

Drug House Management

After attaining the required qualification (i.e. Diploma or Bachelor in pharmacy) as well as the experience of running a drug store, the pharmacist having an aptitude for business and also willing to invest money, has to take one more step, namely to select a suitable location for starting his own drug store.

Drug store can be opened either in a rural or a small town, or in an urban area i.e. big cities or towns.

- **Rural or small town:**

It is possible to run a new drug store in a rural area with limited financial resources. These days the nationalized and cooperative banks provide incentives in the form of soft loans for purchasing the inventories for the drug store. In a rural area, the ideal site for a drug store is in the main market, preferable near about the clinics of physicians. Apart from that, buying capacity of people should also be studied. It is necessary to find out whether the potential customers will be in a position to pay cash for their purchases, otherwise the pharmacist should be prepared for extending credit facility to some of them.

In case, the location of the drug store is to be selected near an industrial town, the financial stability of would be customers should be studied. If a drug store is to be opened on a highway, close to a rural area proximity to a petrol pump, railway station or bus-stand is an ideal location.

- **Urban or big cities or town:**

A lot of investment is required for starting a drug store in big towns. Factors like the nature of community residing there, probable number of customers, their buying capacity (which depends on their nature of work and occupation) may be considered while selecting a suitable for opening a drug store in big towns.

The site for a drug store:

The following factors may be considered while selecting the site for starting a new drug store:

- a) Business locality:** It is preferable to open a drug store in a business locality because the number of people visiting such a locality is quite large. If the drug store has a good look, it can attract a good number of customers. However the main hindrance in opening a drug store in such a locality is that a huge investment is required for this purpose because of high rented and exorbitant land prices.
- b) Thickly populated residential areas:** Such type of area is always preferable since people may prefer to buy the required medicines during their evening walk.
- c) Developing areas:** Nowadays in big cities new localities are coming up very fast. It is, therefore, an ideal place to start a new drug store, because there is no problem of

competition. The drug store will be able to meet the needs of its customers by extending all types of facilities.

- d) **Hospitals:** If a hospital or a nursing home does not have its own drug store and the physicians have a good practice, then it is an ideal location to open a drug store nearby.
- e) **Flow of traffic:** Avoid locations near traffic signals because a shop in the vicinity of traffic signals has to face parking problems for cars, scooters and cycles etc. of the customers. Usually a road having one-way traffic may be avoided. A shop located on that side of the road which takes people to their homes has prospects of better sales as majority of people prefer to do marketing while returning from their place to work. Similarly road circles should be avoided as far as possible because of parking problems.
- f) **Parking:** While selecting the location of a drug store in a busy shopping centre, it must be seen that there is enough parking space outside the drug store. In a big city, there are certain restricted areas where parking is not allowed to prevent obstruction in smooth traffic. Such areas are not ideal to open a new drug store.
- g) **Drug store:** As far as possible there should not be any competitor already existing near a location of a new drug store. However, if sales potential is good even for another store, then one can consider opening a new one.
- h) **Near to hotel, school, cinema hall and play ground:** These locations are not preferable starting a drug store because potential customers are residing quite at a distance from school premises, play grounds and hotels. If the site is near a restaurant, it may create problems of maintaining cleanliness in the vicinity of the drug store. In case cold drink and ice-cream facilities are also extended, then it is preferable to open a drug store near a cinema hall because people may buy drugs when they visit for a soft drink.

In order to establish a new drug store in metropolitan cities like Delhi, Mumbai, Kolkata, Chennai etc., the following additional factors are also to be considered.

- 1) The site should be well connected with various mode of transport.
- 2) The site has good surroundings. There should not be congestion to traffic.
- 3) The essential services such as, bank, post office and warehouse must be available near the site.
- 4) The rules and regulations of municipal corporation or any other local authority does not come in the way of expansion of drug store.

Acquisition of Premises for a Drug Store:

The premises for a drug store may be taken either on rent or on a lease for a certain period or purchased straightaway. The rent amount varies according to the building and locality in which the shop is located. In big cities, due to shortage of space the premises are taken on rent after paying a heavy premium. Similarly, the cost of place in a commercial centre, shopping market and developed area is always very high.

