CHAPTER - 5

INVENTORY MANAGEMENT & CONTROL

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⇒ Meaning and Definition of Inventory Management
⇒ Objective of Inventory Management
⇒ Inventory Control
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  - Economic Order Quantity
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  - Inventory Report
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Meaning and Definition of Inventory

Inventories occupy very important position in the structure of working capital of most business enterprises. The term inventory refers to “the stockpile of the product, a firm is offering for sale and the components that make up the product.” In other words, inventory is composed of assets that will be sold in future in the normal course of business operations. The assets which firms store as inventory in anticipation of need are (1) raw materials, (2) work-in-process (semi-finished goods) and (3) finished goods.

The raw materials inventory contains items that are purchased by the firm from others and are converted into finished goods through the manufacturing process. They are an important input of the final product. The work-in-process inventory consists of items currently being used in the production process. They are normally partially or semi-finished goods that are at various stages of production in a multi-stage production process. Finished goods represent final or completed products which are available for sale. The inventory of such goods consists of items that have been
produced but are yet to be sold. The term “inventory” means the materials having any one of under-given characteristics:-

(a) saleable in the market.

(b) directly usable in the manufacturing process of the undertakings.

(c) usable indirectly in the manufacturing process.

(d) ready to be sent to outside parties for making usable or saleable products.

Meaning and Definition of Inventory Management

Inventory management is a technique of controlling the purchase, use and transformation of materials in an optimal manner.

L.R. Howard observes inventory as “The proper management and control of inventory not only solves the acute problem of liquidity but also increases the annual profits and causes substantial reduction in the working capital of a firm.”

Inventory management helps to isolate or minimize the interdependence of each part of the organisation so that it may work more effectively as becomes evident when many parts and
sub-assemblies are purchased or manufactured stored and used according to the needs.

The area of inventory management covers the following individual Phases: determining the size of inventory to be carried; establishing timing schedules, procedures and lot sizes for new orders; ascertaining minimum safety levels; coordinating sales, production, and inventory policies; providing proper storage facilities; arranging the receipt, disbursement and procurement of materials; developing the forms of recording these transactions; assigning responsibilities for carrying out the inventory control functions; and providing the reports necessary for supervising this over-all activity.

Objectives of Inventory Management

In large business enterprises, the size of inventory is also considerably large. It grows with increase in volume of operations. There may be thousands of items in inventory consisting of varied nature and value. Considerable amount of available funds are tied up in inventory which may vary from 10 per cent to 55 per cent of total capital depending on the nature of business. In manufacturing units funds tied-up in inventory may be lower as compared with
trading concerns. Over-investment in inventory involves certain costs which minimise profitability. On the other hand under-investment in inventory also involves certain risks and costs; although it may result in higher profitability. Thus, the crucial issue is that optimum size of inventory should be maintained so that a proper balance between the costs of over-investment and under-investment in inventory can be maintained. The Bureau of Public Enterprises has cited the following objectives of inventory management:

i) Minimising funds locked up in stock of goods.

ii) Ensuring smooth and unhampered production without any obstructions.

iii) Ensuring regular and continuous sale of finished goods.

iv) Checking-upward or downward fluctuations in output.

Inventory Management, therefore, should maintain a balance between too much inventory and too little inventory.

Inventory Control

Inventory control is rather loosely used to cover two fluctuations which are quite different and are related to each other only in that they both require the maintenance of adequate records
of inventories as well as receipt and issues corresponding to these two functions, inventory control is interpreted as “accounting control” and “operating control.”

Accounting control of inventories is concerned with-

i) The safeguarding of the undertaking’s property in the form of raw materials, work-in-process and semi-finished as well as finished products, and

ii) the proper recording of the receipt and consumption of materials as well as the flow of goods through the plant into finished stock and eventually to customers.

Operating control of inventories is concerned with maintaining inventories at the optimum level keeping in view the operational requirements and financial resources of the business.

According to Ghosh and Gupta, “inventory control is concerned with the acquisition, storage, handling and use of inventories so as to ensure the availability of inventory whenever needed, providing adequate cushion for contingencies deriving maximum economy and minimising wastage and losses.”
Inventory control is exercised by introducing different techniques, such as, ABC approach, E.O.Q. (Economic Order Quantity) technique, which indicates the most economic size of a fresh order, R.O.P. (Reorder Point) techniques.

