

**AS-2535**

**Model Answer**

**B. Pharm. VII Semester  
Pharmaceutical Management**

**Note: 1. All questions in section A is compulsory. Each question carries 2 marks.  
(2x12=24)**

**2. Attempts any four questions from section B. (4x14=56)**

**Section A**

**1. Explain the different levels of Management.**

**Ans.** Level of management tells about the position of the manager in an organization on the basis of authority. Thus on the basis of authority and responsibility management can be divided in three types

- Administrative or Top Management
- Executive or Middle Management
- Supervisory or Lower Management

**2. Write the benefits of ‘Organizing’.**

**Ans.** A well planned organization as the following benefits

- It makes the management simple and efficient and accelerates the progress.
- It encourages specialization and promotes constructive thinking among the employees.
- It increases productivity and boosts the confidence of the employees.

**3. Write difference between ‘Production Management’ and ‘Production Function’.**

**Ans.** ‘Production Management’ and ‘Production Function’ are two different activities. Production management is a decision making challenges whereas production function is discharged by the employees working in the organization.

**4. Name out the traditional methods of evaluation.**

**Ans.** Job evaluation can be basically of two types:

Comparing a whole job against other jobs, (a). Ranking system, (b) Grading or classification system; Comparing compensable elements of the job to a predetermined yard stick (a) Points system, (b) Factor comparison system

**5. Write various ways to settle industrial disputes.**

**Ans.** The methods for prevention of industrial dispute are

Trade Unions

Joint Consultation

Work committee

Joint management council

Conciliation

**6. What are the right sites for promoting retail pharmacy?**

**Ans.** They are generally located at the popular residential areas.

**7. Mention the advantages of advertisement.**

**Ans. Advantages of advertising**

***To manufacturer***

1. It helps in marketing goods produced on a large scale
2. It helps in lowering average cost of production per unit
3. It helps easy introduction of product into the market
4. It helps to establish a direct contact between manufacturer and customer
5. It helps to create the reputation of the product and the manufacturer.

***To wholesalers and retailers***

6. It supplements the merchant middlemen's activity.
7. It provides information regarding the products.
8. It increases the sale turnover.

***To consumer***

9. Advertising gives information about the product quality and price.
10. It elps the consumers to know where and when the products are available.
11. It reduces the shopping time

***To society***

12. Advertising supports and helps to sustain the print media.
13. It encourages industrial research.

**8. Define the concepts-Buying and Selling.**

**Ans.** Buying and selling are understood to be two sides of the same "coin" or transaction. Both seller and buyer engage in a process of negotiation to consummate the exchange of values. Whenever the ownership of the goods changes the transferor is called seller, and the transferee, a buyer.

**9. How many types of line pricing approaches are followed?**

**Ans. Types of pricing strategies**

- Penetration Pricing
- Skimming pricing
- Competition Pricing
- Product lining
- Bundle
- Psychological Pricing
- Premium
- Optional
- Cost Based Pricing
- Cost plus Pricing

**10. Write the advantages of proper packaging.**

**Ans.** Packaging refers to the container or wrapper that holds a product or group of products. Most commercial packaging serves two basic functions: protecting the product from damage during shipping, and promoting the product to the ultimate consumer. Packaging is of great importance to both sellers and buyers of products. It can prevent spoiling, breakage, tampering, or theft; enhance convenience in use or storage; and make products easier to identify.

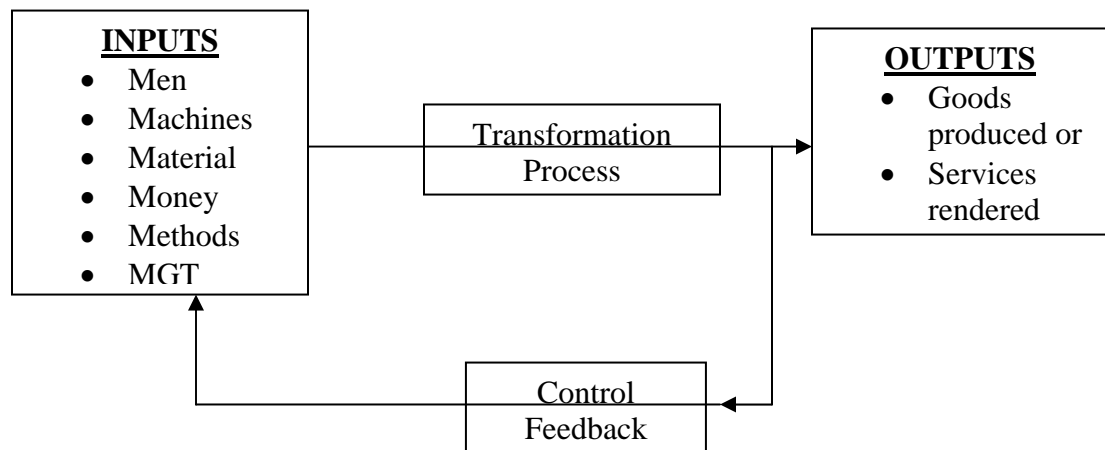
**11. What do you understand by product? Broadly classify product based on consumer behavior?**