If the premises is taken on rental basis a legal written agreement about rent, the period of possession, actual use of shop premises must be executed with the owner. The signed agreement deed should be recorded and registered with the office of the government

concerned with registration of such deeds. The lease has to be renewed after the agreement has expired by mutual agreement with the owner.

It is desirable, that before the pharmacist occupies a new store premises, he/she should observe the following precautions:

- Note down the date of occupancy.
- When to pay the installment of the rent.
- Repair the premises of drug store properly.
- Comply with the local rules and bye-laws about opening and closing time of shops, the weekly closing day of the market etc.

LAYOUT OF A DRUG STORE:

Three main factors responsible for the success of a drug store are:

- 1) Its location and proper layout design.
- 2) Its professional management.
- 3) Sound financial position.

The primary function of a drug store is to provide every possible convenience and aid to the customers to make their shopping easy and less tiring. It is possible only by designing a proper layout of the drug store.

Objectives of Layout Design:

- a) To attract a large number of customers.
- b) To increase the sales of the store.
- c) To reduce the selling expenses to a minimum.
- d) To provide customers satisfaction.
- e) To project a professional image and improve general appearance.
- f) To minimize the movement of customers within the premises of the drug store.
- g) To provide surveillance in order to reduce the chances of pilferage and theft.
- h) To have space for reserve stock, office and resting place for the employees.
- i) To have a proper entrance for incoming goods.

Generally, the drug stores, are located on the ground floor of the building. They are usually constructed of cement concrete walls with mosaic tiles on the floor. The internal fittings usually consist of racks or storage cupboards having glass doors, drawers for storing strips, shelves and proper place for placing refrigerator. The counters of the store are made from wood having white sunmica at its top. The furniture includes a working table, wooden or steel chairs for the staff and customers.

A modern drug store should fulfill all the minimum requirements as laid down in schedule 'N' of the Drugs and Cosmetic Rules, 1945. To start a retail drug store a minimum of 10sq. metre area is required.

The premises of a drug store must be separated from rooms for private use. The outer front of the drug store should be very attractive and built with innovated construction techniques. The material used for constructing drug store front is normally glass, glazed tiles and marbles which are easy to clean. The floor of the drug store should be smooth and washable. The walls should be plastered or tiled or oil painted so as to maintain a smooth durable and washable surface, adequate lighting should be provided, preferably tube lights which are concealed. Good lighting system provides a cheerful atmosphere for the customers, and the merchandise stored and displayed appears more attractive. It also helps in identifying the medicines etc. quickly and easily and thus increase the efficiency of the store.

Figure: An Ideal Drug Store Design

The name of the store and insignia of Pharmacy in neon lighting is very much attractive. The fluorescent lighting is also very attractive. The illumination should be steady and without glare and should not put any strain on the eyes.

LEGAL ASPECTS OF A DRUG STORE:

The following are some of the legal requirements to be fulfilled for opening a retail drug store or a wholesale drug store:

- a) **Minimum qualification:** It is essential that a person who is interested or start a retail drug store must be Registered Pharmacist with the State Pharmacy Council. The minimum qualification to get registered with State Pharmacy Council is Diploma on Pharmacy from a recognized institution. The minimum qualification for starting a wholesale drug store is Matriculation with four years experience in selling of drugs in a chemist shop on salary basis or Diploma in Pharmacy and also being registered as a 'Registered Pharmacist'.
- b) **Minimum space:** Though there is no minimum prescribed area mentioned in the Drugs and Cosmetics Act and Rules, 1945, the minimum desirable area to open a new retail drug store is 10 sq. metre. Similarly, the minimum area required to open a new wholesale drug store is 10 sq. metre. However, the minimum desirable area to open a new combined wholesale and retail drug store is 15 sq. metre.
- c) **Store arrangements:** There should be a sufficient number of racks to store drugs and pharmaceutical preparations. For storage of antibiotics, vitamin products, vaccine, sera, enzymatic preparations and other preparations which are required to be stored at a temperature between 2 to 8°C, a refrigerator is necessary.

Documents Required to open a Retail Drug Store:

Licence: A licence is required to sell, stock or exhibit for sale or distribute drugs. In order to open a retail drug store in any state, the following documents are needed for a new licence:

- 1) Application (in duplicate) on Form 19* of The Drugs and Cosmetic Rules, 1945. One copy is for biological drugs and the other copy for non-biological drugs.

