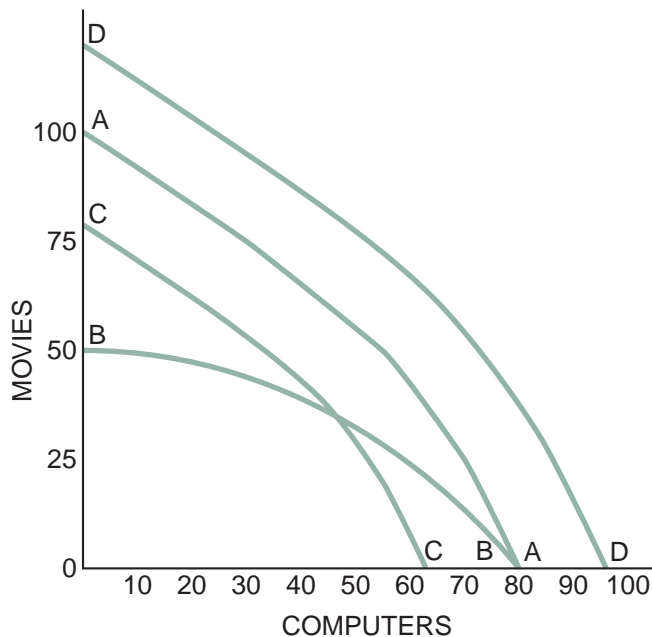


Answers to Sample Long Free-Response Questions

- Every society has the fundamental problem of scarcity.
 - What is scarcity? *Scarcity exists because there are limited resources to fulfill unlimited wants.*
 - What three questions must every society answer because of scarcity? *What to produce and how much of each good or service to produce, how to produce, and for whom to produce*
 - What are the three ways societies have dealt with the scarcity problem? *Tradition, command and market*
 - Give one example of how each way is used in the United States. *Answers will vary.*
- Hightechland produces two commodities: movies and computers. Hightechland's resources include workers, factories, electricity and so on. The following schedule indicates some of the points on Hightechland's production possibilities curve.

Commodity	A	B	C	D	E
Movies	100	75	50	25	0
Computers	0	30	55	70	80

- Does movie production exhibit increasing, decreasing or constant per-unit opportunity costs? How do you know? *Movie production indicates increasing per-unit opportunity costs. As more movies are produced, increasingly more computers must be sacrificed.*
- Graph Hightechland's production possibilities curve, and label it AA.

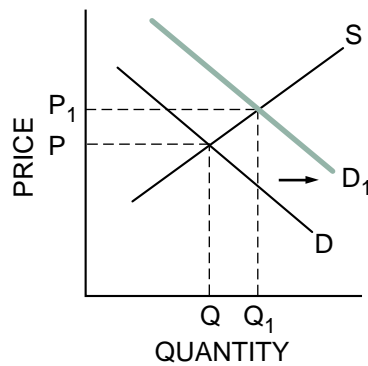


- (C) Suppose Hightechland is operating at Point C but would like to alter production to Point D. What would be the per-unit opportunity cost of producing more computers? ***With a move from Point C to Point D, the per-unit opportunity cost of producing one additional computer is $1\frac{2}{3}$ movies.***
- (D) Suppose Hightechland is operating at Point C but would like to alter production to Point B. What would be the per-unit opportunity cost of producing more movies? ***The per-unit opportunity cost of producing one more movie as we alter the production from Point C to Point B is one computer.***
- (E) What will happen to Hightechland's production possibilities curve if many of its movie sets are destroyed by fire? (Assume that the sets are not used in the production of computers.) Using the same graph you drew for Question 2(B), draw Hightechland's new production possibilities curve and label it BB. ***The point on the axis will shift inward for the movie production, but the point on the axis corresponding to computer production will not change.***
- (F) What will happen to Hightechland's production possibilities curve if all the country's resources are reduced (perhaps by natural disaster or war)? Using the same graph as in Question 2(B), draw Hightechland's new production possibilities curve and label it CC. ***Shift the production possibilities curve to the left or inward.***
- (G) What will happen to Hightechland's production possibilities curve if technology improves both the production of movies and the production of computers? Using the same graph as in Question 2(B), draw Hightechland's new production possibilities curve and label it DD. ***Shift the production possibilities curve to the right or outward.***