**Ans.** A product is anything that can be offered to a market that might satisfy a want or need.

**Product classification based on consumer behavior:**

(1) Convenience goods, (2) shopping goods, (3) specialty goods, and (4) unsought goods

**12. Draw the chart for operation management.**



**Section B**

**2. Elaborate the term ‘management’? Discuss the fundamentals functions of management?**

**Ans.** Management is a process of conducting and coordinating various human activities. Management is a process of planning, organizing, actuating and controlling performance to determine and accomplish the objectives by the use of people and resources. Basically management consists of planning, controlling, coordinating, motivating, directing and channelizing the group efforts for a specific objective.

**Fundamental functions of management**

The management has several important functions. The success of an organization depends upon the efficient discharge of these functions.

The important functions are:

Planning  
Organizing  
Staffing  
Directing  
Controlling  
Coordinating

### **1. Planning**

Planning is an organized approach for accomplishment of predetermined objectives. It is decision making in advance regarding what to do, when to do, where to do, how to do, who has to do and methods of result evaluation.

The process of planning involves the following steps:

- a. Determining the objectives
- b. Forecasting
- c. Search for alternatives
- d. Evaluation of alternative course of action and designing of plans
- e. Formulation of plans and procedures
- f. Preparation of programmes and schedules
- g. Financial including budgeting

### **2. Organizing**

It is a grouping of similar activity together with a view to attain the planned objectives defining the responsibilities of the people in the organization, delegating, suitable authority to them to discharge their respective responsibilities and establishing relationship of co-ordinating the individual efforts to fulfill the objectives of the enterprise.

The process of organizing involves the following steps:

- a. Finding the objectives and locating the main activities
- b. Division of act and creation of jobs
- c. Filling individuals into jobs developing norms, for delegating authorities and responsibilities.

### **3. Staffing**

It involves placing the right people into the organizational structure by means of effective selection and appraisal procedure. A right person should be selected for a right type of a job. A staffing function includes selection, communication, counseling, training, compensation, dismissals etc.

### **4. Direction**

A management function also involves giving proper direction to its employees to work efficiently and effectively to fulfill the objectives of the organization. To do this function manager must have leadership qualities and he should be able to influence, motivate and persuade the people.

This function consists of 3 important sub functions:

- a. Communication

- b. Leadership
- c. Motivation

### **5. Controlling**

It is the process of checking whether the proper progress is made or not to fulfill the objectives and goals of the organization.

Controlling involves the following elements:

- a. Creating standards of performance
- b. Measuring the actual performance
- c. Comparison of the actual performance with the standard performance
- d. Taking corrective steps if the performance is not up to the standard level.

### **6. Coordination**

It is essential that everybody in the organization understands the main objectives of the business and work towards the common goal of the organization with active cooperation of other employees. The objectives of an organization should be clearly laid down and all the employees should work hand in glove to achieve these objectives.

The important features of coordination process are

- a. It is a continuous process
- b. Its purpose to creation of uniform action for a common goal
- c. It is the unification of group efforts
- d. It is the activity of a manager
- e. It coordinates, harmonizes, synchronizes and unites individual efforts for better action and for the achievement of business objectives.

### **3. Define selection. What steps are involved in selection of an employee?**

**Ans.** Selection is a process which helps in choosing right type of candidate to right position in the organization. Based upon the ability and qualifications to perform the job which is vacant in the organization, employment of persons to the job is selection. A well organized selection procedure involves many steps and in each step more information is obtained about the candidates.

#### **Selection Procedure**

1. **Scrutiny of applications:** The applications received up to due date is carefully scrutinized. The incomplete applications and applications of candidates who do not fulfill the required eligibility conditions are rejected.
2. **Preliminary interview:** The candidates considered suitable on the basis of their applications are called for a preliminary interview. This is generally a brief interview and its purpose is to eliminate those candidates who are either unqualified or unsuitable for the job.
3. **Selection test:** It may be written or an oral test. The technical knowledge and administrative capability can be judged from these tests. The following tests are commonly used in the selection process.
  - (a) **Intelligence tests:** These tests are used to estimate the IQ or mental alertness of the candidate.