- 2) A fee of Rs.1500 per licence (Total Rs.3000) to be deposited in State Bank of India/Government Treasury under specific head for grant of a retail sale licence.
- 3) (a) An attested copy of Diploma in Pharmacy from any institution duly recognized by Pharmacy Council of India.
(b) An attested copy of registration certificate issued by State Pharmacy Council.
(c) An attested copy of matriculation certificate.
(d) Affidavit from the qualified person in case he is an employee of a drug store.
- 4) Affidavit on non-judicial stamp paper, duly attested by a First Class Magistrate by each partner in case of partnership concern and by the proprietor himself in case of proprietorship concern.
- 5) A map of the retail drug store duly signed by proprietor/partners of firm.
- 6) Rent receipt in case of rented premises or an affidavit to that effect if the person himself is the owner of the premises.
- 7) A copy of the partnership deed in case of partnership concern.
- 8) Refrigerator purchase receipt.

Documents Required for the Renewal of Retail Sale Licence:

- 1) Application in duplicate on Form 19* of The Drugs and Cosmetic Rules, 1945. Only copy for biological and other copy for non-biological drugs.
- 2) A fee of Rs.1500 per licence (Total Rs.3000) be deposited in State Bank of India/Government Treasury on challan form in the specified head for renewal of retail sale licence.
- 3) A late fee of Rs.500 per licence per month or part thereof.
- 4) Original licence in case of first renewal and latest renewal certificate in case of subsequent renewals.
- 5) Affidavit to be given on non-judicial stamp paper by a partner if any, duly attested by Oath Commissioner.

Documents Required to Open a Wholesale Drug Store (For New Licence):

- 1) Application in duplicate on Form 19 of The Drugs and Cosmetic Rules. One copy for biological drugs and the other copy for non-biological drugs.
- 2) A fee of Rs.1500 per licence (Total Rs.3000) to be deposited in State Bank of India/Government Treasury on challan Form in specified head for grant of wholesale licence.
- 3) (a) Attested copy of Diploma in Pharmacy from any institution duly recognized by Pharmacy council of India.
(b) Attested copy of registration certificate issued by State Pharmacy Council and certificate on the basis of which registration was done with the State Pharmacy Council.
(c) Attested copy of the 'experience certificate' of minimum of 4 years in sale / distribution of drugs after matriculation on salary basis.

OR

Attested copy of the 'experience certificate' of minimum of one year in dealing

with drugs after graduation, in any discipline, from a recognized university on salary basis.

(d) Attested copy of matriculation certificate/graduate degree certificate.

(e) Affidavit of the qualified person if the qualified person is an employee of the firm.

- 4) Affidavit to be given on non-judicial stamp paper duly attested by first class magistrate by each partner in case of partnership concern and by proprietor himself in case of proprietorship concern.
- 5) Plan of the premises on blue print.
- 6) Rent receipt in case of rented premises or an affidavit if the person is himself the owner of the premises.
- 7) Copy of the partnership deed in case of a partnership concern.
- 8) Receipt showing the purchase of refrigerator.

The original licence or a renewal licence to sell drugs on wholesale basis is Valid for five years. It is required to be renewed before its expiry.

Documents required for the Renewal of Wholesale Licence:

- 1) Application in duplicate on Form 19 of The Drugs and Cosmetic Rules. One copy for biological drugs and the other for non -biological drugs.
- 2) A fee of Rs.1500 per licence (Total of Rs.3000) to be deposited in State Bank of India/Government Treasury on challan form in the specified head for renewal of wholesale licence.
- 3) Late fee of Rs.500 per licence per month or part thereof.
- 4) Original licence in case of first renewal and latest renewal certificate in case of subsequent renewals.
- 5) Affidavit to be given on non-judicial stamp paper by any partner duly attested by Oath Commissioner.

The original licence or a renewal licence to sell drugs is valid up to 31st December of the year following in the year in which it is granted or renewed.

Separate licences are required for the retail sale of:

- 1) Schedule C and C₁ drugs
- 2) Schedule X drugs
- 3) All drugs other than those specified in Schedule C and C₁ and Schedule X

In order to get a licence to sell, stock or exhibit for sale or distribute by retail drugs specified in Schedule C and C₁, an application is filled in Form No. 21* and Form No. 21B* is filled to apply for licence to sell Schedule C and C₁, drugs by wholesale.

