#### Central Problems & Solutions of an Economy, Production Possibility Curve & Opportunity Cost

#### **1 Mark Questions**

### 1. Unemployment is reduced due the measures taken by the government. State its economic value in the context of Production Possibilities Frontier. (Delhi 2014)

**Ans.** When government taken measures to reduce the unemployment it enables the economy to utilise its existing resources in the optimum manner and moves from inside the PPC to points on the PPC. Hence, economic value is reflected in terms of increased output arid income.

# 2. Large number of technical training institutions have been started by the government. State its economic value in the context of Production Possibilities Frontier. (Foreign 2014)

**Ans.** The technical training institutions will help increase the efficiency of the labour force, leading to optimum utilisation of resource. Economy will move from a point below PPC towards a point on PPC.

Economic value reflected is in terms of increased productivity.

### 3. Take the economic value achieved through the spread of education in the context Of production potential. (Compartment 2014)

**Ans**. Government's endeavours to spread education will lead to an increase in the quality of the work force. The production potential of country would also increase. Economic value reflected is in terms of providing better quality work force.

#### 4.Define Production Possibility Curve (PPC). (All India 2010,2009)

**Ans.** It is a curve which shows various production possibilities with the help of given limited resources and technology. It is also known as Production Possibility Frontier and transformation curve.

#### 5. Why does an economic problem arise? (Delhi 2009,2007)

**Ans.** An economic problem arises due to relative scarcity of resources having alternative use and unlimited human wants.

### 6.Give the meaning of opportunity cost. (AN India 2009; Delhi 2009c, 2008, 2007,2006)

Ans. Opportunity cost for a commodity is the amount of other commodity that has been

foregone in order to produce the first or in other words, it is the cost of the next best (second best) opportunity foregone.

#### 7. Give two reasons for the problem of choice. (AN India 2007)

Ans. Two reasons for the problem of choice are as follows:

- (i) Resources are scarce.
- (ii) Resources have alternative uses.

### 8. What does the rightward shift of Production Possibility Curve indicate? (Delhi 2007)

**Ans.** The rightward shift of Production Possibility Curve indicates the increase in the resources or improvement in the technology of production of the economy, which expands production of both the goods.

#### 9. What does the problem for whom to produce refer to? (All India 2007)

**Ans**. This is essentially the problem of distribution of income between (i) the different groups of the society

(ii) now and in future.

#### **3 Marks Questions**

#### 10. Explain the central problem for whom to produce. (Delhi 2014)

**Ans**. Under this problem, the decision is to be taken for whom we should produce commodities for the rich or for the poor. All goods and services cannot be produced for everyone. If we produce for the rich, who have capacity to buy, then poor people will suffer from starvation.

On the other hand, if we produce for the poor for the sake of social justice, then we will have to consider, do they have resources to buy?

#### 11. Why does the problem of what to produce arise? Explain. (Compartment 2014)

**Ans.** Problem of 'what to produce' arises as the economy has limited resources.. Because of scarcity city of resources, producers are unable to produce everything in desired quantity, but they will have to make a choice as to which one is important as a whole, so that limited resources can be rationally managed.

Problem of 'what to produce' involved two fold decisions; kinds of goods to be produced and quantity of goods to be produced.

## 12. Define Production Possibility Curve (PPC). Explain, why it is downward sloping from left to right? (Foreign 2014; All India 2012; Delhi 2006C)

**Ans.** It is a curve which shows various production possibilities with the help of given limited resources and technology. It is also known as Production Possibility Frontier and transformation curve.

It is downward sloping from left to right because in a situation of fuller utilisation of the given resources, production of both the goods cannot be increased together. More of good X can be produced only with less of good Y as resources are scarce.

Because of this inverse relationship between production of both the goods, PPC is downward sloping.

### 13. What is opportunity cost? Explain with the help of a numerical example. (Delhi 2012; All India 2012)

**Ans.** Opportunity cost for a commodity is the amount of other commodity that has been foregone in order to produce the first or in other words, it is the cost of the next best (second best) opportunity foregone.

For example If Mr. W has three jobs to select from. Job A is available at 6,000 per month, Job B with 7,000 per month and Job C with 8,000 per month. If Mr W chooses Job C, then, in this case opportunity cost would be 7,000 per month.

### 14. Explain the central problem of 'how to produce'. (All India 2010; Delhi 2011c) or

### Explain the problem of 'how to produce' (All India 2010,2008; Delhi 2008C,2006) or Explain the central problem of choice of techniques'. (Delhi 2008)

**Ans**. It is concerning with, how to organise production. This problem is related to the choice of technique of production. It arises due to the availability of various techniques for the production of a commodity such as labour intensive technique and capital intensive technique.

### 15.Why is a Production Possibility Curve (PPC) concave? Explain. (Odhi 2011; All India 2009)

**Ans.** Production Possibility Curve (PPC) is concave to the origin because marginal opportunity cost of shifting resources from commodity Y to commodity X tends to rise. Marginal opportunity cost tends to rise because the factors of production are not perfect substitute of each other. So when one factor is shifted from the production of one good to another, then its productivity falls, causing marginal opportunity cost to rise.

