

CHAPTER ONE

DEMAND AND SUPPLY

Objectives

By the end of the topic, the learner should be able to:

- (a) Explain the meaning of demand.
- (b) Explain the factors which influence demand for a product.
- (c) Distinguish between derived demand and joint demand.
- (d) Derive a demand curve from a demand schedule.
- (e) Distinguish between movement along a demand curve and shift in the demand curve.
- (f) Explain the meaning of supply.
- (g) Explain the factors which influence the supply of a product.
- (h) Derive a supply curve from a supply schedule.
- (i) Distinguish between movement along a supply curve and shift in the supply curve.
- (j) Determine equilibrium price and quantity.
- (k) Discuss the effects of excess demand and excess supply in the market.
- (l) Explain the effects of a shift in a demand curve on the equilibrium price and quantity.
- (m) Explain the effect of shift in supply curve on the equilibrium price and quantity.
- (n) Explain other methods of determining the price of a product.

Contents

1. Meaning of Demand

The teacher should clearly explain demand as the quantities that buyers are willing and are able to buy at a given price, over a given period of time. It should be stressed that demand does not exist if both willingness and ability are not there.

2. Factors Which Influence Demand for a Product

The teacher may lead the learners in discussing the factors that affect demand for goods and services. These include:

- (a) Price of the commodity. ✓
- (b) Level of consumers' incomes.
- (c) Prices of other related products.
- (d) Changes in tastes, fashions and preferences of consumers.
- (e) Government policy. ✓
- (f) Changes in population.
- (g) Future expectation of changes in prices and quantities supplied.
- (h) Seasonal changes.
- (i) Distribution of incomes.
- (j) Availability of favourable terms of sale.

Appropriate examples should be given in each case (refer to the Students' Book).

3. Derived Demand and Joint Demand

Through the use of appropriate examples, the teacher should explain the term "derived demand" as demand for a product arising from the demand for another product. He/she should also explain the term "joint demand" as demand that exists for goods and services that are consumed together.

4. Demand Schedule and Demand Curve

Through appropriate examples, the teacher should clearly explain the term "demand schedule" as a table that shows the quantities of a commodity that are demanded at various prices over a given period of time. The teacher should also explain the "demand curve" as a graph of quantities demanded against the prices. He/she may lead the learners in preparing demand curves from given demand schedules as shown in the Students Book Page 5, 6, 7 and 8.

5. Movement Along and Shift in a Demand Curve

The teacher may involve the learners in discussing movement along the demand curve. He/she should emphasise that, in normal circumstances, the quantities demanded increase with a decrease in prices and decrease with increases in prices, as can be read from the graph in the Students Book. The teacher should also explain the term "shift in demand curve" as movement of demand curve to a completely different position.

6. Meaning of Supply

The teacher should clearly explain the meaning of the term "supply" as the quantities of a commodity that producers are willing and are able to bring to the market for sale at a given price, over a given period of time. The teacher should emphasise ability, willingness, prices and time frame as concepts which are necessary in the definition of supply.

7. Factors that Influence Supply of a Product

The teacher may use local examples to lead the learners in discussing factors that influence supply of a product. These include:

- (a) Price of the commodity.
- (b) Cost of production.
- (c) Availability of inputs.
- (d) Prices of other related products.
- (e) State of technology.
- (f) Government policy.
- (g) Future expectation of changes in price.
- (h) Natural factors.
- (i) Time.
- (j) Entry of new firms into the industry.
- (k) Incidence of strikes.

8. Supply Schedule and Supply Curve

The teacher should clearly explain the term "supply schedule". This is a table showing the quantities supplied at various prices over a given period of time. He/she should also explain the term "supply curve" which is a graph showing the relationship of quantities supplied and prices over a given period of time. The teacher may lead the learners in preparing supply curves from given supply schedules. He/she should emphasise that, under normal circumstances, the supply curve slopes upwards from left to right.