The drugs which are covered under Schedule X cannot be sold on retail except on the prescription of a registered medical practitioner.

Similarly, to get a licence to sell, stock or exhibit for sell or distribute drugs by retail other than those specified in schedule C and C₁, an application is required in Form 20 and in Form 20B, if the licence is to sell drugs other than those specified in Schedule C and C₁ by wholesale.

IMPORTANCE AND OBJECTIVES OF PURCHASING:

Purchase of material is one of the important functions of material management. A proper purchase of materials and merchandise and the control of stock are of great important in any business i.e. manufacturing, wholesale or retail trade. In a trading business, merchandise purchased must be of proper quality at an appropriate price, in proper quantities and at the proper time.

The objective of purchasing is not only to produce the raw material at the lowest price but also to reduce the cost of the final product.

The following points are taken into consideration while purchasing the materials:

- 1) **Right source:** The source from where the material is procured, must be dependable and capable of supplying items of uniform quality. The buyer has to decide about the proper source the material.
- 2) **Right quality:** Before purchasing the material a sample should be procured and its quality determined. After verifying the right quality, the order may be placed with the supplier for its purchase.
- 3) **Right quantity:** It is in important factor in buying while deciding the right quantity, factor such as price structure, discounts and availability of items are to be taken into consideration.
- 4) **Right price:** The items should be purchased at right price. The right price does not mean the lowest price. For determination of the right price, the cost structure of the product is to be taken into consideration.
- 5) **Right time:** For determining the right time of purchase, the lead time information is taken into consideration. Lead time means the total time consumed between the recognition of the need of an item, till its receipt for use.
- 6) **Right place of delivery:** The supplier should supply the items at the premises of the business.
- 7) **Right mode of transportation:** The goods may be supplied by road, rail or air. The mode of transportation is to be decided between the supplier and purchaser.

Purchasing Procedure:

The purchasing procedure means the sequence of step in which purchase transaction is carried through. The purchasing procedure starts when it is felt that further supply on an item is required. The purchasing procedure generally involves the following stages:

- 1) **Purchase requisition:** Whenever the existing stock of an article approaches a minimum limit or the re-order level, the person incharge of the store ledger, fills the

requisition from and sends it to purchase department. The purchase requisition indicates the type, quantity and quality of the item to be purchased.

- 2) **Selection of the suppliers:** A list of the items to be purchased is sent to various supplier or a tender is invited through leading newspapers. On receiving the quotations from different suppliers, the comparative statement of all the quotations received is prepared. The supplier which have quoted the lowest rate is generally selected. However, apart from the price, other relevant considerations like his ability to supply the required volume, maintenance of quality of goods, ability to deliver the goods per schedule and terms of payment are also taken into consideration.
- 3) **Placing the order:** After the selection of the supplier, the order is placed on the standard purchase order form commonly known as 'Supply Order'. The supply order gives the detailed specification of the items, quantity required, the price and other terms and conditions of the supply. It is signed by the authorized persons. The supply order is a legal document. Generally 5-6 copies of an supply order are prepared. Two copies are sent to the supplier, who is expected to sign one copy as an acknowledgement and return it to the supply department. One copy is sent to store incharge. One copy goes to the accounts department and one copy remains with the purchase manager.
- 4) **Receiving and checking of material:** The material which is supplied by the supplier is received and inspected for its quantity and quality. The goods are compared with challan form or invoice or the bill sent by the supplier. If the goods received do not conform to specifications on the purchase order, the foods are rejected and defects or deficiency, if any, recorded on the invoice or the challan form.
- 5) **Checking of invoice or bill:** If the goods are received in satisfactory condition, the invoice or bill is checked before it is approved from payment. The rates of various items charged in the bill and the other terms and conditions are thoroughly checked and compared with the supply order.
- 6) **Recording of bills in books:** The bills are then sent to the account section, where the bills are entered into the accounts books. The receipt of damaged material, excessive material, short supply and supply of interior quality of material, if any, is reported to the concerned authority dor further necessary action.
- 7) **Releasing the payment to the supplier:** According to terms and conditions of the supply order, the payment is released by the accounts section to the supplier, however, in small organizations, the payment is released by the purchase department itself.