- (b) **Aptitude tests:** These tests help to measure a candidate's capacity to learn and his potential abilities.
- (c) **Trade tests:** These tests help to measure a candidate's capacity to learn particular trade related skills and his acumen.
- (d) **Personality tests:** These tests are employed to find out the emotional balance, maturity, temperament etc. of the candidate.
4. **Selection interview:** A face-to-face dialogue between the employer or his representative and the interested candidate is the most popular tool of selection. The main purpose of a selection interview is:
- To find out the stability of the candidate.
  - To cross check the information revealed in the application and the test.
  - To give to the candidate an accurate picture of his job and the enterprise.
5. **Physical Examination:** Physical examination of the candidate is conducted to ensure that he is physically fit for the job. If he is suffering from any disease or disability, he is rejected.
6. **Reference check:** Usually the candidates are required to write in their application form the names and addresses of two important persons who know the candidates. These persons are contacted to collect the information about the character, ability and background of the candidate.
7. **Final selection and placement:** The candidates who have been found suitable in all respects are appointed by issuing appointment letter to them. They are generally appointed on probation for one or two years. After successful completion of the probationary period, they are made permanent employees. The selected candidates are assigned specific jobs. This is known as placement.
4. **What is advertising? What are the fundamentals of advertising? Explain the media used for advertising?**

**Ans.** Advertising is a purchased publicity directed according to a definite plan to secure, maintain and increase the distribution and consumption of the product. It is defined as any paid form of nonpersonal presentation and promotion of ideas, goods or services by an identified person.

There are three fundamentals of sales

- Product
- Consumer
- The salesman himself

The sales manager should first analyze the influence which the product has made or going to make upon the marketing problem as a whole, the seasonal character, the source from which it comes etc. The product is to be classified before its sale is to be organized. In case of Pharmaceuticals complete data should be provided and it should include pharmacological action, drug absorption, serum binding, half-life, excretion, toxicity, storage conditions etc. Secondly the construction qualities should be discussed for example 1. Appearance of the product, size, shape, design, color and container are essential, 2. Unit and sale number is desirable, 3. New uses of the product, 4. Price cost of production.

### **Media of Advertising**

Advertising comes in many forms and has many uses. These are:

1. **Newspaper:** In selecting a newspaper for many advertising purposes, an advertiser has to take into consideration the following points
  - a. Strength of circulation
  - b. The class of readers it serves
  - c. The geographical region over which it is popular
  - d. The cost of space in the newspaper.
5. **Magazine:** Magazine or periodicals are an excellent medium of advertisement when a high quality of printing and color is required in an advertisement. Magazine advertisement can be directed towards a particular class of people. It is superior to newspaper because magazines are read more carefully and at greater leisure. Advertising through magazine is more effective and it creates a better image of the product advertised. It is expensive to advertise in a magazine and circulation is also small compared to the paper.
6. **Radio Advertisement:** They have gained greater popularity these days. Advertisements are broadcast from the transmitting stations of the commercial services of AIR Radio. Advertisements carry an effective appeal and cover numerous listeners of different tastes. It reaches the illiterate people who can't read. It is suitable for the promotion of mass scale consumer goods. Detailed message can't be broadcast over the radio. Since it is not visual, people may not remember the message.
7. **Television advertisement:** Television advertisement has greater effectiveness as the message is conveyed at the homes of the people. Commercials may be given during that time period when the prospective buyers watch the television programmes.
8. **Film advertisement:** Films are an important medium of advertisement. It involves high cost. Small business firms get cinema slides prepared for display in the cinema halls. It is very effective as it combines spoken words and visual presentation of pictures.
9. **Direct mail advertising:** It is probably the most personal and selective of all advertising media. It is used to send the message directly to the customers.
10. **Outdoor advertising:** It includes the use of poster displays, bill board displays and electric displays. They can't carry long message as posters, hoardings etc. are read by people at a glance. It has a low retention power as people don't devote special time to read these messages.
11. **Vehicular Display:** The space outside and inside the buses, railway carriages and other vans may be hired by the business men to spread their messages. It is not very expensive system and is flexible also.
12. **Window display:** Goods can be exhibited in artistically laid out windows at some special points or at important centers like railway station and bus stops.