3. The market for many commodities is seasonal in nature. Their sales (equilibrium quantity) increase dramatically during certain times of the year. Christmas cards and fresh strawberries, at least in the North, are two examples. Christmas card sales increase during the last three months of the year, and the sales of fresh strawberries in the North increase during the summer months. But the (equilibrium) price movement of these two commodities is quite different during their peak sales season: Christmas cards increase in price during the last three months of the year, whereas strawberries decrease in price during the summer.

- (A) Show on the graph below how there can be an increase in the equilibrium quantity and an increase in the equilibrium price of Christmas cards during the last three months of the year, and briefly explain what has happened.

Christmas Card Market

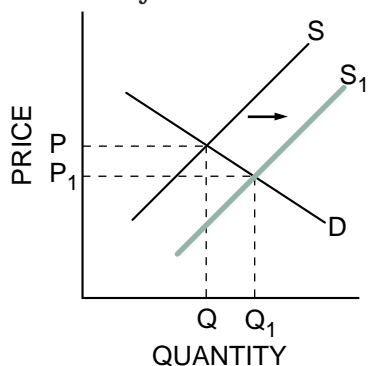


With other things constant, there is an increase in the demand for Christmas cards in the last three months of the year. This causes a rightward shift of demand and causes the price and quantity sold to increase.

- (B) Change the graph below for fresh strawberries in the North to show how there can be an increase in the equilibrium quantity and a decrease in the equilibrium price of strawberries in the summer, and briefly explain what has happened.

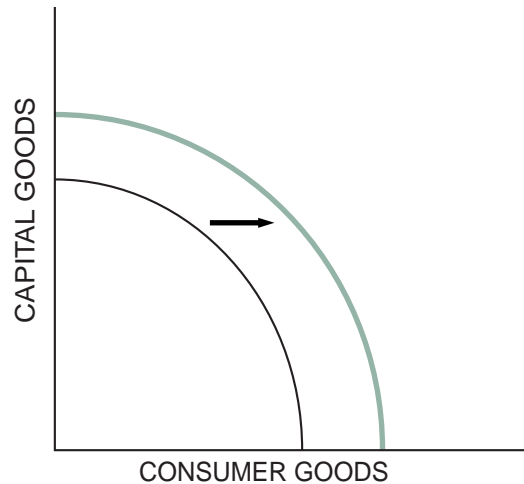
Other things constant, there is an increase in the supply for fresh strawberries in the northern areas of the United States in the warmer months when the berries are harvested in the northern areas. This causes a rightward shift in the supply curve and causes the price to fall and the quantity sold to increase.

Strawberry Market in the North



4. Explain how each of the following may affect the production possibilities curve of the United States or the point at which the economy is operating. Draw a production possibilities curve; put “Capital Goods” on the vertical axis and “Consumer Goods” on the horizontal axis. Now, add a PPC curve or point to the graph to illustrate each scenario.

- (A) The Congress and the president decide to provide more funding for higher education with more students attending college and graduating. **More education increases human capital, a resource, and moves the curve outward.**



- (B) New advances in medicine allow for a healthier lifestyle. **Better medicine improves human capital, a resource, and moves the curve outward.**



- (C) The United States agrees to be a part of a world-trade agreement that will foster international trade. **International trade increases output because of the law of comparative advantage and moves the curve outward.**



- (D) The unemployment rate increases in the economy from 4.2 percent to 5.1 percent of the labor force. **The increase in the unemployment rate results in underemployed resources, which is illustrated by a point inside the curve. The resources (workers) are still available but are not being employed.**



- (E) Computer viruses are out of control, and efficiency and output in the economy fall. **The computer viruses take computers out of commission, which shifts the curve inward.**

