The reorder level is

 (a) The number of units that should be ordered

 (b) The level inventory when next order should be placed

 (c) The economic order quantity

 (d) Both (b) and (c)

12) The costs of preparing, issuing and placing purchase order, plus receiving and inspecting the

 Items in orders is

 (a) Purchasing costs (b) Ordering costs

 (c) Stock costs (d) Carrying costs

13) The cost that result when a company holds an inventory of goods for sale

 (a) Purchasing costs (b) Carrying costs

 (c) Opportunity cost (d) Interest costs

14) The costs associated with storage are an example of which cost category

 (a) Quality costs (b) Labour costs

 (c) Ordering costs (d) Carrying costs

15) If there is increase in the size of inventory orders, Number of orders per year will

 (a) Increase (b) Decrease

 (c) Remain same (d) change depending on other factors

16) If there is increase in the size of inventory orders. Total annual carrying costs will

 (a) Increase (b) Decrease

 (b) Remain same (d) Change depending on other factors

17) If there is increase in the size of inventory orders. Total annual ordering cost will

 (a) Increase (b) Decrease

 (c) Remain same (d) change depending on other factors

18) Continuous stock taking is a part of

 (a) Annual stock taking (b) Perpetual inventory

 (c) ABC analysis (d) Inventory Turnover ratio analysis

19) Material control invoices control over

 (a) Consumption of control over

 (b) Issue of material

 (c) Purchase of material

 (d) Purchase, storage and issue of material

20) Perpetual inventory system involves

 (a) Bin card and Stores ledger

 (b) Bill of material and Material requisition

 (c) Purchase requisition and purchase order

 (d) Inward and outward invoices

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1) | B) | 2) | B) | 3) | C) | 4) | D) | 5) | C) |
| 6) | D) | 7) | D) | 8) | C) | 9) | A) | 10) | B) |
| 11) | B) | 12) | B) | 13) | B) | 14) | D) | 15) | A) |
| 16) | A) | 17) | B) | 18) | B) | 19) | D) | 20) | A) |

 **2) Match the following:**

|  |  |  |  |
| --- | --- | --- | --- |
| **1** | **Group A** |  | Group B |
| 1)2)3)4)5)6) | ABC analysisPerpetual inventoryAbnormal material lossesMaster requisitionIssuing a material item to productionFirst step in purchase  | a)b)c)d)e)f) | Purchase requisition noteSelective controlStores requisition note Costing P&L A/c Continuous stock taking Bill of material  |

**Ans. (1-b), (2-e), (3-d), (4-f), (5-c), (6-a)**

**2) Match the Terms in Column A with Statements in Column B Column A ( Term)**

1) Material

2) Finished product

3) Purchase requisition

4) The maximum stock level

5) Economic order quantity

6) Materials return note

7) Bill of material

8) Perpetual inventory system

9) Minimum stock level

10) Re-order levels

**Column B (Statement)**

a) Maximum consumption x Maximum re-order period

b) All the material required for a particular job listed by the production department

c) Consumed in the process of manufacture

d) Supplies do not become a part of

e) The first step in the purchase procedure

f) Maintain materials at the optimum level at of its requirement returned to stores

g) Method of knowing the stock of every, item of material at all times

h) Re-order level – (Normal consumption x Normal re-order period)

i) Materials issued to a department in excess of its requirement returned to stores

j) Above which the stock of that material should not generally be allowed to go.

Ans.(1-c), (2-d), (3-e), (4-j), (5-f), (6-i), (7-b), (8-g), (9-h), (10-a)

**3) State whether True or False**

 1) Purchase requisition note is prepared by the purchasing department.

 2) Annual stock taking confirms that the perpetual inventory is functioning property.

 3) Weighted average method of pricing stores involves adding all the different prices and

 dividing by the number of such prices.

 4) Bin card shows the quantity and value of a material at any moment of time.

 5) Material losses due to careless handing resulting in breakage should be transferred to

 Costing Profit and Loss A/c

 6) Bill of Material is a cash memo sent by the supplier along with the materials.

 7) Store Requisition Note is not perpetual inventory record.

 8) When maximum stock level is fixed, the stock in hand should never exceed this level.

 9) Re-ordering level is always fixed somewhere between maximum and minimum stock levels

 10) The Economic, order quantity is the re-order quantity.

 11) a List of the material and parts required for a particular job is called production order

12) Purchas control is exercised by the stock-keeper.

13) Purchase order is prepared by the store department.

14) Material requisition note is prepared by the stores department.

15) FIFO method of pricing results in higher profit during the period of falling prices.

16) Economic order quantity is that order size at which each of the ordering cost and carrying

 cost is minimum.

17) Under the ABC analysis of material controls ‘A’ stands or the highest number of items.

18) Tender from is issued by the purchasing department.

19) Lack of efficient material control system increases the material cost of the finished product.

20) A bill of material gives a complete list of all materials required with quantities for

 a particular job.

Ans. True: 5, 7, 9, 10, 14, 15, 18, 19, 20 False: 1, 2, 3, 4, 6, 8, 11, 12, 13, 16, 17

**Theory Questions**

**Q1) Material Control**

**Ans. Meaning:** material control is defined by ICMA as the function of ensuring that sufficient

 Stocks are retained in stock to meet all requirements without carrying unnecessary stocks.