A) **ABC Approach** – This is the important technique which is based on selective control of inventory. There may be thousands of inventory items in a large factory with widely varying value, usage and importance. The question usually posed is whether uniform attention and emphasis should be given to all items of inventory kept in stock? Needless to say that it would neither be desirable nor advisable; because it would result in waste of time energy and money if modern techniques of inventory control are applied uniformly to each and every item of inventory kept in stores, irrespective of their value, usage and importance. Rather a selective approach would prove more useful and economical. The inventory items should be classified according to some set criteria into categories A, B and C. Normally the following three criteria are used for classification.

i) Usage volume, Velocity or Speed.

ii) Unit Value or Unit Cost, and
iii) Critical Nature of the item.

It depends on the discretion of the Management and policies that which of the above three criteria should be given more weightage. Normally items which have a high velocity or speed in usage and which have a high unit-value are placed in category ‘A.’ On the other hand items which are of meager unit-value, having a low frequency in usage and are also not of a critical nature, are usually included in category-C. The remaining items, representing average value, usage and importance are placed in category-B.

Economic Order Quantity

While placing an order for replenishment of raw-materials and other supplies, management is often faced with a dilemma about the appropriate size of such order. Should the total annual requirements of an item be ordered in one lot and kept in stock so that the botheration of placing frequent orders for replenishment in small lots can be avoided? Alternatively should the management divide the total annual requirement in convenient small lots and two or more orders for replenishment be placed again and again? These are the two sides of the dilemma. In case the first alternative is preferred, then it gives rise to higher ‘inventory-carrying cost.’
If the second alternative is chosen then it results in higher 'Inventory-ordering cost.' It is, therefore, necessary to identify these costs before dealing with the E.O.Q. analysis.

**Inventory Carrying Cost**

The existing stock and fresh replenishments have to be stored and maintained properly. This process involves certain costs, which are called inventory carrying costs. The examples of such costs are - costs of upkeep and supervision, cost of storage or godown costs, insurance cost, costs of risk or uncertainty (due to price-rise or obsolescence) and costs of funds (interest obligations) used to finance such stocks. Moreover, there may also be costs pertaining to physical loss, such as pilferage, seepage, damage, leakage etc. All these costs when combined together may mean a substantial amount which may counter balance the benefits of carrying more than the optimum level of inventory.

**Inventory Ordering Cost**

Orders in small lots for frequent replenishment of inventory items (raw materials and supplies) also involve certain costs, which are called inventory ordering costs. These costs include, inter alia, cost of requisitioning, clerical and staff costs, freight, cartage and
portage costs, inspection and receiving costs etc. Moreover, costs of foregoing economies of bulk-purchase are also involved.

Thus, it is clear that there is an inverse relationship between these two categories of costs and in order to balance these costs, orders for replenishment of an item of raw materials or supplies inventory should be of optimum size.

**E.O.Q.**

It is that size of order for an inventory item which balances carrying costs and ordering costs so that the total costs are the lowest. According to Hampton, “The E.O.Q. means the size of order that will result in the lowest total of ordering costs and carrying costs for an item of inventory.” In other words, it can be said that E.O.Q. involves a trade-off between ‘ordering costs’ and ‘carrying costs.’ The technique of E.O.Q. is used as device of inventory control to determine optimum size of orders for replenishment of an item of inventory of raw materials or supplies. Formula for computing Economic Order Quantity is as follows:

$$E.O.Q. = \sqrt{\frac{2 \times A \times Q}{P \times i}}$$

where
E.O.Q. = Economic Order Quantity

A = Estimated annual usage of the item in units

B = Ordering costs in rupees per order

P = Price per unit

i = Carrying cost as percentage of the average rupee value of the item.

GRAPHIC APPROACH-

Economic Order Quantity can also be ascertained through graphic approach as shown below:

![EOQ Graph]

ORDERING COST (IN RS.)

ORDER SIDER (IN UNITS)
RE-ORDER POINT-

A fresh order, placed when the level of inventory is high enough would, no doubt, reduce the risk of being ‘out of stock’ but at the same time it will increase the cost of carrying surplus inventory. On the other hand, fresh order placed when the level of inventory is very thin, would certainly reduce the carrying costs of inventory; but at the same time it would increase the risk of being out of stock. It can well be realised that frequent ‘out of stock situations’ will depress the morale of personnel due to production schedule breakdowns, besides increasing the set-up costs disproportionately. Moreover hurried purchases will also involve certain costs. Hence a trade-off should be maintained between carrying costs and cost of frequent ‘out of stock situations.’

