

## WHAT IS ECONOMICS

Economics is a social science that studies the economic behavior of people and economic phenomena. Economic behavior is essentially a conscious effort of the people to derive maximum gains from the use of scarce resources and opportunities available to them. It is fundamentally the study of how people allocate their limited resources to their alternative uses to produce and consume goods and services to satisfy their endless wants or to maximize their gains.

In an effort to maximize their gains from the limited resources, people (individuals, households, firms, government) as producers and consumers have to make a number of choices regarding the use of their resources and spending their earnings. The need for making choices arises due to following basic facts of economic life:

- *Human wants are unlimited*
- *Resources available to satisfy human wants are scarce*
- *People want to maximise their gains.*

Human wants, desire and needs are endless in the sense that they go on increasing with increase in people's ability to satisfy them. Human wants continue to increase without meeting their end because

- (i) People have insatiable desire to raise their standard of living, comforts and efficiency;
- (ii) Human tendency is to accumulate things beyond their present need;
- (iii) Human wants increase with increase in knowledge, inventions and innovations;
- (iv) Satisfying one want (e.g., buying a car) creates want for many other things (e.g., petrol, driver, parking place, safety locks, spare parts, insurance, etc.);
- (v) The moment one want is satisfied, other wants come up from nowhere;
- (vi) Biological needs (e.g., food, water, etc.) are repetitive;; and
- (vii) In modern times, advertisements influence consumer's taste and preferences and create new kind of wants.

The end of wants for an individual comes only with the end of his/her life. But, human wants continue to increase. Another and an equally important feature of human wants is that they are not equally urgent and equally important. Satisfying some wants gives more pleasure than others. Therefore, gain maximising consumers have to make a choice between wants.

Economics also provides logic and reasoning, tools and technique, and analytical framework to analyse economic phenomena and to predict the consequences of change in economic conditions. It may, thus, be concluded that economics as a science studies economic behaviour of the people and its consequences; it brings out cause-and-effect relationships between economic events; provides the tools and techniques of analysing economic phenomena and the tools and techniques for predicting the consequences of economic decisions and economic events. Economics studies economic phenomena systemically and methodically. This approach to economic inquiry imparts economics the status of a 'social science'.

The mainstream economics is divided into two major branches, In brief, *microeconomics* studies the economic phenomena at micro level, i.e., at the individual level, and **macroeconomics** studies them at national aggregate level. *Microeconomics* studies how consumers and producers make their choices; how their decision and choices affect the demand and supply conditions; how consumers and producers interact to settle the prices of goods and services in the market; how prices are determined in different market settings; and how total output is distributed among those who contribute to production, i.e., between landlords, labor, capital supplier, and the entrepreneurs.

*Macroeconomics*, on the other hand, studies the working and performance of the economy as a whole. It analyses behaviour of the national aggregates including national income, aggregate consumption, savings, investment, total employment, the general price level and country's balance of payments. Macroeconomics analyses how these aggregate variables interact with one another, how they are determined and how they determine the aggregate national output. An important aspect of macroeconomics studies is the consequences of international trade and other economic relations between the nations. The inclusion of these aspects of economic phenomena constitutes the major themes of *macroeconomics*.

### 1.3 What is microeconomics?

As mentioned above, *microeconomics* is, fundamentally, the study of how individuals and firms find solution to the problem of maximising their gains from their limited resources. To maximise their gains, the individuals have to make a number of choices between the endless wants and alternative uses of their resources. Microeconomics studies how individuals make their choices, how their choices determine 'what to produce', 'how to produce', 'for whom to produce' and what price to charge. Microeconomics is the study of decision-making behavior at the *micro* level. It makes a microscopic study of the various elements of an economic system, not the system as a whole. From analysis point of view, decision-makers are classified broadly as consumers, producers and resource owners. Microeconomics studies economic behavior of consumers, producers and factor owners at their individual level individual consumer, individual producer, and individual resource owner. A consumer may be an individual or an individual household. An individual producer may be an individual entrepreneur or a corporate firm. A resource owner may be a worker and an investor (the capital owner).

A systematic study of choice-making behaviour of consumers and producers (individuals, households, firms and government), allocation of resources (land, labor and capital) between goods and services that are produced and consumed and determination of their prices make the **central theme of microeconomics**. The individuals and households as consumers make choices between various goods and services they want to consume. The study of consumer behavior makes the *theory of consumer behavior*, *theory of consumption* and *theory of supply* combined together form the *theory of price determination* or *theory of price*. The study of the behavior of factor owners (labor and capital owners) makes the *theory of distribution or the theory of factor-price determination*. They study of these economic theories and their application to real life conditions, constitute the subject matter of modern microeconomics.