 Material control is the ‘’ safeguarding of company’s property in the form of material by a

 Proper system of recording and also to maintain them at the optimum level considering

 Operating requirements and financial resources of business’’. Material control involves the

 Planning, organizing and controlling the receipt, issue and storage of materials so to as

 achieve the objectives of efficiency and economy.

**Objectives and Advantages:** material control basically aims to ensure that adequate goods in stock to meet all requirements without carrying unnecessarily large stocks. The main Objectives of material control are as follows:

1) To avoid under stocking i.e. to provide continuous supply of materials so that the

 Production is not help up.

2) To avoid over-stocking to reduce carrying cost and avoid surplus and obsolete stocks.

3) To obtain materials of the required quality at minimum cost from a reliable source.

4) To minimize the total cost (i.e. ordering cost & carrying costs)

5) To avoid wastages and losses during storage and usage.

6) To maintain proper and up to date records of inventory

7) To provide the required information to the management for taking inventory decisions.

**Q2) Material Requisition Note**

**Ans. Meaning:** As a rule, in order to prevent misuse and frauds, no material should be issued

 From the stores without a proper written authority. The document which authorizes the

 Issue of material is known as the material requisition note (or stores requisition note,

 material authorization etc.) Normally, the production manager or the manger of the

 concerned cost centre is authorized to place a requisition for the issue of materials with

 the stores. The stores should maintain a list of authorized persons along with their

 specimen signatures. Material requisition note must be signed by an authorized person

 and contain a detailed list of items required fir a specific cost centre / cost unit (a) job,

 batch or process.

**Q3) How Much Quantity Can be Requisitioned (Bill of materials)**

**Ans. Meaning:** when the company receives on order for a job or a contract etc. the planning

 Department prepare a detailed on order list of materials (alongwith quantity of each item)

 Likely to be required for the entire job or contract. The list of the materials is known as the

 Bill of materials. While in case of job or contract, the bill of materials is made out in

 Respect of each job or contract, in case of a process it is made out in respect of a period

 (year, much etc)

**Q4) Difference between bills of material and material requisition note**

|  |  |  |
| --- | --- | --- |
|  | **Bills of Material**  | **Material Requisition Note**  |
| **1** | It is document prepared by the drawing office. | It is prepared by the foremen of the consuming department  |
| **2** | It is a complete schedule of component parts and raw materials required for a particular job or work order. | It is a documents authoriisng store-keeper to issue materials to the consuming department.  |
| **3** | It often serves the purpose of a materials required for a particular job i.e. it can replace material requisition  | It cannot replace a bill of materials. |
| **4** | It can be used for the purpose of quotations. | It is useful in arriving at historical cost only |
| **5** | It helps in keeping a quantitative control on materials drawn through material requisition. | It shows the material actually drawn from stores. |

**Q5) Stock levels**

**Ans. Minimum level**

**1)**  **Meaning:** Minimum level indicates the lowest figure of inventory balance, which must be maintainedin hand at all time, so that there is no stoppage of production due to non-availability of inventory.

**2)**  **Factors:** The main factors considered or the fixation of minimum level of inventory are as follows:

**(a)** Maximum consumption and maximum delivery period in respect of each item to

 Determine its re-order level.

**(b)** Average rate of consumption for each inventory item.

**(c)** Average re-odder for each item. This period can be calculated by averaging the maximum and minimum period.

**3) Formula:** The formula used for its calculation is as follows:

 Minimum level of inventory—

 Re-order level – (Average consumption X Average re-order period)

**Maximum Level**

**1) Meaning:**  maximum level indicates the maximum figure of inventory quantity held in stock at any time.

**2) Factors:** The important factors which should be considered while fixing the maximum level for various inventory items are as follows:

 (a) The re-order level which itself is the product of maximum consumption of inventory item and Its maximum delivery period.

 (b) Minimum consumption and minimum delivery period for each inventory item should also be known.

 (c) The economic order quantity (i.e. the re-order quantity)

 (d) Availability of finds storage space nature of items and their price per unit are also important for the fixation of maximum level.

 (e) In the case of important materials due to their irregular supply, the maximum level should be high.

**3) Formula:** The formula used for its calculation is as follows:

 Maximum level of inventory = re-order –level + recorder quantity – (maximum consumption X minimum re-order period)

**Re-order Level**

**1) Meaning:** Re-order level lies between minimum and maximum levels in such a way that before the Material ordered is received into the stores, there is sufficient quantity on hand to cover both normal and abnormal consumption situation. In other words, it is the level at which fresh order should be placed for replenishment of stock.

**Q6) Economic Order Quantity (EOQ)**

**Ans. Meaning:** Purchase department in manufacturing concerns is usually faced with the problem of order size is small, and then the ordering cost will be high. In order to minimize ordering and carrying costs

It is necessary to determine the order quantity which minimizes these two costs. The size of the order for which both ordering and carrying costs are minimum is known as economic order quantity. Re-order quantity (ROQ) is that quantity at the re-order level for an item for which order is placed again and again.EOQ can be ROQ, but not vice-versa.