### 16.How does Production Possibility Curve (PPC) is affected by unemployment in the economy? Explain. (All India 2011)

**Ans.** Production Possibility Curve (PPC) will not shift due to unemployment in an economy. Due to unemployment in the economy, labour is under utilised (or less than fully employed). As a result, actual output is less than the potential output. Economy operates from a point below PPC.

### 17.Explain the central problem of distribution of income. (All India 2011,2009,2008; Delhi 2008)

**Ans**. The problem for whom to produce is the problem of distribution of income. It is a problem concerning the distribution of goods and services among factors of production and individuals in an economy. This problem has two aspects:

(i) Distribution of income between the different factors of production,

(ii) Distribution of income in present as well as in future.

#### 18. Explain properties of Production Possibility Curve (PPC). (Delhi 2010c)

Ans. Productiion Possibility Curve (PPC) has two basic properties that are as follows:

(i) PPC is downward sloping Downward slope of PPC indicates that if the country wants to produce more of one good, it has to reduce the production of other good.

(ii) PPC is concave to origin Concave shape of PPC means that slope of PPC increases as in this concept production will obey the law of increasing opportunity costs or increasing Marginal Rate of Substitution.

### 19.Explain the central problem of the choice of products to be produced, (Delhi 2010,2009.2008.2008C, 2006; All India 2006)

**Ans.** Problem of 'what to produce' arises as the producers have limited resources. In an economy because of scarcity of resources, producers are unable to produce everything in desired quantity but they will have to make a choice as to which one is important on the whole, so that limited resources can be rationally managed. Problem of 'what to produce' involves two fold decisions, kinds of goods to be produced and quantity of goods to be produced

### 20.What is Marginal Rate of Transformation? Explain With the help of an example (Delhi2010)

**Ans**.It is the ratio of number of units of good 'Y sacrificed to produce an additional unit of good 'X'. Marginal Rate of Transformation of a particular good along PPC is the amount of a particular good which is sacrificed to increase the production of the other good by one unit. It is also called marginal opportunity cost.

#### γ For example,

Production of X	Production of Y	$MRT\left(\frac{\Delta Y}{\Delta X}\right)$
0	10000	Q. a <del>−</del> a a
- 1 °	9000	1000 : 1
2	7500	1500 : 1
3	5500	2000:1

Marginal Rate of Transformation (MRT) =  $\frac{\text{Unit of One Good Sacrificed}}{\text{More Units of Other Good Produced}} = \frac{\Delta Y}{\Delta X}$ 

21.State reasons, why does an economic problem arise? (Delhi 2009) or Why do problems relating to allocation of resources in an economy arise? Explain. (HOTS; All India 2009)

or

State three reasons which give rise to an economic problem. (Delhi 2009c) or

Why does an economic problem arise? (Delhi 2006)

Ans. The reasons behind an economic problem are as follows:

(i) Scarce resources

(ii) Alternative uses of resources

(iii) Wants are unlimited and recurring in nature

Due to the above three factors, the problem of decision-making or problem of choice arises in the economy which is also termed as central problem or economic problem.

#### **4 Marks Questions**

#### 22. Production in an economy is below its potential due to unemployment. Government starts employment generation schemes. Explain its effect using Production Possibility Curve.

**Ans**. When the economy is below its potential due to unemployment the economy operates inside the PPC. When the government starts employment generation scheme, it enables the economy to utilise its existing resources in an optimum manner. The idle resources will now get utilised and the economy functions at its maximum capacity and moves from inside the PPC to points on the PPC.

Thus, economy moves from point 'a' inside the PPC to any point on PPC as shown in the diagram.



### 23.With the help of suitable example, explain the problem of 'for whom to produce'. (All India 2013)

**Ans.** This is essentially the problem of distribution of income between (a) the different groups of the society and (b) in present and in future. As to income distribution between the different groups with in a society an economy has to find ways and means to get a distribution that promotes social welfare at present and on the other hand do not compromise the need of the future generation#) e.g. if we produce for the poor for the sake of social justice, then we will have to consider, whether they can buy it or not.

### 24.Explain the meaning of opportunity cost with the help of production possibility Schedule. (All India 2013)

**Ans**. Opportunity cost for a commodity is the amount of other commodity that has been foregone in order to produce the first or in other words, it is the cost of the next best (second best) opportunity foregone

<b>.</b>	Production Possibility Schedule			
, –	Wheat (kg) Y	Cloth (metre) X	Marginal Opportunity Cost $(\Delta Y / \Delta X)$	
2 9 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	100 90	0	 10/25 = 0.4	
	70 AT 2 1	50	20/25 = 0.8	
	40	75	30/25 = 1.2	
	10	85	30/10 = 3	
di je t	0	87	10/2 = 5	

Marginal Opportunity Cost = Unit of One Good Scarificied More Units of Other Good Produced

#### 25.Draw a Production Possibility Curve. What does a point below this curve indicate? Explain. (HOTS; AH India 2006)

**Ans**. It is a curve which shows various production possibilities with the help of given limited resources and technology. It is also known as production possibility frontier and transformation curve.



In the given figure, PP' shows the Production .Possibility Curve. Any point inside Production Possibility Curve (like point R) corresponds to under utilisation of resources or inefficient utilisation of resources.