SELECTION OF SUPPLIERS:

In Government departments, public sector undertakings and large business houses, the supply of all types of items of daily use are received through the suppliers who are in their approved list. This is done to ensure timely supplies and of required quantity. In order to prepare the approved list of suppliers questionnaires is send to various suppliers. After receiving these questionnaires, the approved list of suppliers is prepared. The following points should be generally taken into consideration while preparing the approved list of suppliers:

- 1) Reputation of the supplier in the market. (business reputation)
- 2) Financial condition of the supplier.
- 3) Manufacturing capabilities of the supplier.
- 4) Capability of the supplier to supply at a short notice.
- 5) After sales service facilities provided by the supplier.
- 6) Terms and conditions of payment.

CREDIT INFORMATION:

Whenever any sale deed is done between buyer and seller, the terms of payment is also finalized in order to avoid any misunderstanding at the later stage. The sale of merchandise is done either on cash payment or on credit. In pharmaceutical marketing, 45 days credit facility is provided by many manufacturers to the wholesalers. However, the credit facility is not provided to the new wholesalers in the initial stage. A wholesaler, usually gives 21 days credit facility to its retailers in business.

Nowadays a substantial amount of trading involves credit. Credit is a means through which the items can be bought or sold without making cash payment. It is advantageous to both the buyers and the sellers. The buyer is benefited to carry on his business with less capital whereas seller can increase its sale.

When the sale is done on credit, it will certainly increase the sell but it involves the risk of bad debts and delayed payments. In order to avoid such problems, many business organizations have a credit department which investigates the credit worthiness of each prospective customer. The following information may be obtained about the buyer before selling the goods on credit:

- 1) **The character of the buyer:** He should be honest, reliable, trustworthy and having reputation for fairness and justice.
- 2) **Financial position of the buyer:** This is done to know the financial position of the buyer, in order to find its capacity to pay the debt etc.
- 3) **Assets and liability of the firm:** The information helps to judge its state of business.

These informations can be obtained by going through the financial statements of the firm, bank reference and salesman's report.

TENDERS:

In order to avoid favouritism during purchasing of goods from the market in Government departments, public undertakings and private sector undertakings, the tenders are invited from the approved suppliers. A tender or a quotation is a written offer to do work or to provide a material at a given price within a prescribed period and under specified condition.

Types of Tenders:

Tenders are of following types:

- 1) **Open tenders:** These tenders are called by advertisement when the sources of supply are many and total value of items to be purchased is large. The tenders are given in leading newspapers. After receiving the tenders from various supplies, a comparative statement of rates as well as terms and conditions quoted by different firms is prepared. Generally, the order is placed with the firm which has quoted the lowest rate. The method of purchasing goods through open tender is costly and time consuming.
- 2) **Limited tenders:** The system is used only in those cases where the value of tender is moderate. The tenders are invited only from those firms which are on the approved list of supplier. The main advantages of this method are as under:
 - a) The suppliers are well conversant with the items to be supplied.
 - b) The suppliers generally submit realistic quotations because they are regular supplier of those items.
 - c) There are less chances of any error in supplying the items of required specification.
 - d) There are chances of processing reduction in price.
- 3) **Single tenders:** When the items to be purchased are proprietary in nature or the order is to be repeated within a short period, the tender is sent only to a single supplier who is dealing with the items of specific specification.
- 4) **Oral tenders:** In case the supplies are of minor character and are urgently required, a person or a committee is deputed to purchase the specified items from the market. After collecting the information regarding the price charged and quality of product to be supplied from three to four suppliers, the items are purchased from the supplier which has quoted the minimum price of the specified items.
- 5) **Global tenders:** The tenders are invited from all parts of the world/ these are for large contracts for supplies from foreign countries or when foreign collaboration is required in the proposed project.

The tenders are invited from the various suppliers or firms which deal in the supply of the items which are required to be purchased. The notice containing the following information is issued to call the tender:

- a) Name and detailed specification of material to be purchased. In it, the drawing of material or particular make should be mentioned.
- b) Quantity to be purchased.
- c) Period of delivery.
- d) Earnest money to be deposited.
- e) Terms and conditions of purchase.
- f) Date, time and place for receiving and opening of the tenders.