**Assumptions:** The calculation of quantity of economic order of material to be placed is subject to the Following assumptions:

1) Anticipated usage of material in units is known.

2) Cost per unit of the material is constant and is known as well.

3) Ordering cost per order and carrying cost per unit per annum are known and they are fixed.

4) The quantity of material ordered is received immediately i.e. the lead time is zero.

**Factors:** EQQ is determined after considering is received immediately i.e. the lead time is zero.

**A) Ordering Costs:** The term ;ordering costs’ refer to the costs incurred for acquiring inputs.(i) cost of placing an order (ii) cost of transportation (iii) cost of receiving goods (iv) cost of inspecting goods. There Is an inverse relationship between order size and ordering cost. Bigger order quantity means lower ordering costs.

**b) Carrying costs:** The term “Carrying costs” refer to the costs incurred I maintaining a give level of inventory. These costs include – (i) cost of storage space.(ii) cost of handing material (iii) cost of insurance (iv) cost of determination or obsolescence (v) cost of store staff. There is positive relationship between order size and carrying cost. Bigger order quantity means higher carrying costs.

**Formula:** The famous mathematician Wilson derived the formula which is used for determining the size of order for each of purchases at minimum ordering and carrying costs.

The formula given by Wilson for calculating economic order quantity is a follows:

EOQ = where/

A= Annual usage units

Q= Ordering cost per order

C= Annual carrying cost of one unit i.e. carrying cost percentage p.a. x cost of one unit.

**Q7) ABC Classification**

**Ans. Meaning:** ABC Classification or Analysis is a system of inventory control. It helps to control different items of stores classified on the basis of the investment involved usually the item are divided into three categories according to their importance, namely, their value and frequency of replenishment during a period.

1) ‘A’ category of items consists of only a small percentage i.e. about 10% of the total items handled by the stores but require heavy investment about 70% of inventory value, because of their prices or heavy requirement or both.

2) ‘B’ categories of items are controlled to lesser degree than for ‘A’ category of items. The orders for the items in this category may be placed after reviewing their situation periodically.

3) ‘C’ category of items need not be controlled constantly. Order for items in this group may be placed either after six months or once in a year, after ascertaining consumption requirements.

**Advantages:**

The advantages of ABC analysis are as shown below:

1) It ensures UN interrupted production as well as minimum investment in inventories of stocks of materials.

2) The cost of purchase, receipt and storage is minimized.

3) Management items is saved sine attention need b paid only to the most valuable item rather than all the items. This is known as the principle of management by exception.

4) Much of the routine purchase work can be handled by clerical staff.

**Q8) Distinction**

|  |  |  |
| --- | --- | --- |
|  | **Periodic Inventory System** | **Perpetual Inventory System** |
| 1 | This system is based on physical verification. | It is based on book records. |
| 2 | This system provides information about stocks and cost of goods sold at a particular date. | If provides continuous information about stock and cost of sales. |
| 3 | This system determines first, inventory and, computes cost of goods sold as balancing figure.  | It determines first, cost of goods sold and, computer stock as balancing figure. |
| 4 | Cost of goods sold includes loss of goods as goods not in stock are assumed to be sold  | Closing inventory includes loss of goods as all unsold goods are assumed to be in inventory. |
| 5 | Under this method, inventory control is not possible  | Inventory control is possible under this system. |
| 6 | This system is simple and less expensive  | It is complex and costlier method. |
| 7 | It requires closure of business for counting of stock | Inventory can be determined without stopping the operations of the business. |

**Q9) Inventory Turnover Ratio**

**Ans. Meaning:** Inventory Turnover Ratio is one of the techniques of inventory control. It expresses the relationship between the cost of material consumed and the average stock held.

  **Objective:** TheObjective computing the Inventory Turnover Ratio is to determine the efficiency With which inventories are maintained. The Objective is to find out-

 (a) Fast Moving Stock i.e. stock in great demand

 (b) Slow Moving Stock i.e. stock in low demand

 (c) Dormant Stock i.e. stock having no demand at present.

 (d) Obsolete Stock i.e. stock no longer in demand.

 Formula: Inventory Turnover Ratio is computed with the help of following formula:

 Where:

 (i) Cost of materials consumed = opening stock + purchases –closing stock

 (ii) Average stock=1/2 (opening stock +closing stock)

 Note: This ratio is usually expressed as ‘x’ number of time.

Average no. of days for which an average inventory is held

**Interpretation:** It indicates the speed with which the inventory is consumed. In general, a high ratio Indicates fast moving stock and a low ratio indicates slow moving stock. However, too high ratio and too low ratio call for further investigation. A too high ratio may be the result of a very low Inventory levels which may result in frequent stock outs. On the other hand, a too low ratio may be the result of excessive inventory levels, slow-moving or dormant or obsolete inventory and thus, the firm may incur high carrying costs. Thus, a firm should have neither a very high nor a very low Stock turnover ratio; it should have a satisfactory level. To judge whether the ratio is satisfactory or Not, it should be compared with its own past ratios or with the ratio of similar firms in same industry or with industry average.