Reorder point is also called ordering-level at which a fresh order for replenishment should be given. While determining this point or level, it is essential to keep in mind the following points:-

(a) The Lead time, i.e., the time lag between placing an order and the actual receipt or delivery of goods ordered.

(b) The average usage that is the average consumption quantity of an item in units, and
(c) The Economic Order Quantity (E.O.Q.) which has already been explained.

In case the demand for an item being produced and the average usage of the item can be estimated precisely and with accuracy, then the re-order point can be computed as follows:

\[ \text{ROP} = \text{LT} \times \text{AU} \]

where,

- ROP is the Re-Order Point
- LT = The Lead Time
- AU = Average usage of the item in units.

INVENTORY REPORT-

To have an effective control of inventories, the management should be aware of the latest stock position of different items, which can be done by preparing periodic reports. On the basis of these reports, Management can take necessary corrective measures.

The reports are in the following manner:

<table>
<thead>
<tr>
<th>Stock Control Statement for the Month of</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Groups &amp; Items</td>
<td>Unit</td>
<td>Maximum Level</td>
<td>Minimum Level</td>
<td>Stock as of</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Quantity in Stores awaiting Inspection</td>
</tr>
</tbody>
</table>


Evaluation of Inventory Management

The efforts of any company to control inventory should focus at keeping various components of inventory at economic levels and in correct proportions. In textile companies, the necessary component is work is process whereas other components provide flexibility to operations. Inventory include:–

(a) Raw materials.
(b) Work-in-process.
(c) Finished Goods.
(d) Stores and Spares.

Some of the above given components of inventory need high degree of control whereas others may not be controlled easily.

If excess funds are blocked in slow moving segments, it will place a financial burden and also affect the liquidity of the working capital. Therefore, the allocation of funds to each component of inventory should be proper.

(A) SIZE OF INVENTORY
<table>
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</tr>
</thead>
<tbody>
<tr>
<td>The British India Corporation Ltd.</td>
<td>8,65,62,297 (49.75)</td>
<td>7,93,58,606 (40.82)</td>
<td>12,53,51,481 (53.47)</td>
<td>14,24,03,126 (66.08)</td>
<td>18,28,90,533 (38.16)</td>
<td>36,51,55,152 (55.46)</td>
<td>16,36,20,199.166 (50.62)</td>
</tr>
<tr>
<td>The Elgin Mills Company Limited</td>
<td>1,64,43,010 (25.07)</td>
<td>1,61,64,190 (25.72)</td>
<td>1,47,53,863 (25.98)</td>
<td>1,46,89,598 (19.30)</td>
<td>1,46,89,598 (14.73)</td>
<td>N.A.</td>
<td>15,34,80,518 (22.19)</td>
</tr>
<tr>
<td>Cawnpore Textiles Ltd.</td>
<td>2,40,26,410 (54.43)</td>
<td>2,33,87,407 (41.35)</td>
<td>2,23,59,577 (39.80)</td>
<td>2,23,50,554 (43.80)</td>
<td>2,23,50,554 (41.82)</td>
<td>N.A.</td>
<td>22,89,49,004 (44.24)</td>
</tr>
</tbody>
</table>

Source: Annual Reports & Accounts of the Company under study.
The above table shows the size of inventory of selected textile companies in Uttar Pradesh from 1998-1999 to 2003-2004 and figure in brackets show percentage of inventory to total current asset.

It is clear from the table that share of inventories in The British Corporation Limited, as a percentage of total current asset was 55.46 percent in 2003-2004, as against 49.75 per cent in 1998-99. The share of inventories as a percentage of total current assets has an increasing trend in 2000-2001 and 2001-2002, whereas decreasing trend in 1999-2000 and 2002-2003.

In case of The Elgin Mills Company Ltd., the percentage of inventories to total current assets was 14.73 per cent in 2002-2003 as against 25.07 per cent in 1998-99. The share of inventories as a percentage of total current assets has an increasing trend in first three years and decreasing trend in the two out of five years. This shows that Management improved its inventory in these years.

