THE PRICE PUZZLE: WHAT DRIVES THE MARKET

Class 09 - Social Science (Understanding Society)

Time Allowed: 1 hour and 27 minutes **Maximum Marks: 145**

1. When does a 'shortage' typically occur as a result of a price ceiling? **[1]**

   a) When the government sets a price ceiling above the market equilibrium price.

   b) When production costs unexpectedly decrease, leading to lower market prices.

   c) When the quantity supplied exceeds the quantity demanded at a specified price.

   d) When the quantity demanded surpasses the quantity supplied at the ceiling price.

2. Which concept describes the situation where buyers desire more of a good than sellers are willing to provide at a particular price? **[1]**

   a) A supply shift

   b) A market shortage

   c) An equilibrium point

   d) A market surplus

3. Demand for which type of good tends to show a small fall in quantity demanded even when its price rises significantly? **[1]**

   a) Necessity goods

   b) Substitute goods

   c) Luxury goods

   d) Perishable goods

4. Which factor most accurately reflects the impact of expectations on the market? **[1]**

   a) Expectations affect only the long-term trends, not short-term market behavior.

   b) Expectations primarily impact seasonal price fluctuations.

   c) Expectations can influence both consumer demand and producer supply.

   d) Expectations only influence the supply side of the market.

5. Which characteristic best defines a 'necessity' in economic terms? **[1]**

   a) A good that people can easily stop using if its price increases.

   b) A good that has many readily available substitute products.

   c) A good that is always very expensive and exclusive.

   d) A good considered essential for maintaining basic living standards.

6. What is the primary objective of implementing a price ceiling? **[1]**

   a) To promote international trade and reduce import tariffs.

   b) To encourage increased production of a specific commodity.

   c) To ensure producers receive a guaranteed minimum income for their goods.

   d) To safeguard consumers from excessively high market prices.

USP

7. Which of the following scenarios describes a price ceiling operating effectively below the equilibrium price? **[1]**

a) A new subsidy causes the retail price of energy to drop significantly below its previous level.

b) The market price for a certain fruit is determined to be ₹120 per kilogram, and a new regulation caps it at ₹100 per kilogram.

c) A voluntary agreement among businesses leads to a reduction in the price of their services.

d) A government sets a maximum vehicle price at a level higher than the current market price.

8. A situation where individuals can benefit from a good or service without contributing to its cost is known as which of the following? **[1]**

a) Price discrimination

b) Free-riding

c) Information asymmetry

d) Market efficiency

9. Under what condition does a price ceiling have a strong effect on the market? **[1]**

a) When it is set below the equilibrium price.

b) When it is set at the equilibrium price.

c) When it is set above the equilibrium price.

d) When it applies to non-essential goods.

10. Which of the following describes the substitution effect? **[1]**

a) Consumers buy more of a product when their income increases.

b) Producers supply more of a good when its price increases.

c) People switch to a similar, cheaper product when the price of one product rises.

d) People feel as if their money buys less when a product becomes more expensive.

11. Which of the following factors causes a shift in the entire demand curve to the right? **[1]**

a) A decrease in the number of potential buyers in the market.

b) A technological advancement in the manufacturing process.

c) A significant increase in the production costs for the item.

d) A rise in consumer income for a normal good.

12. How do sellers of perishable goods often behave near the end of the day to avoid waste? **[1]**

a) They store the goods for sale the next day at a higher price.

b) They reduce prices to sell them before they spoil.

c) They offer discounts on future purchases to loyal customers.

d) They increase prices to compensate for potential losses.

13. What is market failure? **[1]**

a) A situation where prices always perfectly reflect the true costs and benefits.

USP

b) A decline in overall market activity.

c) The efficient allocation of resources by market forces.

d) Market does not allocate resources efficiently.

14. When the price of a basic food item rises, why might consumers not significantly reduce their consumption? **[1]**

a) Because such items are considered necessities with few substitutes.

b) Because basic food items are typically luxury goods.

c) Because sellers always offer large discounts on these goods.

d) Because consumers expect prices to fall dramatically very soon.

15. If consumers expect prices to rise soon, how might their current demand be affected? **[1]**

a) Their current demand will remain unchanged.

b) They will switch to substitute goods, lowering demand for the original product.

c) Their current demand will decrease as they wait for lower prices.

d) Their current demand will increase as they buy more now.

16. A rise in the price of an advanced gaming console leads to a substantial drop in sales. What does this suggest about the gaming console? **[1]**

a) It behaves more like a luxury good.

b) Its supply is artificially restricted by producers.

c) It is a perishable good with limited shelf life.

d) It is likely a necessity product.

USP

17. What is a defining characteristic of luxury goods in terms of buyer response to price changes? **[1]**

a) Buyers maintain consistent consumption regardless of price.

b) Their demand fall is usually small when prices increase.

c) Buyers can often reduce buying more easily when prices rise.

d) They typically have very few substitute choices.