9. Movement Along a Supply Curve and Shift in the Supply Curve

The teacher may involve the learners in discussing the movement along a supply curve. He/she should emphasise that, in normal circumstances the quantities supplied increase with the increase in prices of the commodity and decrease with the decrease in prices. The teacher should also explain the term “shift in supply curve” as a change in position of a supply curve to a different position as detailed in Student Book Page 15 and 16.

10. Equilibrium Price and Quantity

The teacher should clearly explain the term “equilibrium price” as the price at which the quantity demanded is equal to the quantity supplied. Conversely the “equilibrium quantity supplied” as the quantity that prevails at the equilibrium price. He/she may involve the learners in determining the equilibrium price and equilibrium quantity using demand and supply schedules or curves as explained in the Student Book Page 18.

11. Excess Demand and Excess Supply

By the use of relevant examples or curves, the teacher should explain the terms “excess demand” and “excess supply” as:

- (a) Excess demand — the quantities demanded in excess of what the suppliers are able to supply.
- (b) Excess supply — the quantities supplied in excess of what consumers are prepared to buy.

12. Effects of Shift in Demand Curve on the Equilibrium Price and Quantity

Through appropriate illustrations, the teacher should explain the effects of a shift in the demand curve on the equilibrium price and quantity generally as:

- (a) Shift in the demand curve to the right would increase the equilibrium price and also the equilibrium quantity.
- (b) Shift in the demand curve to the left would decrease the equilibrium price and equilibrium quantity.

13. Effects of Shift in Supply Curve on the Equilibrium Price and Quantity

Using appropriate diagrams, the teacher should explain the effect of shift in supply curve on equilibrium price and quantity as:

- (a) Shift in supply curve to the right decreases the equilibrium price and increases the equilibrium quantity.
- (b) Shift in supply curve to the left increases the equilibrium price and lowers the equilibrium quantity.

14. Other Methods of Determining Price of a Product.

The teacher should involve the students in discussing other methods of determining price of a product which include:

- (a) Government intervention.
- (b) Haggling (bargaining).
- (c) Auction.
- (d) Tendering

Suggested Teaching/Learning Activities

- (a) Learners to research prices of a commodity during high and low seasons.

- (b) Learners to develop hypothetical demand and supply schedules and prepare their results curves.
- (c) Participation by learners during the development of the lesson.

Suggested Teaching/Learning Resources

- (a) Relevant textbooks.
- (b) Chalkboard.
- (c) Charts.
- (d) Immediate environment.

Evaluation

- (a) Tests and quizzes.
- (b) Oral questions.
- (c) Exercises.

Answers to Exercise 1A

1. Desire refers to a feeling of wanting something without considering whether one has the ability to acquire it or not. On the other hand, for demand to exist, there must be willingness and also the ability to acquire the commodity.
2. Factors that may influence an individual's demand for a commodity are:
 - (a) Price of a commodity.
 - (b) Prices of other related commodities.
 - (c) Levels of his/her income.
 - (d) Tastes, fashions and preferences.
 - (e) Government policy.
 - (f) Future expectation of changes in prices or quantities supplied.
 - (g) Seasonal changes.
3. Complimentary goods are goods that are consumed together, e.g., shoes and shoe polish while substitute goods are goods that can be used instead of each other, e.g., tea and coffee.
4. Factors that determine the supply of coffee are:
 - (a) Price of coffee.
 - (b) Prices of other related commodities.
 - (c) Costs of production.
 - (d) Availability of inputs.
 - (e) State of technology.
 - (f) Government policy.
 - (g) Future expectation of changes in prices.
 - (h) Natural factors.
 - (i) Time.
 - (j) Entry of new firms into or withdrawal of some firms from the industry.
5. Derived demand is demand for a commodity that arises from demand for another different commodity. eg demand for hens may arise from demand for eggs.
Joint demand is demand for commodities that are consumed jointly, e.g., tea and sugar.
6. Factors that may cause a shift in the supply curve:
 - (a) *Cost of production*: If the cost of factors of production increases, the selling price of the commodity will go up with the effect that demand for the commodity will decrease. Suppliers will hence reduce their supply to avoid excess supply in the market. With

the increased cost of production, some producers will be forced out of business thereby reducing the supply. The reduction in supply will shift the supply curve to the left. An increase in the cost of production will shift the supply curve to the left. A decrease in the cost of production will shift the supply curve to the right.

- (b) *Availability of inputs:* Unavailability of inputs will reduce the supply of a commodity with the effect that the supply curve shifts to the left (contracts).
- (c) *Prices of other related products:* The supply of a commodity will increase if the supply of a commodity jointly produced with it increases. This will result into a shift of the supply curve to the right.

Similarly, the supply of a commodity will increase if the supply of a substitute decreases and vice versa.

- (d) *State of technology:* Improvement in technology will increase the supply of a commodity with the effect that its supply curve shifts to the right.
- (e) *Government policy:* The government may cause a shift in the supply curve of a commodity to the left through taxation and quotas. It may cause a shift to the right through subsidies and financial assistance to producers.
- (f) *Future expectation of changes in price:* When producers expect the price to rise in future, they hoard what they have currently, with the result that supply decreases, resulting into a shift in supply curve to the left. On the other hand, if they expect the prices to decrease in future, they tend to release all what they have currently with the result that supply increases. This shifts the supply curve to the right in the long run.
- (g) *Natural factors:* Natural factors such as weather, diseases, pests may cause an increase or a decrease in supply of a commodity depending on how the production of the commodity is affected. An increase will cause a shift in supply curve to the right while a decrease will cause a shift in the supply curve to the left.
- (h) *Time:* Expansion in production capacity for most commodities takes time such that it becomes possible to increase supply after some time. This would mean that the supply curve would shift to the right in the long run.

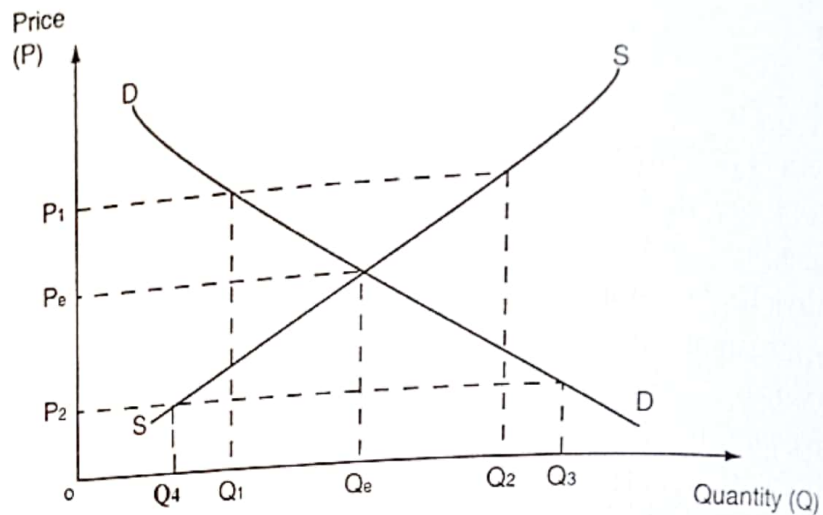
7. Ways of determining price of a commodity:

- (a) Price mechanism.
- (b) Haggling/bargaining.
- (c) Auction.
- (d) Tendering.
- (e) Price controls.

8. Movement along the supply curve involves reading of prices against different quantities supplied along the same supply curve. Shift in supply curve means movement of a supply curve to a completely new position.

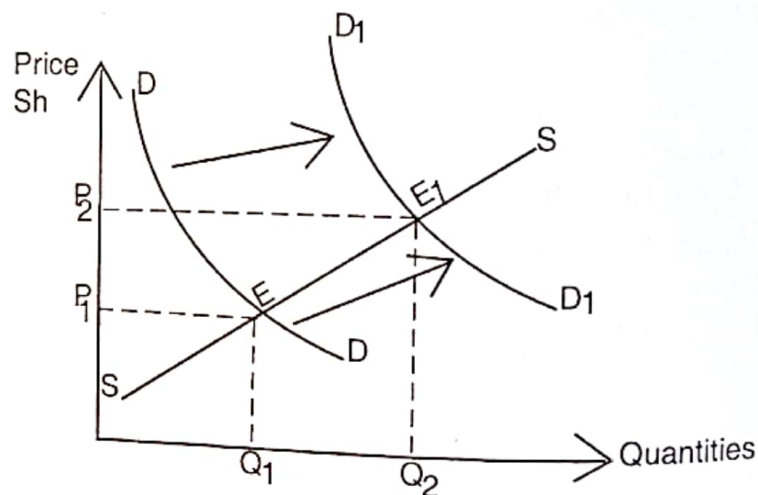
Answers to Exercise 1B

- 1. Determination of price of a commodity in a free market situation is done by the interplay of demand and supply (price mechanism) as illustrated in diagram below.

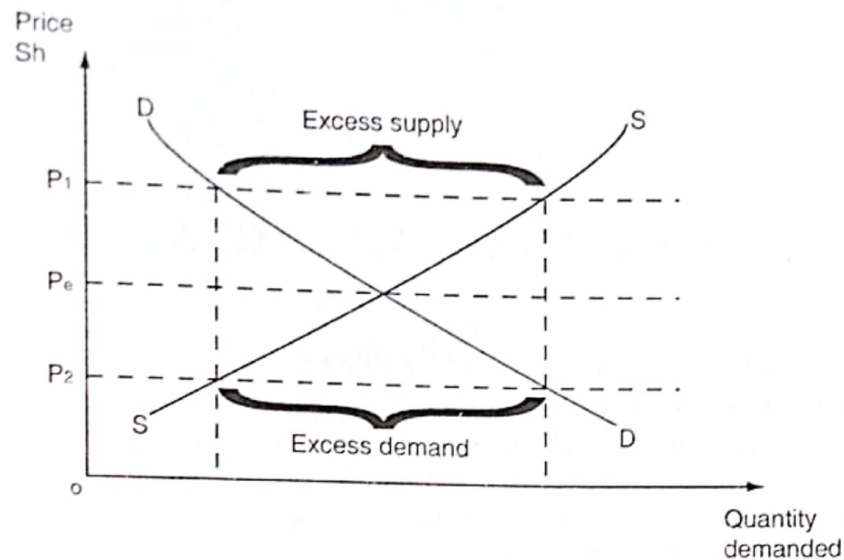


When the price is fixed at P_1 the quantities demanded will be Q_1 while the quantities supplied will be Q_2 . There will hence be an excess supply of $(Q_2 - Q_1)$. Suppliers will be forced to reduce their price in order to sell the surplus. On the other hand, if the price is fixed at P_2 , demand will be Q_3 while the supply is Q_4 resulting to an excess demand of $(Q_3 - Q_4)$. Consumers will then be forced to raise their prices in order to attract more supply. At the equilibrium, both the sellers and buyers are satisfied.

2. Effects on the equilibrium point following an increase in demand under normal situations:



The equilibrium point changes from E to E_1 along the supply curve. Thus, the equilibrium price changes from P_1 to P_2 and the equilibrium quantity increases from Q_1 to Q_2 .



When price is fixed at point P_1 there would be excess supply as indicated. When price is fixed at point P_2 there would be excess demand as indicated (see Students' Book page 18).

3. Ways through which the government may influence price of a commodity:
 - (a) Taxation – Price will go up with an increase in tax and will go down with a decrease in tax.
 - (b) Subsidies – Price will decrease where the government has given subsidies. It will increase if subsidies are withdrawn.
 - (c) Price controls – The government may fix the price of a commodity beyond which the commodity should not be sold.