**5. What do you understand by market? Discuss market classification in details. Elaborate market segmentation and segmentation process in detail?**

**Ans.** Market is the center in which certain business activities are undertaken to direct the flow of goods and services from the producer to the consumer or user.

### *Classification of Market*

**Market can be classified in different ways**

- A. According to geographical area

- B. On the basis of the position of sellers
- C. On the basis of the volume of business transacted
- D. On the basis of the nature of transaction
- E. From the standpoint of buyer's and seller's ability to dictate terms
- F. On the basis of goods transacted
- G. From economic standpoint of view
- H. On the basis of time
- I. On the basis of goods
- J. On the basis of regulation

A market consists of large number of individual customers who differ in terms of their needs, preferences and buying capacity. Therefore, it becomes necessary to divide the total market into different segments or homogeneous customer groups. Such division is called market segmentation. They may have uniformity in employment patterns, educational qualifications, economic status, preferences, etc. Market segmentation enables the entrepreneur to match his marketing efforts to the requirements of the target market. Instead of wasting his efforts in trying to sell to all types of customers, a small scale unit can focus its efforts on the segment most appropriate to its market.

Market segmentation is the act of subdividing the market into a group or groups of people who have similar needs within the group, but dissimilar needs across the groups. An example would be people wanting cars, but different types of cars. The different types of cars may be luxury, sports, or SUV's.

There are three ways in which a marketer can segment the market. He may use one, two, or all of these. This will depend on the product and industry. These three types of segmentation include:

**Benefit Segmentation** - Benefit segmentation is the subdivision of the market based on benefits the consumer hopes to derive from using the product. Products that were launched based on these variables include the "100 Calorie Twinkie" and many lifestyle drugs like diet pills and hair growth products.

**Usage Segmentation** - This is the subdivision of the market based on how often a consumer uses the product. They will be categorized into those who do not use the product, those who use it a little, and those who are considered heavy users.

**Behavioral Segmentation** - This is the segmentation of users based on on various personality and behavioral traits.

**A market can be segmented on the basis of the following variables:**

1. Geographic Segmentation: The characteristics of customers often differ across nations, states, regions cities or neighborhoods. The entrepreneur can decide to operate in one or a few or all the geographic areas, but pay attention to differences in geographic needs and preferences.
2. Demographic Segmentation: Variables such as age, sex, family size, income, occupation, education, religion, race and nationality are widely used for market segmentation.



3. Psychological variables: Personality, life style, social class, etc. can also be used for market segmentation. For example, some products like pens, watches, cosmetics and briefcases are designed differently for common men and status seekers.
4. Behavioural Segmentation: Buyers are divided into groups on the basis of their knowledge, attitude, use or response to a product.

#### **Reasons for market segmentation**

- i. Target market
- ii. Market understanding
- iii. Marketing mix
- iv. Competitive positioning
- v. New opportunities
- vi. More offering

#### **Steps involved in market segmentation**

1. **Define the market:** Clearly define the market of interest.
2. **Create market segments:** Determine what types of different consumers from that overall market. Different variables like behavioral, demographic etc.
3. **Evaluate the proposed market segments for viability:**
  - a. Evaluate to ensure that they are usable and logical.
  - b. Set evaluation criteria and assess them: If segment don't appear to meet the evaluation criteria then step 2 is repeated with other variables.
4. **Construct segment profiles:** To understand and describe the segment.
5. **Evaluate the attractiveness of each segment:** In terms of
  - a. Financial issues
  - b. Structural attractiveness
  - c. Strategic direction
6. **Select target market:** According to results or assessment select target market.
7. **Develop positioning strategy**
8. **Develop and implement marketing mix**
9. **Review performance**

#### **6. Define production management. Add a note on importance of production planning and control.**

**Ans.** Production management comprises of two words: 'Production' and 'Management'. Production means creation of utility or is the transformation of raw materials by factory methods into finished goods wanted by society. Management in the context of production means planning and organizing the production process and effective utilization of production facilities. Production management is a process of decision-making regarding production. It includes production, planning, acquisition of production resources, directing, regulating and controlling of production process. The main object of production management is to produce goods and services at a possible minimum cost of a good quality and with a simple and fine method, with a view of increase the profit.

#### **Importance of Production Management**

- (a) Customer services
- (b) Unilateral material flow

- (c) Optimum inventory level
- (d) Increased productivity
- (e) Production and employment stabilities.