18. If consumers anticipate a major technological device will be discounted next month, what is the most probable impact on its current demand? **[1]**

a) Current demand will remain constant, unaffected by future expectations.

b) Current demand will probably decrease as purchases are delayed.

c) Current demand will switch to expensive, premium alternatives.

d) Current demand will likely increase significantly.

19. Which situation explicitly describes information asymmetry? **[1]**

a) Market prices are fully transparent and reflect all available data.

b) Government regulations disseminate all critical information uniformly.

c) All participants in a transaction possess identical and complete knowledge.

d) One party in a transaction has superior or more extensive knowledge than the other.

20. What is the immediate consequence when a price ceiling is set below the equilibrium price? **[1]**

a) An increase in quantity supplied
b) A shortage
c) A reduction in consumer demand.
d) An abundance of goods

21. Match the items in List I with those in List II. **[1]**

List I	List II
(A) Market failure cause: pollution	(I) Overproduction relative to socially efficient level
(B) Market failure cause: vaccination	(II) Under-provision relative to socially desirable level
(C) Price ceiling effect: landlords	(III) Might spend less on property maintenance
(D) Price ceiling effect: product quality	(IV) Decline in quality instead of price increase

a) A-IV, B-III, C-II, D-I
b) A-I, B-II, C-III, D-IV
c) A-III, B-IV, C-I, D-II
d) A-II, B-I, C-IV, D-III

22. Match the term in List I with its graphic representation or definition in List II. **[1]**

List I	List II
(A) Demand Curve	(I) Point where demand and supply curves cross
(B) Supply Curve	(II) Downward sloping from left to right
(C) Equilibrium	(III) Movement along this curve due to price change
(D) Change in Quantity Demanded	(IV) Upward sloping from left to right

a) A-II, B-IV, C-I, D-III
b) A-III, B-I, C-IV, D-II
c) A-I, B-II, C-III, D-IV
d) A-IV, B-III, C-II, D-I

USP

23. Match the types of goods in List I with their price-related behavior in List II. **[1]**

List I	List II
(A) Substitutes	(I) Demand rises if price of associated good falls
(B) Complements	(II) Demand for one rises if the other's price increases
(C) Normal goods	(III) Demand typically rises with an increase in income
(D) Inferior goods	(IV) Demand typically falls with an increase in income

a) A-III, B-IV, C-I, D-II
b) A-I, B-II, C-IV, D-III
c) A-IV, B-III, C-II, D-I
d) A-II, B-I, C-III, D-IV

24. Match the market outcome in List I with the type of pressure it exerts on prices in List II. **[1]**

List I	List II
(A) Surplus	(I) Upward pressure on price
(B) Shortage	(II) Downward pressure on price
(C) Increased Demand	(III) Higher equilibrium price
(D) Decreased Supply	(IV) Higher equilibrium price

a) A-I, B-II, C-III, D-IV

b) A-II, B-I, C-III, D-IV

c) A-IV, B-III, C-II, D-I

d) A-III, B-IV, C-I, D-II

25. Match the items in List I with those List II. **[1]**

List I	List II
(A) Non-excludable	(I) Example: Street lighting benefits all walkers
(B) Non-rivalrous	(II) Example: One person in park doesn't hinder others
(C) Free riding	(III) Using a good without paying for it
(D) Market underprovision of public goods	(IV) Price system cannot enforce payment

a) A-IV, B-II, C-III, D-I

b) A-III, B-I, C-II, D-IV

c) A-II, B-IV, C-I, D-III

d) A-I, B-II, C-III, D-IV

26. **Statement I:** If consumers expect prices to rise soon, they tend to delay purchases, leading to a decrease in current demand. **[1]**

Statement II: If sellers expect prices to fall, they may hold back goods from the market, reducing current supply.

a) Statement I is false but Statement II is true

b) Statement I is true but Statement II is false

c) Both Statement I and Statement II are true

d) Both Statement I and Statement II are false

USP

27. **Statement I:** An increase in a subsidy provided by the government to producers will cause the supply curve to shift to the right. **[1]**

Statement II: When a market is in equilibrium, there is still pressure for the price to rise or fall due to unsatisfied buyers and sellers.

a) Statement I is true but Statement II is false

b) Both Statement I and Statement II are true

c) Statement I is false but Statement II is true

d) Both Statement I and Statement II are false

28. **Statement I:** An increase in the price of a necessity good will always lead to a complete cessation of its demand as per the Law of Demand. **[1]**

Statement II: Luxury goods are characterized by a high degree of substitutability, making their demand elastic to price changes.

a) Statement I is false but Statement II is true

b) Both Statement I and Statement II are true

c) Statement I is true but Statement II is false

d) Both Statement I and Statement II are false

29. **Statement I:** A price ceiling set above the equilibrium price will effectively prevent prices from **[1]**

rising too high.