The tenders are sent by suppliers in sealed envelope before the due date. The word 'Tender' or quotation and its date of opening must be written on the top of the envelope.

After opening the tender on due date and time in the presence of the representative of the suppliers, the purchase officer write on each tender, the serial number of tender, total number of tenders received and number of page in a particular tender. Any correction or over-writing is also attested during that period in order to avoid any dispute at a later stage.

A comparative statement is prepared from the tenders or quotations which are received. Generally, the order is placed with the firm which has quoted the lowest rate. The factors like sample specification, make, guarantee period, period of supply, other expenses like freight, sale tax, packing and forwarding charges are also to be considered.

CONTRACTS:

It is also called purchase order or supply order. After the selection of the supplier, a mutual agreement is done between the supplier and the buyer. This agreement is called contract. The buyer places an order with the supplier to buy specific products from the supplier. It serves as the basis for legal obligation to supply or accept a specific product to the various terms and conditions stated to it. While drafting an order to supply the goods, care should be taken that no ambiguity should be left, otherwise it will create legal obligation to accept the goods and to pay according to its terms and conditions. The following particulars are required to be mentioned in the contract which is mostly in printed/typed forms:

- 1) Supplier's name and address
- 2) Order number, date and the reference number
- 3) The detailed specifications of the items and quantity ordered
- 4) Rate and the amount
- 5) Mode and date of delivery
- 6) Packing and forwarding instructions
- 7) Mode of payment and the terms of payment
- 8) Signature of the official authorized to place order

STORAGE:

The medicines which are purchased from the market are stored in drug stores to provide a uniform supply to drugs to the patients. The medicines are stocked in containers, such as drums and boxes and on flexible racks and shelves etc.

It must be ensured that the medicines which are stored in a drug store remain preserved during their storage. There should not be any damage due to high temperature or exposure to sunlight. The drugs are to be stored as per the prescribed conditions of their storage.

The drugs stored in a drug store be arranged in such a way that they are easily traceable as and when required, for this purpose the drugs are stored by any one of the following methods:

- **According to manufacturers:** The drugs are arranged in a drug store manufacturer-wise. For example, the drugs manufactured by Glaxo (India) Ltd. Are placed at one place i.e. in one cupboard.
- **According to pharmacological action:** In this method, the medicines are divided according to their pharmacological action and drugs of one group are placed at one place. For example, all analgesic drugs are placed in one cupboard. Likewise similar drugs of other groups are placed together on a separate shelf or in a separate cupboard.
- **Alphabetically:** In this method the drugs are placed alphabetically. The drugs with first letter “A” are placed in one cupboard.

Out of the above methods the storing of drugs manufacturer-wise is most popular and convenient method. The drugs are stored in such a way that the older stock must be sold first. The drugs having date of expiry may be arranged in such a way that these can be sold before their date of expiry. This can be achieved by placing the old stock in the front and the fresh stock on the backside of it.

CODIFICATION OF VARIOUS ITEMS OF DRUG STORE:

Codification is the process of assigning of code symbol or a number to a particular material for easy identification. Codification of various items of material is essential for good system of store-keeping.

Advantages of Codification:

- 1) Ambiguity in description is avoided.
- 2) The length in description is minimized.
- 3) The codes ensure security of items lying in the store.
- 4) Each stored item is easily identified, particularly, where the same item is known by more than one name. For example, acetyl salicylic acid tablet is also known as aspirin tablet.

Methods of Codification:

- 1) **Alphabetical method:** This method is also known as letter-code system. In this system, letters are chosen to represent a particular classification. Alphabet consists of 26 letters. So each position in the code has 26 possible letters. The method is useful when relatively a few positions or places are required. For example, code “T” represents tablets and code “C” represents capsules. This method is very simple but it lacks flexibility and expansion. The method is not suitable where store consists of a large number of items.
- 2) **Mnemonic method:** In this method, code is assigned to stored items with the objective of easy identification. For example, code AT represent aspirin tablet, code ATP represent aspirin tablet with paracetamol. The main disadvantages of this method is that materials cannot be recognized without making reference to code index.