Production manager perform the following functions:

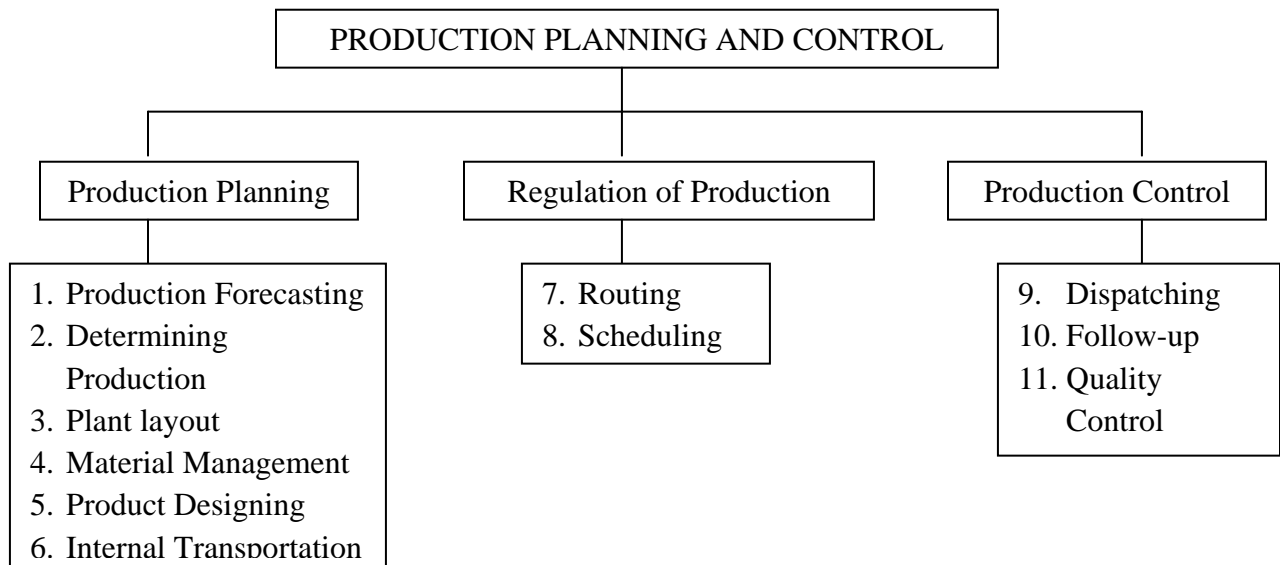
- (a). **Production Planning:** It is an inaugaratory activity and is the soul of the production management. It involves projection of sales, determination of production resources, quantity, quality and determination of standards of production, labor force, raw material requirement, inventory management etc.
- (b). **Regulation and control of production:** It involves-routing, scheduling, dispatching work orders and instructions follow up, quality control, cost control and budgetary control etc.
- (c). **Other functions:** Method analysis, inventory control etc.

**Production Planning and Control**

The word ‘production planning and control’ is a combination of two terms: production planning and production control. Production planning comprises the planning of production process such as routing, scheduling, and dispatching and follow up function. Production planning provide management with the information necessary to plan and schedule work in the plant so that the minimum expense and optimum efficiency can be achieved. The word production control refers to ensuring the work according to plan.

**Elements of production planning and control**

The PPC can be scientifically sub-divided into three parts:



**7. Write a short note (any two)**

- a) **Market research**

**Ans.** Market research is the process of systematic gathering, recording and analyzing information data about problem related to the marketing of goods and services.

### **Objectives of marketing research**

1. To facilitate decision making process
2. To reduce the risk associated with the process of decision making
3. To help firms in discovering opportunities which can be profitably exploited
4. To know the persons buying habits
5. To find out the impact of promotional efforts
6. To know customer response to a new product
7. To forecast sale
8. To study the goodwill of the firm in comparison with the competitive firms.

**Marketing research process involves the following step in sequence.**

1. Situation analysis
2. Preliminary investigation
3. Research design
4. Sources of data  
    Primary or secondary data
5. Data analysis
6. Report preparation
7. Follow-up recommendation

### **Applications of Marketing Research**

1. Sales and Market Analysis
2. Product Research
3. Business Economics and Corporate Research
4. Advertising Research
5. Consumer Behavior Research

### **b) New product development**

**Ans. new product development (NPD)** is the complete process of bringing a new product to market. A product is a set of benefits offered for exchange and can be tangible (that is, something physical you can touch) or intangible (like a service, experience, or belief). There are two parallel paths involved in the NPD process: one involves the idea generation, product design and detail engineering; the other involves market research and marketing analysis.