Statement II: When a price ceiling is set below the equilibrium price, it can lead to black markets due to higher demand and reduced supply.

a) Statement I is true but Statement II is false

b) Statement I is false but Statement II is true

c) Both Statement I and Statement II are false

d) Both Statement I and Statement II are true

30. **Statement I:** A decrease in the cost of raw materials for a product will cause a movement along the existing supply curve to a higher quantity supplied. **[1]**

Statement II: If people expect the price of a product to rise significantly in the near future, current demand for that product is likely to increase.

a) Both Statement I and Statement II are false

b) Statement I is true but Statement II is false

c) Both Statement I and Statement II are true

d) Statement I is false but Statement II is true

31. **Statement I:** If farmers experience a very good harvest due to favorable weather conditions, the supply curve for their crops will shift to the left. **[1]**

Statement II: When the market price of a product is below the equilibrium price, it leads to a surplus and downward pressure on prices.

a) Both Statement I and Statement II are true

b) Statement I is false but Statement II is true

c) Both Statement I and Statement II are false

d) Statement I is true but Statement II is false

32. **Statement I:** Negative externalities lead to an underproduction of a good because the full social costs are not reflected in the market price. **[1]**

Statement II: Positive externalities result in an underprovision of a good because the wider benefits are not fully captured by private decisions.

a) Both Statement I and Statement II are true

b) Statement I is false but Statement II is true

c) Both Statement I and Statement II are false

d) Statement I is true but Statement II is false

33. **Statement I:** When sellers expect a future price increase for their goods, they tend to release more stock into the market immediately to capitalize on current demand. **[1]**

Statement II: Consumers postponing a purchase because they anticipate a price drop for a specific phone model is an example of expectations affecting current demand.

a) Both Statement I and Statement II are true

b) Statement I is true but Statement II is false

c) Both Statement I and Statement II are false

d) Statement I is false but Statement II is true

USP

34. **Statement I:** Market failures always result in an overproduction of goods and services. **[1]**
Statement II: Externalities are a type of market failure where the market price does not fully reflect all the costs or benefits of an economic activity.

a) Both Statement I and Statement II are true
b) Statement I is false but Statement II is true
c) Statement I is true but Statement II is false
d) Both Statement I and Statement II are false

35. **Statement I:** If there is a decrease in the number of firms operating in a particular market, it will generally lead to an increase in the market supply. **[1]**
Statement II: The Law of Supply states that, other things remaining the same, when the price of a good rises, the quantity supplied rises.

a) Both Statement I and Statement II are true
b) Statement I is true but Statement II is false
c) Both Statement I and Statement II are false
d) Statement I is false but Statement II is true

36. **Assertion (A):** When people expect future prices to rise, current demand may increase. **[1]**
Reason (R): Consumers often buy more now to avoid paying higher prices later, shifting today's demand.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false.
d) A is false but R is true.

37. **Assertion (A):** Price acts as a crucial signal for buyers regarding product affordability. **[1]**
Reason (R): If a price falls, more consumers consider the product affordable, increasing purchases.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false.
d) A is false but R is true.

38. **Assertion (A):** A market surplus occurs when the price is set below the equilibrium price. **[1]**
Reason (R): At prices below equilibrium, quantity demanded exceeds quantity supplied.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false.
d) A is false but R is true.

39. **Assertion (A):** Perishability leads to atypical pricing strategies for sellers. **[1]**
Reason (R): Sellers face pressure to sell goods quickly to avoid waste.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false.
d) A is false but R is true.

40. **Assertion (A):** Price controls, like ceilings, are justified in certain emergencies. **[1]**

USP

Reason (R): They can prevent widespread hardship by making essential goods more affordable.

a) Both A and R are true and R is the correct explanation of A.

b) Both A and R are true but R is not the correct explanation of A.

c) A is true but R is false.

d) A is false but R is true.

41. What is the relationship between the price of complementary goods and the demand for a specific product? **[2]**
42. Explain how a product's price acts as a critical communication mechanism for both consumers and producers within a market system. **[2]**
43. How might a decrease in population affect the demand for local consumer goods, assuming other factors remain constant? **[2]**
44. Describe the characteristics of a public good and explain why private markets typically under-provide them. **[2]**
45. How do negative externalities contribute to market failure, and what is the typical outcome in terms of production levels? **[2]**
46. Explain how a price ceiling, if set below the equilibrium price, can lead to a market shortage for a product such as cooking oil. **[2]**
47. Which two factors commonly cause a change in demand (a shift of the entire demand curve)? **[2]**
48. What is meant by 'quantity demanded,' and how does it differ from a 'change in demand'? **[2]**
49. What is the Law of Supply? **[2]**
50. What is the equilibrium price in a market? **[2]**
51. Define the Law of Demand. **[2]**
52. Why do technological advancements in production typically increase the supply of a product? **[2]**
53. What is the difference between a surplus and a shortage, and how does each resolve through price adjustments? **[2]**
54. How does the income effect help explain the downward slope of the demand curve? **[2]**
55. Explain how increased production costs for a specific good would typically influence its market supply and consequently affect its equilibrium price and quantity. **[2]**
56. Describe the primary characteristic of a supply curve and what its typical upward slope signifies about producer behavior. **[3]**
57. In what ways can real-world market dynamics, particularly perishability and expectations, cause deviations from the simple textbook representations of supply and demand? **[3]**
58. What market conditions lead to a 'shortage,' and what immediate effect does it have on pricing within that market? **[3]**
59. Describe the phenomenon where a non-paying individual benefits from a shared resource, leading to insufficient provision of that resource by private entities. Provide an example to illustrate this concept. **[3]**
60. How do technological advancements influence the supply of goods and services in a market, and what is the typical graphical representation of this change? **[3]**
61. How do consumer expectations about future price changes influence current demand for a product? **[3]**
62. Explain how economic activities can generate unintended positive or negative consequences for individuals not directly involved in the transaction, leading to an inefficient allocation of **[3]**