3) Numerical method: This method is also referred to as sequence system. Under this method, separate numbers are assigned to different classifications of store items. Each time a new type of material is acquired the next higher number in sequence is assigned to it. Numerical system involves use of following system:

- a) Decimal system
- b) Block system

a) Decimal system:

In this system, the numbers are assigned in such a manner that each digit represents a sub- group or sub-account of the previous digit. For example, code number 16.1, 16.11, 16.111 are assigned to three different tablets belonging to analgesic group (16.1 represent tablet analgin, 16.11 represent tablet disprin and 16.111 represent tablet paracetamol).

The main advantage of this system is its capacity to expand to accommodate new items. The method has the disadvantage of being cumbersome in use.

b) Block system:

In this method, the numbers are reserved for specified classification. For example, 101 to 300 may be allotted to various types of tablets and number 301 to 500 may be assigned to capsules.

4) Combination method: In this method, both mnemonic and numerical methods are combined together to assign a code to different items of the store. For example, code number AT 300 is allotted to aspirin tablet 300 mg and AT 301 is allotted to aspirin tablet 600 mg.

This method is flexible and at the same time it aids in memorizing the codes for different stores items.

PRICING OF MATERIAL:

The drugs and others related materials which are stored in the drug stores are ultimately sold to the patients against prescription of the registered medical practitioners. The price which is going to be charged from the customer can be calculated by adopting any one of the methods given below:

1) First in First out method (FIFO):

Under this method, the materials which are received first are issued first. The issues are priced at the cost price of oldest consignments till it gets exhausted. As soon as the oldest lot is exhausted, the issues are priced at the cost price of the next of oldest lot in the sequence. The closing stock is valued at the latest purchase price. For example, the following transactions occurred during the first week of April 2005.

April 1	200 units purchased @ Rs. 5 per unit
April 5	500 units purchased @ Rs. 6 per unit
April 10	300 units sold

The issue of 300 units will be priced as under:

From the first lot 200 units @ Rs. 5	: Rs. 1,000
Remaining 100 units from second lot @ Rs. 6	: <u>Rs. 600</u>
	<u>Rs. 1,600</u>

The value of the closing stock of 400 units (i.e. second lot 500 units less 100 units issued) will be costed @ Rs. 6 i.e. the value of closing stock would be Rs. 2400.

2) Last in First out method (LIFO):

In this method the price of the latest consignment in stock is used for calculating the value of issue until that consignment is exhausted, then the next lot of pricing is used and so on through the successful lots. For example, the following transactions occurred in during the first week of April 2003.

April 1	500 units purchased @ Rs. 5 per unit
April 5	300 units purchased @ Rs. 6 per unit
April 10	400 units sold

The issue of 400 units on April 10, will be priced as under:

From the second lot 300 units @ Rs. 6	: Rs. 1,800
Remaining 100 units from first lot @ Rs. 5	: <u>Rs. 500</u>
	<u>Rs. 2,300</u>

The closing stock of 400 units will be priced @ Rs. 5 i.e. Rs. 2000.

3) Average cost method:

In this method, when a new stock of goods is received the total value of goods in stock is divided by the total quantity in hand and this will give the average price. All issues of goods will be made at this price until a new consignment is again received. Then a new price will be calculated. This method has an advantage when the prices are subject to constant change.

It is noted, that instead of the simple average, wherein only the unit cost is considered for calculating the average cost to be charged to the issues, weighted average cost can also be used. Under the weighted average cost, alongwith unit cost the quantity of the units is also considered. For example, the following two lots were purchased during April 2005:

April 1	1000 units purchased @ Rs. 3 per unit
April 2	5000 units purchased @ Rs. 5 per unit

The simple average cost = $\frac{3+5}{2} = \text{Rs. } 4$

While the weighted average cost would be as under:

	Unit Cost (Rs.)	Weight	Weighted Cost (Rs.)
April 1	3	1000	3000
April 2	5	5000	25000
		6000	28000

The weighted average cost = $\frac{28000}{6000} = \text{Rs. } 4.67$

4) Replacement price method:

This method is also known as market price method. In this method, the materials are priced at the prevailing market price on the date of issue. According to this method, the replacement price is determined each time when the material is issued. The main advantage of this method is that it considers the current market price which is more significant for the purpose of pricing policies.