#### ***1. Idea Generation is often called the "NPD" of the NPD process***

- Ideas for new products can be obtained from basic research using a SWOT analysis (Strengths, Weaknesses, Opportunities & Threats). Market and consumer trends, company's R&D department, competitors, focus groups, employees, salespeople, corporate spies, trade shows, or ethnographic discovery methods (searching for user patterns and habits) may also be used to get an insight into new product lines or product features.

- Lots of ideas are generated about the new product. Out of these ideas many are implemented. The ideas are generated in many forms. Many reasons are responsible for generation of an idea.
- Idea Generation or Brainstorming of new product, service, or store concepts - idea generation techniques can begin when you have done your OPPORTUNITY ANALYSIS to support your ideas in the **Idea Screening Phase** (shown in the next development step).

## 2. Idea Screening

- The object is to eliminate unsound concepts prior to devoting resources to them.
- The screeners should ask several questions:

Will the customer in the target market benefit from the product?

What is the size and growth forecasts of the market segment / target market?

What is the current or expected competitive pressure for the product idea?

What are the industry sales and market trends the product idea is based on?

Is it technically feasible to manufacture the product?

Will the product be profitable when manufactured and delivered to the customer at the target price?

## 3. Concept Development and Testing

- Develop the marketing and engineering details

Investigate intellectual property issues and search patent databases

Who is the target market and who is the decision maker in the purchasing process?

What product features must the product incorporate?

What benefits will the product provide?

How will consumers react to the product?

How will the product be produced most cost effectively?

Prove feasibility through virtual computer aided rendering and rapid prototyping

What will it cost to produce it?

- Testing the Concept by asking a number of prospective customers what they think of the idea - usually via Choice Modeling.

## 4. Business Analysis

- Estimate likely selling price based upon competition and customer feedback
- Estimate sales volume based upon size of market
- Estimate profitability

## 5. Beta Testing and Market Testing

- Produce a physical prototype or mock-up
- Test the product (and its packaging) in typical usage situations
- Conduct focus group customer interviews or introduce at trade show
- Make adjustments where necessary

- Produce an initial run of the product and sell it in a test market area to determine customer acceptance

## 6. **Technical Implementation**

- New program initiation
- Finalize Quality management system
- Resource estimation
- Requirement publication
- Publish technical communications such as data sheets
- Engineering operations planning
- Department scheduling
- Supplier collaboration
- Logistics plan
- Resource plan publication
- Program review and monitoring
- Contingencies - what-if planning

## 7. **Commercialization** (often considered post-NPD)

- Launch the product
- Produce and place advertisements and other promotions
- Fill the distribution pipeline with product
- Critical path analysis is most useful at this stage

## 8. **New Product Pricing**

- Impact of new product on the entire product portfolio
- Value Analysis (internal & external)
- Competition and alternative competitive technologies
- Differing value segments (price, value and need)
- Product Costs (fixed & variable)
- Forecast of unit volumes, revenue, and profit

## 13. **Transportation and storage of drugs**

**Ans.** For many medicinal products, storage and transportation temperatures are a highly significant factor in maintaining the quality of medicinal products throughout the distribution network. The distribution chain is seldom simple and distribution systems can vary enormously. In its simplest form, the chain involves shipment direct from the manufacturer to the customer or end user but, in reality, the chain is rarely this short. In its more complex form, the distribution chain may involve a number of storage and transit locations, including airports, docks, and a variety of methods of transport, including aircraft.

Special storage conditions for active substances should be based on results from stability studies. The storage conditions for medicinal products should also be based on the results of the stability studies undertaken on the finished product. Stability testing is necessary to ensure the product is of acceptable quality throughout its entire storage period. In order to do this, it is necessary to monitor compliance of the product with a suitable

quality specification throughout the shelf life. The shelf life is defined by ICH as ‘the time period during which a drug product is expected to remain within approved shelf-life specification, provided that it is stored under the conditions defined on the container label.

The following are examples of specific storage statements that are declared on the label of a medicinal product:

- Do not store above 25°C/Do not store above 30°C
- Store below 25°C/Store below 30°C
- Store in a refrigerator (2°C – 8°C)
- Store and transport refrigerated (2°C – 8°C)
- Store in a freezer (temperature range)\*
- Do not refrigerate/Do not freeze

(\*Freezer storage temperatures may vary from 0°C to -20°C or below -20°C)

Products should be stored according to conditions described on the label