USP

resources.

63. How do changes in consumer income directly influence the overall demand for typical goods and services in a market economy? **[3]**

64. Explain how the 'substitution effect' impacts consumer buying habits when the price of a particular product rises significantly. **[3]**

65. Describe the conditions under which an illegal exchange system emerges, characterized by transactions at prices exceeding legally mandated limits, often as a response to product scarcity. **[3]**

66. **Read the given source carefully and answer the questions that follow:** **[4]**

A city experiences an unusually hot summer. As temperatures rise, more people begin purchasing air coolers and portable fans. Retail stores notice that customers are willing to buy these products even at slightly higher prices because of the discomfort caused by the heat. Manufacturers respond by increasing production and sending larger quantities to shops. However, production cannot increase immediately because factories need additional raw materials and labour. For a short period, demand grows faster than supply. As a result, many stores face shortages and begin raising prices. Over the following weeks, producers expand output and more units reach the market. Eventually, the quantity supplied catches up with the quantity demanded. The market reaches a new balance where a larger number of coolers are sold at a higher price than before. This example illustrates how demand and supply interact to determine market prices. It also shows how producers respond to price signals and how temporary shortages can influence consumer behaviour. Such adjustments occur regularly in markets and help explain why prices change when economic conditions change.

Questions:

a. What is meant by demand? **(1)**

b. What happens when demand increases faster than supply? **(1)**

c. Explain how the market reaches a new equilibrium in the given situation. **(2)**

67. **Read the given source carefully and answer the questions that follow:** **[4]**

A wholesale tomato trader in a major agricultural market faced a dual crisis. Heavy evening monsoons were predicted to spoil his remaining stock of ripe tomatoes within hours, forcing him to slash prices by 60% at 7:00 PM just to liquidate inventory and recover basic transport costs. Simultaneously, a verified government broadcast announced that a severe transport strike would block all fresh vegetable inflows into the city starting the following week. This announcement caused an immediate shift in the morning market dynamics. Expecting severe shortfalls ahead, retail vegetable vendors scrambled to buy up dry onions and potatoes, doubling current wholesale demand and causing prices to climb immediately.

The market square presented a strange paradox: tomatoes were being dumped at a loss due to immediate physical decay, while storable items were experiencing artificial price inflation driven entirely by forward-looking buyer panic.

Questions:

a. Define perishable goods based on the provided text. **(1)**

b. Mention one way supplier expectations can alter the market supply of an item today. **(1)**

c. Explain how the twin factors of physical perishability and future expectations altered normal textbook pricing behavior in this marketplace. **(2)**

USP

68. **Read the given source carefully and answer the questions that follow:** **[4]**

In a bustling urban district, a sudden supply chain disruption caused a simultaneous 40% price spike for both life-saving insulin at local pharmacies and designer leather boots at luxury retail outlets. Within a month, market analysts observed drastically different consumer behaviors between the two sectors.

Pharmacy registers showed that the total quantity of insulin purchased by diabetic patients dropped by less than 2%, forcing households to cut back on entertainment and dining out to afford their prescriptions. Meanwhile, the luxury footwear boutique saw its sales volume plunge by over 75% almost instantly, as shoppers easily migrated to mid-tier footwear brands or deferred their purchases altogether.

Local shop owners noted that while consumers complained bitterly about both price increases, their ultimate economic choices were dictated by structural urgency and the availability of viable alternatives, proving that price elasticity is deeply tied to the functional nature of a commodity.

Questions:

a. State the law of economics that governs the inverse relationship between the price of a commodity and its quantity demanded. **(1)**

b. Identify the type of goods that show highly responsive demand shifts when their market prices change. **(1)**

c. Contrast the demand behavior of insulin with that of luxury boots during the price spike, highlighting the underlying economic reasons for this variance. **(2)**

69. **Read the given source carefully and answer the questions that follow:** **[4]**

To protect low-income households from rising food inflation, the municipality implemented a strict price ceiling of ₹30 per kilogram on wheat flour, which was currently trading at an equilibrium price of ₹50 per kilogram. Within two weeks, prominent grocery stores across the city ran completely out of stock.

Long lines formed outside state-run fair price shops before dawn, with working-class citizens wasting hours hoping to secure a single rationed packet. To protect their shrinking profit margins, commercial millers stopped sorting and cleaning the flour, leading to a noticeable drop in the quality of the available grain.

Furthermore, apartment landlords who depended on ground-floor retail rents from these food stalls suspended all property maintenance, citing a lack of disposable income. What began as a welfare policy to ensure cheap food access transformed into a structural crisis of severe shortages, lost time, and degrading product standards.

Questions:

a. What is meant by a statutory price ceiling? **(1)**

b. State any two non-price allocation methods that emerge when a market faces an artificial shortage. **(1)**

c. Analyze the unintended qualitative and structural consequences that emerged when the government forced the price of wheat flour below equilibrium. **(2)**

70. **Read the given source carefully and answer the questions that follow:** **[4]**

A popular sports personality is seen wearing a newly launched brand of running shoes. Within a few weeks, the shoes become highly fashionable among young consumers. Even though the

USP

price remains unchanged initially, many more people start visiting stores to purchase the product. Retailers notice a sharp increase in sales, and some outlets even run out of stock. The manufacturer increases production to meet growing demand, but expanding output takes time because additional labour and raw materials are required. During this period, shortages occur and retailers begin charging higher prices. As production gradually increases, more shoes become available in the market. Eventually, demand and supply adjust to each other, creating a new market equilibrium. This example illustrates how consumer preferences and tastes can influence demand. It also demonstrates that demand can change even when the price of a product remains unchanged. The case highlights the role of non-price determinants of demand and explains how changes in consumer behaviour can affect market outcomes such as prices and quantities sold.

Questions:

a. What is meant by a change in demand? **(1)**

b. Name one non-price factor that can increase demand. **(1)**

c. Analyse the effect of increased consumer preference on market equilibrium. **(2)**

71. Analyze how an unexpected major technological advancement in smartphone manufacturing would affect the market for smartphones, specifically detailing its impact on equilibrium price and quantity. **[5]**

72. Differentiate between a change in quantity demanded and a change in demand, providing an example for each. **[5]**

73. Explain the concept of 'price as a signal' for both consumers and producers within a market economy. **[5]**

74. Explain how negative externalities contribute to market failure, using a scenario where production costs are not fully borne by the involved parties. **[5]**

75. Describe the main objective behind government implementation of a price ceiling and its intended benefit for consumers. **[5]**

USP

Solution
THE PRICE PUZZLE: WHAT DRIVES THE MARKET
Class 09 - Social Science (Understanding Society)

1.

(d) When the quantity demanded surpasses the quantity supplied at the ceiling price.
Explanation:
A shortage occurs when, at the controlled price (below equilibrium), the quantity consumers want to buy exceeds the quantity producers are willing to sell.

2.

(b) A market shortage
Explanation:
A shortage occurs when the quantity demanded exceeds the quantity supplied at a given price, usually below the equilibrium price.

3. **(a)** Necessity goods
Explanation:
For necessity goods, if the price rises, people may not be able to reduce consumption much, leading to a small fall in quantity demanded, as there is often no easy replacement.

4.

(c) Expectations can influence both consumer demand and producer supply.
Explanation:
Expectations play a significant role for both consumers (delaying or accelerating purchases based on expected prices) and producers (holding back or releasing stock based on expected prices).

USP

5.

(d) A good considered essential for maintaining basic living standards.
Explanation:
Necessities are defined as goods people feel they must have to maintain basic living standards.

6.

(d) To safeguard consumers from excessively high market prices.
Explanation:
A price ceiling is a legal maximum price set to protect consumers from high prices.

7.

(b) The market price for a certain fruit is determined to be ₹120 per kilogram, and a new regulation caps it at ₹100 per kilogram.
Explanation:
A price ceiling is effective when set below the equilibrium price, forcing the market price to decrease. If the equilibrium price is ₹120 and the ceiling is ₹100, it is effective.

8.

(b) Free-riding
Explanation:
Free-riding occurs when individuals consume goods or services without paying for them, particularly common with public goods.

9. **(a)** When it is set below the equilibrium price.
Explanation:

A price ceiling only significantly impacts the market if it is set lower than the natural equilibrium price, forcing prices down.

10. **(c)** People switch to a similar, cheaper product when the price of one product rises.
Explanation:
The substitution effect refers to the tendency of consumers to switch to a relatively cheaper alternative when the price of a good increases.

11. **(d)** A rise in consumer income for a normal good.
Explanation:
For a normal good, an increase in consumer income leads to an increase in demand, shifting the demand curve to the right.

12. **(b)** They reduce prices to sell them before they spoil.
Explanation:
Sellers of perishable goods, facing time pressure, may reduce prices near the end of the day or selling period to avoid waste and ensure the goods are sold before they spoil.

13. **(d)** Market does not allocate resources efficiently.
Explanation:
Market failure is a situation where the market does not allocate resources efficiently, leading to outcomes that are not optimal for society.

USP

14. **(a)** Because such items are considered necessities with few substitutes.
Explanation:
Basic food items are necessities; people need them to maintain living standards and often have limited non-consumption substitutes, making their demand less responsive to price changes.

15. **(d)** Their current demand will increase as they buy more now.
Explanation:
When consumers expect prices to rise soon, they tend to buy more currently to avoid paying higher prices later, which increases present demand.

16. **(a)** It behaves more like a luxury good.
Explanation:
A significant drop in sales due to a price rise indicates that consumers can easily reduce or forgo consumption, a characteristic of luxury goods.

17. **(c)** Buyers can often reduce buying more easily when prices rise.
Explanation:
Luxury goods are defined as items people can live without, and when their price rises, buyers can often reduce buying more easily, making demand more responsive to price changes.

18. **(b)** Current demand will probably decrease as purchases are delayed.
Explanation:
When consumers expect future price drops, they delay their purchases to benefit from the lower price, leading to a decrease in current demand.

19.

(d) One party in a transaction has superior or more extensive knowledge than the other.

Explanation:

Information asymmetry exists when one side of a market transaction has more or better information than the other.

20.

(b) A shortage

Explanation:

When a price ceiling is below equilibrium, quantity demanded exceeds quantity supplied, leading to a shortage.

21.

(b) A-I, B-II, C-III, D-IV

Explanation:

A-I, B-II, C-III, D-IV

Pollution creates negative externalities leading to overproduction. Vaccination generates positive externalities, so it is underprovided by the market. Price ceilings reduce landlords' incentives to maintain properties, and they often lead sellers to reduce quality instead of raising prices.

22. **(a)** A-II, B-IV, C-I, D-III

Explanation:

A-II, B-IV, C-I, D-III

Demand curve slopes downward showing inverse relation between price and demand. Supply curve slopes upward showing direct relation. Equilibrium is where both curves intersect. A change in quantity demanded occurs when price changes, causing movement along the same demand curve.

USR

23.

(d) A-II, B-I, C-III, D-IV

Explanation:

A-II, B-I, C-III, D-IV

Substitute goods can replace each other, so price rise of one increases demand for the other. Complementary goods are used together, so they move in opposite price-demand directions. Normal goods show positive income effect, while inferior goods show negative income effect.

24.

(b) A-II, B-I, C-III, D-IV

Explanation:

A-II, B-I, C-III, D-IV

A surplus leads to sellers lowering prices to clear excess goods, creating downward pressure. A shortage creates competition among buyers, pushing prices upward. Both increased demand and decreased supply tend to raise equilibrium price, though through different market forces.

25.

(d) A-I, B-II, C-III, D-IV

Explanation:

- A-I (Non-excludable → Street lighting): You cannot stop non-payers from using it; the light shines on everyone walking by.
- B-II (Non-rivalrous → Public park): One person using the good does not reduce its availability or enjoyment for the next person.
- C-III (Free riding → Using without paying): This is the direct definition of a free rider - benefiting from a resource without contributing to its cost.

- D-IV (Market underprovision → Price system failure): Because private companies cannot force people to pay (due to non-excludability), the market lacks the profit incentive to provide enough of these goods.

26.

(d) Both Statement I and Statement II are false
Explanation:
Statement I is false because if consumers expect prices to rise, they buy more now, increasing demand. Statement II is false because if sellers expect prices to fall, they sell more quickly, increasing supply, not holding back goods.

27. **(a)** Statement I is true but Statement II is false
Explanation:
Statement I is true. A subsidy reduces the cost of production for sellers, making them willing and able to supply more at each price, thus shifting the supply curve to the right. Statement II is false. At equilibrium, the quantity demanded equals the quantity supplied, meaning the market 'clears' and there is no pressure for the price to rise or fall, even if some individuals might still idealize a different price.

28. **(a)** Statement I is false but Statement II is true
Explanation:
Statement I is false because the passage states that even if the price of a necessity rises, demand still follows the Law of Demand, but the fall in quantity demanded may be small, not a complete cessation. Statement II is true as luxury goods often have more substitute choices, making their demand more responsive to price changes.

29.

(b) Statement I is false but Statement II is true
Explanation:
Statement I is false because a price ceiling set above the equilibrium price is ineffective as sellers would not be charging above that price anyway. Statement II is true as a price ceiling below equilibrium creates shortages, which can lead to black markets where goods are sold at higher than legal prices.

30.

(d) Statement I is false but Statement II is true
Explanation:
Statement I is false. A decrease in production costs (like raw materials) causes the entire supply curve to shift to the right, indicating an increase in supply at every price, not a movement along the curve. A movement along the supply curve is caused by a change in the price of the good itself. Statement II is true. If buyers expect prices to rise, they are motivated to purchase more now, increasing current demand.

31.

(c) Both Statement I and Statement II are false
Explanation:
Statement I is false. A good harvest means an increase in supply, which shifts the supply curve to the right, not the left. Statement II is false. When the market price is below the equilibrium price, it leads to a shortage because quantity demanded exceeds quantity supplied, and this shortage creates upward pressure on prices, not downward.

32.

(b) Statement I is false but Statement II is true
Explanation:

USP

Statement I is false because negative externalities lead to an OVERPRODUCTION of goods as the market price is artificially low without reflecting the full social cost. Statement II is true because the market underprovides goods with positive externalities due to uncaptured wider benefits.

33.

(d) Statement I is false but Statement II is true

Explanation:

Statement I is false; the text states that if sellers expect prices to rise soon, they may hold back goods, reducing supply, not releasing more stock. Statement II is true as the example directly illustrates how anticipating a price drop (expectations) reduces current demand.

34.

(b) Statement I is false but Statement II is true

Explanation:

Statement I is false because market failures can lead to either overproduction (e.g., negative externalities) or underproduction (e.g., positive externalities or public goods). Statement II is true and directly from the text's definition of externalities as market failures.

35.

(d) Statement I is false but Statement II is true

Explanation:

Statement I is false. A decrease in the number of sellers (firms) in a market would lead to a decrease in the overall market supply, not an increase, as there are fewer producers offering goods. Statement II is true. This is the definition of the Law of Supply described in the text, indicating a positive relationship between price and quantity supplied.

USP

36. **(a)** Both A and R are true and R is the correct explanation of A.

Explanation:

Expectations about future prices are a determinant of current demand. If consumers anticipate price increases, they bring forward their purchases, leading to a rise in present demand.

37. **(a)** Both A and R are true and R is the correct explanation of A.

Explanation:

The reason directly explains how price signals affordability to buyers and influences their purchasing decisions when the price falls.

38.

(d) A is false but R is true.

Explanation:

- **Assertion (A) is false:**
  A market **surplus** occurs when price is **above equilibrium**, not below it. At low prices, surplus does not occur.
- **Reason (R) is true:**
  At prices **below equilibrium**, quantity demanded **exceeds** quantity supplied, leading to a **shortage**, not surplus.

39. **(a)** Both A and R are true and R is the correct explanation of A.

Explanation:

- **Assertion (A) is true:**
  Perishable goods (like milk, fruits, vegetables) often require **special pricing strategies**, such as discounts or quick-sale pricing.
- **Reason (R) is true:**
  Sellers must sell these goods quickly because they **spoil or lose value over time**.

- **R correctly explains A:**
  Because of the urgency to avoid waste, sellers adjust pricing strategies (like lowering prices or offering deals), which makes pricing behavior atypical.

40. **(a)** Both A and R are true and R is the correct explanation of A.
    Explanation:
    - **Assertion (A) is true:**
      Price controls like price ceilings are often used in emergencies (e.g., food shortages, inflation spikes) to stabilize access to essential goods.
    - **Reason (R) is true:**
      They help make essential goods more affordable, reducing hardship for lower-income groups during crises.
    - **R correctly explains A:**
      The justification for imposing price ceilings in emergencies is exactly to ensure affordability and prevent widespread economic distress.
41. Complementary goods are used together. If the price of a complementary good decreases, it becomes more affordable, leading to increased demand for that complement. Since the specific product and its complement are typically consumed together, an increase in demand for the complement will also lead to an increased demand for the specific product, shifting its demand curve to the right.
42. For buyers, price indicates affordability; a rise typically prompts careful consideration, potentially leading to reduced purchases or alternatives, while a fall encourages more buying. For sellers, price signals profitability; a higher price incentivizes increased supply due to better profit margins, whereas a lower price disincentivizes supply. These signals allow for decentralized decision-making, coordinating market activities without a central authority.
43. A decrease in population implies fewer potential buyers in the region. With fewer consumers available to purchase goods and services, the overall desire and ability to buy local consumer goods at every given price point will diminish. This will lead to a decrease in demand, causing the demand curve for these goods to shift to the left.
44. Public goods are non-rivalrous and non-excludable, meaning one person's use does not reduce availability for others and no one can be effectively excluded from using them. Because of these features, private markets under-provide them. Firms cannot easily charge users, leading to free riding, where people benefit without paying, reducing producers' incentive to supply.
45. Negative externalities cause market failure because producers do not account for harmful effects imposed on third parties, such as pollution. As a result, private costs are lower than social costs, leading to overproduction of the good. The market produces more than the socially optimal level, creating inefficiency and welfare loss in the economy.
46. A price ceiling set below the equilibrium price leads to a shortage because at the lower controlled price of cooking oil, quantity demanded rises as consumers find it more affordable. However, producers reduce supply due to lower profit margins. This creates excess demand over supply, resulting in shortages, queues, and possible rationing in the market.
47. Two common causes for a change in demand are changes in consumer income and changes in consumer tastes and preferences. Other factors include changes in the prices of related goods, population changes, and expectations about future prices.
48. Quantity demanded is the specific amount consumers wish to buy at a particular price point. A change in quantity demanded occurs only due to a price change of the good itself, representing a movement along the existing demand curve. A change in demand, however, involves a shift of the entire demand curve, caused by factors other than the good's own price.
49. The Law of Supply states that, assuming all other factors remain constant, when the price of a good increases, the quantity supplied of that good increases, and conversely, when the price of a good decreases, its quantity supplied decreases.
50. The equilibrium price is the specific price in a market where the quantity of a good that buyers are willing and able to purchase is exactly equal to the quantity that sellers are willing and able to offer for sale. At this price, the market clears.