5) Standard price method:

In this method the material issues are charged at a pre-determined or estimated price which reflects a normal or an effected future price. The standard price is generally fixed after careful examination of the current market price, trend of price and market conditions etc. The standard price is made applicable for a definite period, say a month or a quarter or a year. The standard price should be revised periodically to avoid discrepancies which go beyond a particular limit.

The material pricing is to be done on the basis of acquisition cost of the materials. The acquisition cost should include the net invoice price of the supplier and the transport charges. Besides that, charges, such as cost of ordering, receiving, unpacking, inspection, insurance, storing etc. may also be included.

Now a days compounding of drugs/prescription has almost become obsolete in retail sale. The ready-made drug formulations are available for retail sale and the price to be charged from the patients are also stated on the label as maximum retail price inclusive of all taxes.

6) Inflated price method:

This method is used for those goods which are subject to some wastage. The total amount paid is divided by the quantity expected to be finally available for use and that rate is used for sale of goods.

There are certain types of normal wastages which are incidental to the material usage e.g. loss on braking the bulk, evaporation etc. The cost of such normal wastage is included while charging the price when such material is sold.

For example, 100 packets of Menthol were purchased at the rate of Rs. 60 per packet. There is wastage of 10% Menthol during its storage.

Total cost of 100 packets of Menthol @ Rs. 60 per packet = $100 \times 60 = \text{Rs. } 6000$.

Wastage of Menthol during storage = 10% of total material purchased.

Material left after wastage = $100 - 10 = 90$ Packets

\therefore Total cost price of quantity of material available = $\frac{6000}{90} = \text{Rs. } 66.66$

7) Actual price method:

In this method the material issues are priced at the actual acquisition cost of the respective materials. This method is applicable, where the purchases are made for the specific jobs and are kept physically separate in the store room. Each material receipt is recorded in separate store ledger card and the material issues are costed at the actual acquisition cost. This method is relatively awkward, however, it is advised where few costly items are used in processing and where non-standardised materials are purchased to meet the customer's specification.

Legal Requirements and Price Control on Bulk Drugs and Formulations:

The Government has taken control over the prices of bulk drugs and drug formulations by Drug (Price Control) Order, 1987. It came into force on 26/08/1987.

The order authorized the Central Government to fix the maximum sale price of the following categories of drugs:

- a) Bulk drugs manufactured in the country listed in first or second schedule of the order.
- b) Bulk drugs other than those specified in first and second schedule.

c) The formulation of drugs sold in retail.

a) Prices of Bulk Drugs (Listed in First and Second Schedule):

The Drug (Price Control) Order, 1987 authorized the Central Government to fix the maximum sale price of bulk drugs manufactured in the country and are listed in first or second schedule to the order. The manufacture of these drugs are required to provide detail specification in Form – I on 31st January and on 30th June of each year. While fixing price of bulk drugs Government may take into consideration the following points:

- A post tax return of 14% on net worth.
- A return of 22% on capital employed.
- An internal rate return of 12% based on long term marginal costing in respect of new plant.

b) Prices of Bulk drugs (Not specified in First and Second Schedule):

The manufacturers of such drugs are required to furnish all details to the Government within 14 days of manufacture of drugs in bulk. Every manufacturer of bulk drugs is required to furnish a price list of its bulk drugs manufactured to the Government within 30 days of introduction of finance bill in the Parliament.

c) Retail Price of Drug Formulations:

There are various formulae to calculate the retail price of the drug formulation, but the following formula is generally employed to calculate the retail price of drug formulations:

$$RP = (MC + CC + PM + PC) \times \left(1 + \frac{MAPE}{100}\right) + ED$$

Where,

RP = Retail price

MC = Material cost

CC = Conversion cost as per norms notified from time to time

PM = Cost of packing material

PC = Packet charges

MAPE = Maximum allowable post manufacturing expenses

ED = Excise duty

A manufacturer, importer or distributor may sell a formulation to a wholesaler at a retail price minus 20% in case of ethical drugs and minus 18% in case of non-ethical drugs or

to a retailer at a retail price minus 17% in case of ethical and 15% in case of non-ethical. The retail price of the drug formulation is required to be displayed on the label of the container.

STUDY QUESTIONS: