Value Based and Higher Order Thinking Skills (HOTS) Questions (With Answers)

Unit 1: Introduction

Q1. Unemployment is reduced due to the measures taken by the government. State its economic value in the context of production possibilities frontier. *(Delhi 2014)*

Ans. When unemployments is reduced or employment is raised then production will increase. PPC will shift outwards, country's *GDP* will rise.

Q2. 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. Its economic value is that production potential of the country will rise. PPC will shift outwards.

Q3. Explain the shape of the production possibility frontier. *(Sample Paper 2009)*

Ans. **Shape of *PPC*:** *PPC* is downward sloping concave to the origin.

(a) **PPC is downward sloping.** The downward slope of *PPC* means that if the country wants to produce more of one good, it has to produce less of the other good.

(b) **PPC is concave to the point of origin.** Concave shape of *PPC* implies that slope of *PPC* increases. Slope of *PPC* is defined as the quantity of good *Y* given up in exchange for additional unit of good *X*.

$$\left[\begin{array}{l}\text{Slope of Production}\\\text{Possibility Curve}\end{array}\right] = \frac{\Delta Y}{\Delta X} = \frac{\text{Amount of Good } Y \text{ lost}}{\text{Amount of Good } X \text{ gained}}$$

[Slope of *PPC*] = MRT = [Marginal Opportunity Cost]

Slope of *PPC* increases because of the following two reasons:

(a) **Specific use of resources.** That is, resources are not equally suited for the production of both the goods: and

(b) There is a difference in the proportions in which the factors are used in the production of both the goods.

Q4. Why is production possibility curve called opportunity cost curve?

Ans. *PPC* is also called opportunity cost curve because slope of the curve at each and every point measures opportunity cost of one commodity in terms of alternative commodity given up. The rate of this sacrifice is called the Marginal Opportunity Cost of the expanding good.

Q5. What shape will *PPC* take when marginal rate of transformation is decreasing?

Ans. If marginal opportunity cost or *MRT* values were decreasing, *PPC* will be convex to the origin.

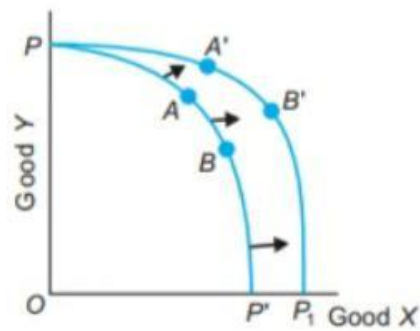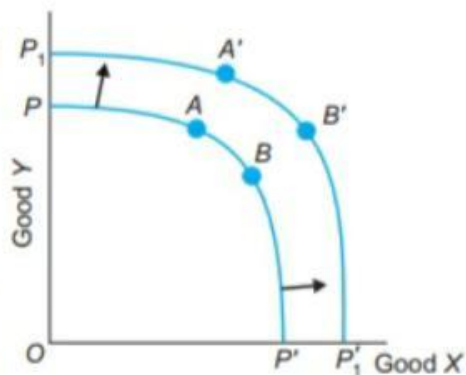Decreasing Marginal Opportunity Cost
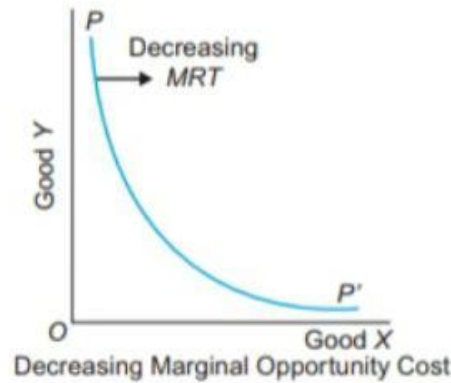
Q6. Explain the effect of economic growth on *PPC*?

Ans. With discovery of new stock of resources or an advancement in technology, the productive capacity of an economy increases. The economy can produce more good X or more good Y or more of both goods. The effect of economic growth on the production possibility curve to a country is illustrated in Fig. below

In Fig. there is an outward shift of the production possibility curve from PP' to P_1P_1'. It shows economic growth of an economy. Economic growth has shifted the production possibility curve outwards and made it possible for an economy to produce more of both the goods. The economy has not stagnated but has developed over a period of time. In a reverse situation, if due to earthquake and floods mass destruction takes place then the country will stagnate. The *PPC* curve will shift inwards.

In the Fig. below improvement in technology takes place only in one good, good X. There is no improvement in the technology of producing good Y. Thus, **more of good X** can be produced. Production possibility curve PP' expands to PP_1, showing economic growth.
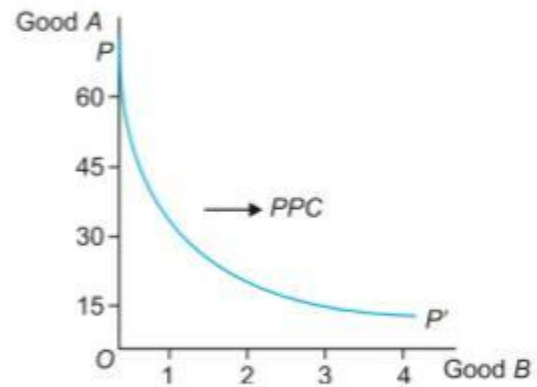

Q7. Calculate Marginal opportunity cost from the following table. What will be the shape of *PPC* and why?

Good A	Good B
60	0
35	1
20	2
10	3
5	4

Ans. Marginal opportunity cost of the expanding good B

$$= \frac{\text{Amt. of good } A \text{ given up}}{\text{Amt. of good } B \text{ gained}}$$

Good A	Good B	Marginal Opportunity Cost
60	0	—
35	1	25 A : 1B
20	2	15 A : 1B
10	3	10 A : 1B
5	4	5 A : 1B

Good A will be plotted on the y-axis because it is the good sacrificed and good B will be plotted on the x-axis because it is the good gained. *PPC* will be convex to the origin because its slope, called Marginal opportunity cost, is declining.