### 1.4 Microeconomics: a positive or a normative science?

Before we answer the question whether microeconomics is a positive or a normative science, let us know what a positive science is and what a normative science is.

According to J.N. Keynes, “..... a positive science is a body of systematized knowledge concerning what is while and normative or regulatory science is a body of systematized knowledge relating to criteria of what ought to be and is concerned therefore with ideal as distinguished from actual.”

Friedman has defined’ positive science; more elaborately and clearly. In his words, “The ultimate goal of a positive science is the development of a ‘theory’ or ‘hypothesis’ the yields valid and meaningful predictions about phenomena not yet observed.”

Judged against these definitions, economics as a social science deals with both positive and normative economic questions: ‘What is’ and ‘what ought to be’. Thus, microeconomics is both a positive and a normative science. The positive and normative aspects of economic studies are described below.

#### **1.4.1 Microeconomics as a Positive Science**

*Microeconomics as a positive science* seeks to analyze and explain economic phenomena as they are. It seeks to answer the questions ‘what is’, ‘Why it is’ and ‘what will be ...’. For example, what is the trend in the prices of matooke in Masaka? What will be the demand for matooke if prices go up? These are questions of positive nature. Microeconomics explains the economic behavior of individual decision-makers under given condition; their response to change in economic conditions; and brings out the relationship between the change in economic conditions and economic decision of the people. In fact, *the main function of microeconomics is to establish cause-and-effect relationship, if there is any, between two or more economic events at micro level and to provide the basis for prediction.* Emphasizing the positive character of economics, Friedman says, “Economics as a positive science is a body of tentatively accepted generalizations about economic phenomena that can be used to predict the consequences of change in circumstance.” What Friedman said about economics is more true about microeconomics. One of the main tasks of microeconomics is ‘to provide a system of generalisations’ or microeconomic theories capable of being used to predict economic phenomena at micro level. This makes microeconomics a positive science. Here, the word ‘positive’ does not mean that theoretical statements are positively true: it means that it has a great possibility to occur if conditions are fulfilled.

#### **1.4.2 Microeconomics as a Normative Science**

Microeconomics as a normative science deals also with the normative question ‘what ought to be’ ‘What is’ or ‘what happens in the market’ may not be desirable or in the interest of the society. For example, production and sale of harmful goods like alcohol and cigarettes may be a very profitable business. But, ‘Is production and sale of these goods desirable for the society? Is a normative question – a question in public interest. Microeconomics as a social science examines this question from the angle of social desirability of production and sale of such goods. It examines the social costs and benefits or production and sale of goods like alcohol and cigarettes and prescribes the control and regulatory measures.

Consider another microeconomic problem. Given the growth of population and supply of houses in Kampala, house rents if not controlled, will increase and has, in fact, increased exorbitantly. ‘Should house rents be allowed to increase depending on the market demand and supply conditions or be controlled and regulated to protect the interest of tenants?’ is a normative question – a question in public interest. Micro economics as normative science examines the

issue in the interest of both landlords and the tenants and prescribes the reasonable rate of house rents and measures to implement it.

Microeconomics, as a *normative science*, involves *value judgement* on 'what is good' and 'what is bad' for the society. The values are drawn from the moral, ethical, social and political aspirations of the society. Since microeconomics prescribes methods to correct undesirable economic happenings, it is also called a *prescriptive science*.

## **REVIEW QUESTION AND EXERCISES**

1. The origin of economics lies in endless human wants and scarcity of resources. Elaborate.
2. "Scarcity of resources is the mother of all economic problems." Discuss with examples.
3. Why can't you buy anything you want? What is your main consideration in deciding what to buy and what not to?
4. What is microeconomics? Is microeconomics a positive or a normative science? Give arguments for your answer.
5. What is scientific method of investigation? What are the steps that are generally followed in scientific study of economic problems? Use a suitable example to answer this question.

## **CHAPTER TWO THE ECONOMY AND ITS WORKING**

### **2.0 Introduction**

In Chapter 1, we have discussed the nature, scope and methods of microeconomics. We have noted that microeconomics is the study of economic behaviour of human beings in their individual capacity. People do not carry out their economic activities in isolation. They are a part of a social system and their economic activities are a part of an economic system.

In an economic system, economic activities of various economic agents – individuals, households, firms, etc. – are interrelated and interdependent. Therefore, economic behaviour of the people is determined and governed largely by their economic environment and the economic system in which they operate. Therefore, it is useful to have an idea of the functioning of the economic system and its basic problems. In this chapter, we will briefly describe the functioning of a simplified economic system, the basic problems of an economy and how the problems are solved by the price mechanism. Finally, we will discuss the production possibilities of an economy.

### **2.1 Learning Outcomes**

#### **2.2 What is an Economy?**

According to McEachern, (2003) an economy is “The structure of economic life or economic activity in a Country, region, group of countries or the world.”, Lipsey, (1995) defines an economy as “Any specified collection of interrelated marketed and non marketed productive activities”, it can also be defined as a social organism through which people make their living. It is constituted of all the individuals, households, farms, firms, factories, banks and government who act and interact to produce and consume goods and services.

Individuals and households put their resources (land, labour, capital and skill) to one or more of their alternative uses and make their living. Firms buy or hire factors of production and organise them in the process of production; produce goods and services; and sell them to their users to make profits. Traders and shopkeepers’ works as intermediaries between the producers and consumers to make their living, financial institutions, e.g., commercial banks, and other financial institutions and mutual funds, collect savings from the households and firms and provide it to their prospective users. Transport companies transport goods from one place to another and so on. In the process, all those who contribute to these services make their living. The system often works smoothly even if nobody controls and regulates these activities. Consumers are able to get goods and services they want; producers are able to produce goods and services they can sell; factors of production are able to find employment, and so on. The system is operated in an orderly manner by what Adam Smith called, ‘invisible hands,’ that is, the market forces of demand and supply.

Government is an important element in the modern economy. it taxes people’s income and hires factors of production and producers certain goods and services for the people. In addition, it intervenes with the purpose of achieving certain social and economic goals. The level of intervention and participation of the government in overall economic activities of the people

determines whether economy is a **capitalist** or **free enterprise economy**, a **socialist** or **command economy** or a **mixed economy**. In a free enterprise economy, government intervention in the form of control and regulation of economic activities of the people is minimal, it is total and all pervasive in a command economy, also known as communist economy and it is partial in a mixed economy

### 2.3 The Five Fundamental Questions in Economics

The need for ensuring efficiency in production of goods and services and their efficient distributions among the consumers arises due to (I) scarcity of resources; (ii) ever growing human wants; and (iii) desire to maximize gains. The problems that arise in ensuring efficiency in production and distribution of goods and services are expressed in the following questions

- **What to produce?** The problem ‘what to produce’ is the problem of choice between commodities. This problem arises mainly for the reason that scarcity of resources does not permit production of all the goods and services that people would like to consume; it is essentially the problem of efficient allocation of scarce resources so that the *output is maximum* and *the output-mix is optimum*. The objective is to satisfy the maximum needs of maximum number of people.
- **How to produce?** The problem ‘how to produce’ is the problem of choice of technique. Here the problem is how to determine an optimum combination of in puts – labor and capital – to be used in the production of goods or services. This is because the limited resources and technology set a limit to how much of any good or service that can be produced.
- **For whom to produce?** i.e. the target market. The problem ‘for whom to produce’ is the problem of marching the production pattern with the demand pattern, so that those who have the ability and willingness to pay, get the commodity. Demand pattern is determined by the pattern of choices and preferences and income distribution.
- **Where to produce?** This is a problem of location, Depending on what the business/ industry is producing, different factors like proximity to raw materials, markets, electricity have to be considered
- **When to produce?** this question looks at times and seasons, e.g. success and Christmas cards have to be produced at specific times of the year, for agricultural products, there are planting and harvesting seasons e. t. c

### 2.4 Scarcity, Choice and Opportunity Cost

Since human wants are unlimited, and the means to satisfy them are limited, every society is faced with the twin problems of scarcity and choice and hence, opportunity cost.

Resources can be classified as

- (i) natural resources (including land, space, water, minerals, forest climate, jointly called land);
- (ii) human resources including man-power, its energy, talent, professional skills, and innovative ability and organizational skills, jointly called labor);

- (iii) Man-made resources (including machinery, equipments, tools, technology and building, jointly called capital). To this economists add another category of resource called entrepreneurship, i.e., those who organize the resources and assume risk in business. Time and information are two other kinds of resources which have economic value.

All these resources available to a person, society, country – however rich – at any point of time are limited.

***Resource scarcity is a relative term; it implies that resources are scarce in relation to the demand for them.*** The scarcity of resources is, in fact, the mother of all economic problems.

If resources were unlimited, like human wants, there would be no economic problem and no economics.

### **Choice**

***It is the scarcity of resources in relations to human wants which forces people to make choices.***

Furthermore, the problem of choice arises also because resources have alternative uses and alternative uses have different returns or earnings. For example, if the resources used to set up a super market yield more income than when used to build houses for rent, gain maximising resource owners have to make choices between the alternative uses of scarce resources. Economics as a social science analyses how people (individuals and society) make their choices between the economic goals they want to achieve, between the goods and services they want to produce and between the alternative uses of their resources with the objective of maximising their gains.

### **Opportunity cost**

The gain maximisers will have to evaluate the cost and benefit of alternative options in making their choices. Once a choice is made, the alternative foregone is known as the opportunity cost

## **2.5 The Production Possibility Frontier (PPF)**

As noted above, societies cannot have all that they want because resources are scarce and technology is given. In reality, however, both human and non-human resources available to a country keep increasing over time and technology becoming more and more productive. Availability of human resources increases due to a natural process of increase in population, and non-human resources (especially capital goods and raw materials) increase due to creative nature of human beings. non human resources have been increasing due to human efforts to create more and better of capital goods to discover new kinds and sources of raw materials, and to create a new and more efficient technique of production. Such factors change production possibilities and production possibility frontier of an economy.

The concepts of scarcity, choice and opportunity cost can be represented using the PPF. The PPF is a curve that shows all possible combinations of two goods that can be produced within a specified period of time when all resources are fully and efficiently employed.

### **Assumptions**

- A country's resources consists of only labor and capital;
- Availability of labor and capital is given;
- The country produces only two goods; and
- Production technology for the goods is given.

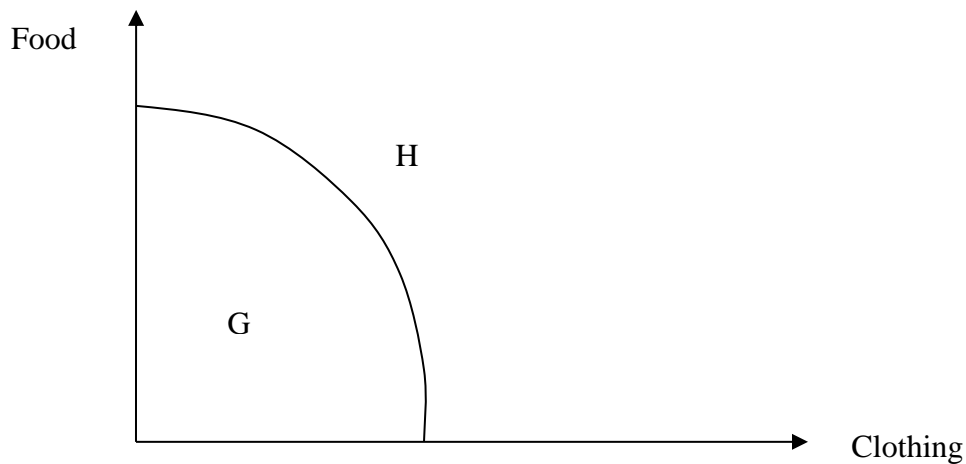
- The economy's resources are fully employed

**Production Possibilities Frontier** refers to a locus of points showing alternative combinations of two commodities that a society is capable of producing with its given resources and state of technology

For example, let us suppose that, given the availability of labor, capital, and technology, the alternative production possibilities open to the country are given in the table below, the Production possibilities can be presented in the form of a diagram as shown in Fig. 2.1.

	Food(tons)	Clothing(meters)
A	7	0
B	6	33
C	5	48
D	4	60
C	5	48
D	4	60

**Figure 2.1**



In this diagram, vertical axis measures food production and horizontal axis measures production of clothing. By graphing the alternative production possibilities given in, we locate points A B, C, D and F as shown in Fig. 2.1. A number of intermediate points can be located between any two of these points. By joining these points, we get a curve AF. This curve is called Production Possibility Frontier (PPF). Each point on the PPF shows a different combination of two goods. For example, *production possibility frontier AF* shows that if the country choose point A, it can produce 7 thousand tons of food and no clothing, point B shows a combination of 6 thousand tons of food and 33 million meters of clothing and point C shows a combination of 5 thousand tons of food and 48 million meters of clothing and so on. The combination of food and clothing that society chooses to produce on the PPF depends on the demand for food and clothing.