The percentage of inventories to total current assets in Cawnpore Textiles Limited showed decreasing trend in first three years. It was 54.43 per cent in 1998-99 which decreased to 41.35
per cent in 1999-2000 then 39.8 per cent in 2000-2001. It increased again to 43.80 per cent in 2001-2002 and then again decreased to 41.82 per cent in 2002-03.

GROWTH OF THE TOTAL INVENTORY

To study the growth of the ‘total’ inventory, the progressive base year, percentage of growth has also been calculated in the given table.

Table – 5(B)


<table>
<thead>
<tr>
<th>YEAR</th>
<th>TOTAL INVENTORY</th>
<th>GROWTH OF TOTAL INVENTORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998-1999</td>
<td>12,70,31,717</td>
<td>-</td>
</tr>
<tr>
<td>1999-2000</td>
<td>11,89,10,203</td>
<td>(-) 6.40</td>
</tr>
<tr>
<td>2000-2001</td>
<td>16,24,64,921</td>
<td>36.62</td>
</tr>
<tr>
<td>2001-2002</td>
<td>17,94,43,278</td>
<td>10.45</td>
</tr>
<tr>
<td>2002-2003</td>
<td>21,99,30,685</td>
<td>22.56</td>
</tr>
<tr>
<td>2003-2004</td>
<td>36,51,55,152</td>
<td>66.03</td>
</tr>
</tbody>
</table>

It can be seen from the above table that the size of inventory of the under studied textile manufacturing concerns showed an increasing trend except in 1999-2000.
The rate was declining in 1999-2000 which was (-) 6.40 per cent. In 2000-2001, it increased to 36.62 per cent. Again in 2001-2002 it was 10.45 per cent. In last two years, it against showed increasing trend which was 22.56 per cent in 2002-03 and 66.03 per cent in 2003-04.

Inventory Turnover Ratio

“Inventory turnover Ratio is the method of reviewing performance and controlling inventories periodically to check the inventory turnover of each type of raw materials, supply and finished goods.” The higher the turnover, the larger the profits of the concern.

The Inventory turnover ratio helps to judge the efficiency of inventory management.

The position of inventory turnover in textile manufacturing companies in Uttar Pradesh under study can be seen in 5(c).
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</thead>
<tbody>
<tr>
<td>The British India Corporation Ltd.</td>
<td>0.66</td>
<td>1.29</td>
<td>1.10</td>
<td>1.13</td>
<td>0.86</td>
<td>0.53</td>
<td>0.92</td>
</tr>
<tr>
<td>The Elgin Mills Company Limited</td>
<td>0.084</td>
<td>0.11</td>
<td>0.076</td>
<td>0.002</td>
<td>Nil</td>
<td>N.A.</td>
<td>0.054</td>
</tr>
<tr>
<td>Cawnpore Textiles Ltd.</td>
<td>0.039</td>
<td>0.06</td>
<td>0.0009</td>
<td>0.08</td>
<td>Nil</td>
<td>N.A.</td>
<td>0.035</td>
</tr>
</tbody>
</table>

Source: Annual Reports & Accounts of the Company under study.
According to the table in British India Corporation Ltd. in 1999-2000, it increased to 1.29 times followed by decrease in 2000-2001 which was 1.10 time. It again increased in 2001-02 to 1.13 times. It decreased in last two years which shows that there was no improvement in the efficiency of inventory management of the company.

In case of The Elgin Mills Ltd., it increased in 1999-2000 to 0.11 time followed by decrease in 2000-2001 to 0.076 times. It decreased badly in 2001-02 to 0.002 times and was found NIL in 2002-2003.

In Cawnpore Textile Limited, it showed decrease in first three years and in 2002-2003 again in this company it was found NIL.

On the basis of average, it can be concluded that The British India Corporation Ltd. has the highest (0.92) turnover ratio.

(B) STRUCTURE OF INVENTORY

The items included in inventory are raw materials, work-in-process, stores and spare parts and finished goods. These are many factors which influence the size of inventory. In trading concerns,
the ratio of funds tied-up in inventory to total funds is larger as compared to manufacturing concerns. The structure of inventory can be analysed in two ways:-

1) Each component’s share may be related to aggregate inventory.

2) Appropriate indicators about the adequacy or inadequacy of each type of inventory may be developed and applied to the actual position obtained in textile companies.

RAW MATERIALS

Materials, which are used to produce a commodity by a manufacturing concern are raw materials. To have continuity in production process, a textile company needs raw materials like raw cotton or synthetic fibre. The quantity of raw materials depends on production plan of company. Any company which gives higher volume of business with proportionately lower volume of raw material inventory is considered an efficient concern. The higher the turnover ratio or the smaller the conversion period, the less the investment in raw materials and consequently the larger the profits of a concern, other things remaining the same.
Table 5(D) shows the size of raw materials in the companies under study from 1998-99 to 2003-2004. The share of raw materials in aggregate inventory has been in the range of 1.33 per cent to 7.98 per cent in The British Corporation Limited. In 1998-99 it was 7.98 per cent which decreased in 1999-2000 and 2000-2001 to 3.43 per cent and 2.01 per cent respectively. Again it increased to 3.30 per cent in 2001-2002 and again decreased to 1.33 per cent in 2002-2003 with increase in 2003-2004 to 1.69 per cent.

In case of Cawnpore Textile Limited, the ratio was 36.59 per cent in 2002-2003 as against 34.05 per cent in 1998-99. It increased to 34.98 per cent in 1999-2000 and was same in the remaining years.

On the basis of the average of all companies, it was observed that the share of raw materials to “aggregate inventory” was the lowest in The British Corporation Ltd. and the highest in Cawnpore Textiles Ltd.
### Table – 5 (D)

**EXTENT AND PERCENTAGE OF RAW MATERIALS TO “AGGREGATE INVENTORY” IN THE SELECTED TEXTILE COMPANIES IN U.P. FROM 1998-99 TO 2003-2004**

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<tbody>
<tr>
<td>The British India Corporation Ltd.</td>
<td>69,09,016 (7.98)</td>
<td>27,26,051 (3.43)</td>
<td>25,21,412 (2.01)</td>
<td>47,05,983 (3.30)</td>
<td>48,81,072 (1.33)</td>
<td>61,72,678 (1.69)</td>
<td>46,52,702 (3.29)</td>
</tr>
<tr>
<td>The Elgin Mills Company Limited</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>Cawnpore Textiles Ltd.</td>
<td>81,82,247 (34.05)</td>
<td>81,82,247 (34.98)</td>
<td>81,82,247 (36.59)</td>
<td>81,82,247 (36.59)</td>
<td>81,82,247 (36.59)</td>
<td>N.A.</td>
<td>81,82,247 (35.76)</td>
</tr>
</tbody>
</table>

Source: Annual Reports & Accounts of the Company under study.

Figures in bracket shows the percentage of raw materials to “aggregate inventory.”
Work-In-Process

This represents value of inventory tied-up in the process of manufacture. As items move from raw materials godown to work-in-process stages value is added at each stage in the form of direct costs and factory overheads. This is termed as value added in production.

The size of funds invested in work-in-process inventory depends considerably on the duration of production cycle. The factors which influence investment in processed goods inventory are: volume of production, price levels of raw materials used, usages and other items that enter into production costs.

Table-5(E) shows that the percentage of work-in-process to aggregate inventory in The British India Corporation has been fluctuating during the under-studied period. It was 18.27 per cent in 1998-99 which increased to 20.07 per cent in 1999-2000 and again increased to 39.63 per cent in 2000-2001. It decreased in 2001-2002 to 28.57 per cent followed by increase in 2002-2003 to 39.63 per cent. It decreased to 2003-2004 to 29.57 per cent.
### Table 5 (E)


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</thead>
<tbody>
<tr>
<td>The British India Corporation Ltd.</td>
<td>1,58,17,191 (18.27)</td>
<td>1,59,28,008 (20.07)</td>
<td>4,96,85,515 (39.63)</td>
<td>4,06,89,215 (28.57)</td>
<td>7,24,87,678 (39.63)</td>
<td>10,79,98,551 (29.57)</td>
<td>5,04,34,359 (29.29)</td>
</tr>
<tr>
<td>The Elgin Mills Company Limited</td>
<td>77,98,474 (47.42)</td>
<td>77,98,474 (48.24)</td>
<td>77,98,474 (52.85)</td>
<td>77,98,474 (53.08)</td>
<td>77,98,474 (53.08)</td>
<td>N.A.</td>
<td>77,98,474 (50.93)</td>
</tr>
<tr>
<td>Cawnpore Textiles Ltd.</td>
<td>89,50,163 (37.25)</td>
<td>89,50,163 (38.26)</td>
<td>89,50,163 (40.02)</td>
<td>89,50,163 (40.04)</td>
<td>89,50,163 (40.04)</td>
<td>N.A.</td>
<td>89,50,163 (39.12)</td>
</tr>
</tbody>
</table>

Source: Annual Reports & Accounts of the Company under study.