**Implications of points away from PPF.** The production possibility frontier shows that alternative combinations of the two goods under the conditions that all the resources (labour and capital) are fully employed. Any point below the PPF, e.g., point G, implies **under-utilisation or unemployment** of resources. Point H is unattainable for lack of resources i.e. due to scarcity. The scarcity of resources does not permit production of any combination of food and clothing indicated by a point outside the PPF.

**The opportunity costs.** Apart from showing the possible alternative combination of two goods, production possibilities frontier indicates also the opportunity cost of one commodity in terms of the other. In the present context, “The opportunity cost of an increase in the output of some product is the value of the other goods and services that must be foregone when inputs (resources) are taken away from production in order to increase the output of the product in question”. In our example, opportunity cost of food production is the quantity of clothing foregone to produce a certain quantity of food, and vice versa. A movement from point A to point B shows decrease in food production from 7 thousand tons to 6 thousand tons and increase in the production of clothing from 0 million meters to 33 million meters. It implies that 1 thousand tons of food can be produced only by sacrificing 33 million meters of clothing.

### **2.5.1 Increasing opportunity cost and concavity of PPF**

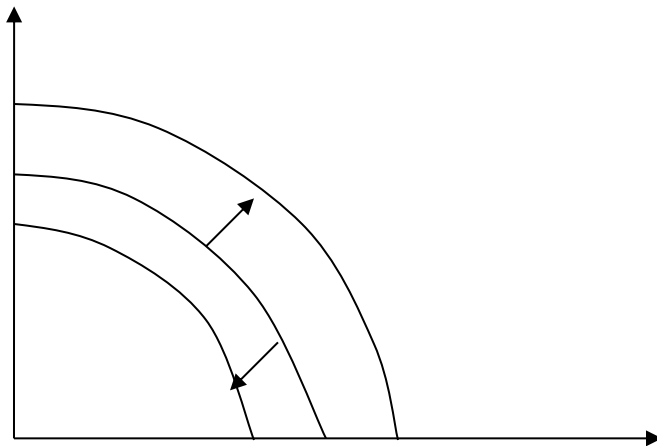
The production possibility frontier reveals another important fact that opportunity cost changes along the PPF. In Fig. 2.1, movement from point A downwards to points B, C, D, E and F shows increasing opportunity cost of clothing in terms of lost output of food. For example, movement from points A and B, means transferring resources (labor and capital) from foods production to clothing production. As a result, food production is lost by 1 thousand tons for 33 million meters of clothing. It means that the opportunity cost 33 million meters of clothing is 1 thousand tons of food. A further movement from point B to C means that the opportunity cost of only 15 million meters of clothing, a much lower quantity, is the same one thousand tons of food. It means that opportunity cost of clothing increases as we move downwards along the PPF. It increases further between points C and D. Similarly, movement from point F towards point A, shows increasing opportunity cost of food production in terms of clothing.

**Why is PPF concave?** It can be seen from the diagram that the PPF takes the form of concave curve. The PPF derives its concavity from the fact that opportunity cost increases along the PPF. The movement from point A towards point F implies transfer of resources from food production to production of clothing. As more and more resources are employed to produce clothing, marginal productivity of resources in terms of clothing goes on diminishing. The result is increase in the opportunity cost

### **2.5.2 Shift in Production Possibility Frontier**

The production possibilities frontier is not fixed for all times. In general, it keeps shifting upwards for reasons such as: (i) expansion of resources, i.e., increase in the availability of resources and (ii) technological improvements. The effects of resource expansion and technological improvements on the PPF is explained and illustrated below. An outward shift in the PPF represents Economic growth while an inward shift represents a decline in the economy