Figures in bracket shows the percentage of raw materials to “aggregate inventory.”
It is clear from the table given that in The Elgin Mills Company Ltd. showed increasing trend under the studied period. It was 47.42 per cent in 1998-99 which increased to 48.24 per cent, 52.85 per cent, 53.08 per cent respectively in the year 1999-2000, 2000-2001, 2001-02. It remained same in 2002-03 as compared to 2001-02.

In case of Cawnpore Textiles Ltd., the trend was increasing throughout the under studied period, It was 37.25 per cent in 1998-99 which increased to 38.26 per cent, 40.02 per cent in the year 1999-2000, 2000-01 respectively. It was same in the remaining years which was 40.04 for both 2001-02 and 2002-2003.

On the basis of average per centage of work-in-process to aggregate inventory in all the companies taken together, it is clear that The British India Corporation had the lowest inventory i.e. 29.29%.

**Finished Goods**

It is essential that efforts should be made to keep the size of finished goods inventory at the optimum level. In case it is unduly large, a part of the funds so tied-up will remain idel and this will
affect adversely the degree of profitability of the firm. On the contrary if it is kept below the optimum level, then it will bring down the morale of sales personnel, because in that situation it would be difficult for them to meet delivery schedules in time to their customers and also to take advantages of sales rush occasionally.

Finished goods inventory has a direct relationship with sales. If sales decline then the finished goods inventory will pile up because proper adjustment in production schedule will take sometime to materialise. “The level of finished goods inventory is a matter of coordinated production and sales. The financial manager can stimulate sales by changing credit terms and by allowing credit to marginal risks. Whether the goods remain on the books as inventories or as receivables the financial manager has to finance them. Many times firms find it desirable to make sales and then take one step near to realising cash.” Firms, which produce goods to order, may reduce the size of their finished goods inventory to almost zero. In Agro-based industries where raw materials supply is easy in a particular season, whereas the demand for their product is perennial, a larger stock of finished goods
inventory may be needed. In a way it can be said that efficient management of finished goods inventory depends to a great extent on the correct and precise sales forecast.

Table-5(F) shows both the extent and the percentage of finished goods to “aggregate inventory” in textile manufacturing companies under study in U.P.

It can be seen from the table that the percentage of finished goods to aggregate inventory in The British India Corporation Ltd. showed a fluctuating trend during the period of study. It was 57.94 per cent in 1998-99 which increased to 61.8 per cent in 1999-2000. It again decreased to 49.52 per cent in 2000-2001 followed by increase in 2001-2002 to 61.2 per cent. It showed decreasing trend in the remaining years.

It can be observed from the Table-5(f) that in The Elgin Mills Company Ltd., the percentage of finished goods to aggregate inventory in 1998-99 was 15.13 per cent which declined to 12.86 per cent in 1999-2000. It again decreased in 2000-2001 to 5.23 per cent. In the year 2001-2002 and 2002-2003, it remained constant.
Table - 5 (E)

EXTENT AND PERCENTAGE OF FINISHED GOODS TO “AGGREGATE INVENTORY” IN THE SELECTED

TEXTILE MANUFACTURING COMPANIES IN U.P. FROM 1998-99 TO 2003-2004

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</thead>
<tbody>
<tr>
<td>The British India Corporation Ltd.</td>
<td>5,01,58,056 (57.94)</td>
<td>4,90,65,952 (61.80)</td>
<td>6,20,78,169 (49.52)</td>
<td>8,72,02,930 (61.20)</td>
<td>9,23,00,972 (50.46)</td>
<td>16,04,87,313 (43.90)</td>
<td>50,12,93,392 (54.13)</td>
</tr>
<tr>
<td>The Elgin Mills Company Limited</td>
<td>24,87,945 (15.13)</td>
<td>20,79,461 (12.86)</td>
<td>7,72,123 (5.23)</td>
<td>7,16,817 (4.87)</td>
<td>7,16,817 (4.87)</td>
<td>N.A.</td>
<td>13,54,632.6 (8.59)</td>
</tr>
<tr>
<td>Cawnpore Textiles Ltd.</td>
<td>39,14,031 (16.29)</td>
<td>23,14,175 (9.89)</td>
<td>22,92,469 (10.2)</td>
<td>29,25,675 (13.02)</td>
<td>29,25,675 (13.08)</td>
<td>N.A.</td>
<td>28,74,405 (12.49)</td>
</tr>
</tbody>
</table>

Source: - Annual Reports & Accounts of the Company under study.

Figures in bracket shows the percentage of raw materials to “aggregate inventory.”
In case of Cawnpore Textiles Ltd., in first year, there was a decreasing trend in the percentage of finished goods to aggregate inventory. In 2000-2001 it again increased to 10.2 per cent which again increased to 13.02 and 13.08 in the year 2001-2002 and 2002-2003 respectively.

From the study of the average percentage of finished goods to aggregate inventory of all companies, we can conclude that the average ratio was highest in The British India Corporation Ltd. and lowest in The Elgin Mills Company Ltd.

STORES & SPARES-

Besides the above categories, there is fourth category termed as ‘Stores & Spares.’ This includes a variety of goods such as fuel, lubricants chemicals, detergents, cleaning materials and number of waste products & affluents. If there is not proportionate investment in stores & spares, it reduces the profitability of a concern. Only if reasonable maximum and minimum limits for each items of stores & spares are determined, it will be possible to avoid overstocking.
Table-5(G) reveals that the percentage of stores and spares to aggregate inventory in The British India Corporation Ltd. showed increasing trend in 1999-2000 which came to 14.54 per cent as compared to 13.56 in 1998-99. It showed decreasing trend in 2000-2001, 2001-2002 which was 8.82 per cent and 6.88 per cent respectively. It increased in 2002-2003 to 7.21 per cent and again decreased in 2003-2004 to 4.02 per cent.

In case of The Elgin Mills Company Ltd., the percentage of stores and spares to aggregate inventory for the year 1998-99 was 37.44% which increased to 38.89 per cent in 1999-2000 and 41.90 per cent in 2000-2001.

It was constant in 2001-2002 and 2002-2003 with 42.03 per cent.

Table-5(G) further shows that percentage of stores and spares to aggregate inventory in case of Cawnpore Textiles Ltd. was increasing in first three years. In 1998-99 it was 12.40 per cent, 99-2000 it was 12.57 per cent which again rose to 13.12 per cent in 2000-2001. It showed decreasing trend in 2001-2002 and was 13.08 per cent and remained constant in the year 2002-03.
## Table – 5 (G)

### EXTENT AND PERCENTAGE OF STORES AND SPARES TO “AGGREGATE INVENTORY” IN THE SELECTED TEXTILE COMPANIES IN U.P. FROM 1998-99 TO 2003-2004

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>The British India Corporation Ltd.</td>
<td>1,17,45,924 (13.56)</td>
<td>1,15,44,968 (14.54)</td>
<td>1,10,66,385 (8.82)</td>
<td>98,04,998 (6.88)</td>
<td>1,31,98,548 (7.21)</td>
<td>1,46,92,263 (4.02)</td>
<td>20,08,847.66 (5.17)</td>
</tr>
<tr>
<td>The Elgin Mills Company Limited</td>
<td>61,56,495 (37.44)</td>
<td>62,86,255 (38.89)</td>
<td>61,83,266 (41.90)</td>
<td>61,74,307 (42.03)</td>
<td>61,74,307 (42.03)</td>
<td>N.A.</td>
<td>61,94,926 (40.45)</td>
</tr>
<tr>
<td>Cawnpore Textiles Ltd.</td>
<td>29,79,969 (12.40)</td>
<td>29,40,822 (12.57)</td>
<td>29,34,698 (13.12)</td>
<td>29,25,675 (13.08)</td>
<td>29,25,675 (13.08)</td>
<td>N.A.</td>
<td>29,41,367.8 (12.85)</td>
</tr>
</tbody>
</table>

Source:– Annual Reports & Accounts of the Company under study.

Figures in brackets show the percentage of raw materials to “aggregate inventory.”
The study of average percentage of stores and spares to aggregate inventory of all companies showed that the highest percentage of stores and spares as found in The Elgin Mills Company Ltd. and lowest in The British India Corporation Ltd.