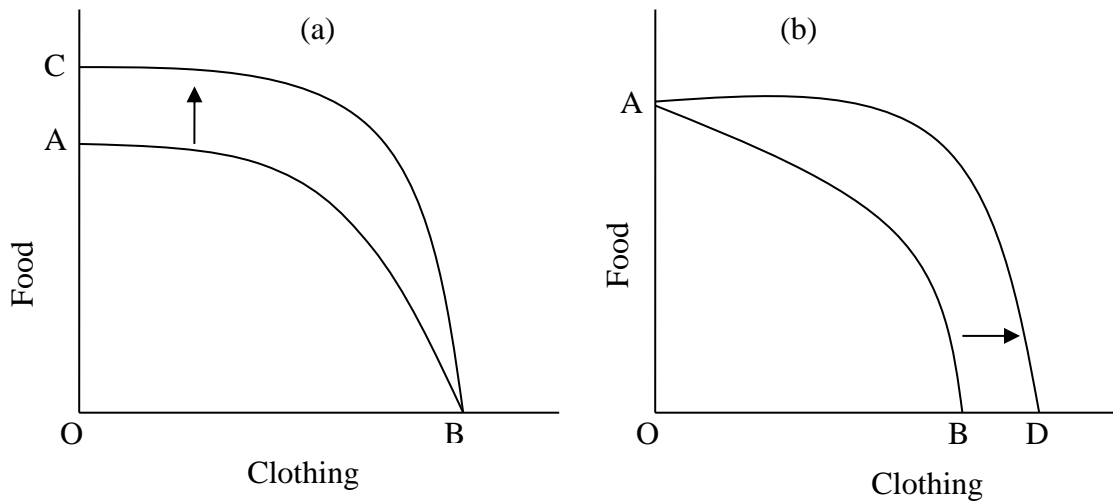
Diagram



**Biased and unbiased shifts of the PPF**

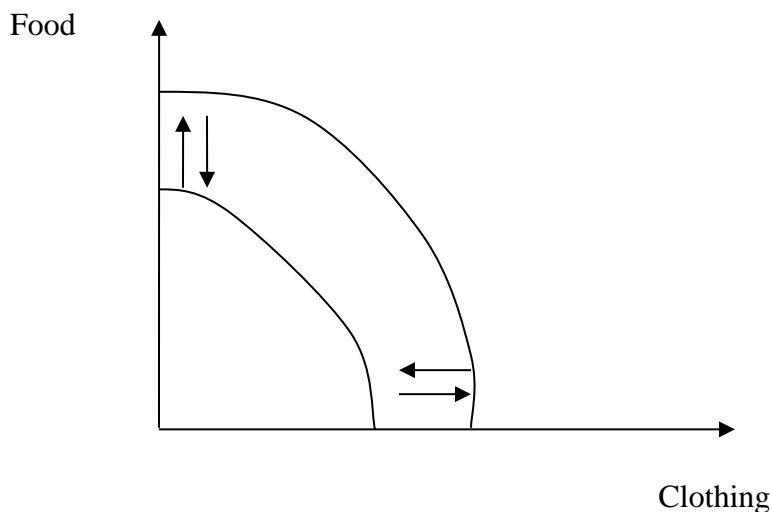
A *biased shift* if one where due to an increase in the resources used to produce one of the products production increases only in that product but not the second product causing the PPF to move outward only on one side as shown below. (a decrease in resources e.g. exhaustion causes an inward shift in the PPF)

Diagram



**Unbiased shift**

Is when due to for e.g. An improvement in technology the PPF moves outward i.e. there is an increase in the production of both products as shown below.



## 2.6 Economic systems

An economy is a social organism through which people make their living. It is constituted of all the individuals, households, farms, firms, factories, banks and government who act and interact to produce and consumer goods and services. An economic system is an interaction of economic units in mobilization and allocation resource in the economy.

### Review Questions

1. How will you define an economic system? What are the various constituents of the economic system? How do they act and react?
2. Scarcity is the mother of all kinds of economic problems. Do you agree with this statement? Give reasons for your answer.
3. Define opportunity costs. why does opportunity cost increase along the production possibility frontier? Explain with an appropriate example. Suppose a country produced only two goods – cars and computers. When some of the resources are transferred from car production to computer production, car output decreases by 1000 units and computer output increases by 50,000 units. Find the per unit opportunity cost of car production.
4. What are the factors that make production possibility frontier upwards? Illustrate and explain an upward shift in the production possibility frontier caused by (a) increase in the supply of resources, technology remaining the same; (b) technological improvements, resource remaining the same
5. What of the following statements is NOT correct?
  - (a) Scarcity is the cause of all economic problems;
  - (b) Market mechanism can solve all economic problems;
  - (c) Consumer is sovereign in a socialist economy;
  - (d) Opportunity cost equals cost of production;

6. Do you agree with the following statements? Give reason for your answer.
- (i) Government is an important element of modern economies
  - (ii) Production possibilities frontier shows the combination of two goods, which cannot be produced.
  - (iii) Production possibilities frontiers can shift upwards without increase in resources.
  - (iv) The basic economic problems that to produce and how to produce is the problem of only poor countries.