USP

51. The Law of Demand states that, assuming all other factors remain constant, when the price of a good increases, the quantity demanded for that good decreases, and conversely, when the price of a good decreases, its quantity demanded increases.
52. Technological advancements usually make production processes more efficient, thereby reducing the cost of producing each unit of a good. With lower production costs, producers can achieve higher profit margins at any given price. This increased profitability incentivizes them to supply more of the product to the market, leading to an increase in supply.
53. A surplus occurs when quantity supplied exceeds quantity demanded, pushing prices down as sellers compete. A shortage happens when quantity demanded exceeds quantity supplied, driving prices up as buyers compete. Both situations create pressure for the market price to move towards equilibrium, where demand and supply are balanced, naturally resolving the imbalance.
54. The income effect states that when the price of a good falls, consumers' real purchasing power effectively increases, making them feel richer. Conversely, if the price rises, their purchasing power decreases. This change in real income influences consumers to buy more of a good when its price falls and less when its price rises, contributing to the inverse relationship between price and quantity demanded.
55. When production costs for a good rise, producers find it less profitable to supply the same quantity at previous prices. This leads to a decrease in supply, causing the supply curve to shift to the left. Consequently, at the original price, a shortage would emerge. This shortage puts upward pressure on prices, resulting in a higher equilibrium price and a lower equilibrium quantity for the good.
56. A supply curve is a graphical representation showing the relationship between the price of a good and the quantity that producers are willing and able to supply. Its typical upward slope indicates that as the price of a product increases, producers are encouraged to supply more of it. Higher prices often lead to greater profits, making production more attractive. Conversely, when prices fall, producers tend to reduce the quantity supplied because production becomes less profitable.
57. Real-world market dynamics like perishability and expectations introduce complexities not fully captured by basic supply and demand models. Perishability creates time-sensitive pressure for sellers, often forcing price reductions to avoid spoilage, which can lead to intra-day price variations. Buyer awareness of this can shift demand patterns, impacting equilibrium. Expectations, both consumer and seller, can cause anticipatory buying or holding behaviors, leading to either artificial surges or drops in demand and supply. These factors disrupt instantaneous market equilibrium by introducing future-oriented decisions, making actual market behavior less predictable than textbook theory suggests.
58. A shortage occurs when the quantity demanded of a good or service exceeds the quantity supplied at the current market price. This situation often arises when prices are set below the equilibrium level or when demand increases sharply while supply remains limited. As consumers compete to obtain the scarce product, upward pressure is placed on prices. In a free market, sellers typically respond by raising prices, which helps reduce excess demand and restore market equilibrium.
59. The phenomenon where a non-paying individual benefits from a shared resource is known as 'free riding,' and it often leads to the under-provision of public goods by private firms. Since public goods are non-excludable, it's difficult to prevent people from using them even if they haven't paid. Consequently, private companies struggle to generate sufficient revenue to cover costs, as many users opt to enjoy the benefit without contributing. For instance, if a private company built a public park, people could use it without paying, leading to a lack of funds for maintenance and eventual deterioration or closure.
60. Technological advancements generally increase the supply of goods and services by making production more efficient and reducing costs. Improved technology allows producers to manufacture more output using the same or fewer resources, increasing profitability. As a result, firms are willing and able to supply more at every price level. Graphically, this change is represented by a rightward shift of the supply curve, indicating an increase in supply rather than a movement along the existing supply curve.
61. Consumer expectations significantly influence current demand. If consumers anticipate a price increase in the near future, they are likely to purchase the product immediately to avoid paying a higher price later, leading to an increase in current demand. Conversely, if consumers expect a price decrease, they might delay their purchases, hoping to acquire the product at a lower cost, which results in a reduction

in current demand. This foresight allows consumers to optimize their spending by timing their acquisitions based on projected market movements.

62. Economic activities can generate unintended consequences, known as externalities, for third parties. Negative externalities, like pollution from a factory, impose costs on others (e.g., health issues) who are not part of the production or consumption, causing overproduction because the market price doesn't reflect the true societal cost. Positive externalities, such as vaccinations, provide benefits to others (e.g., reduced disease spread) beyond the direct participants. Since these wider benefits aren't fully captured, the market under-provides such goods. In both cases, the market fails to allocate resources efficiently from a societal perspective.
63. Changes in consumer income significantly affect the demand for goods and services. When incomes rise, people generally have greater purchasing power and tend to buy more normal goods such as better-quality food, clothing, electronics, and leisure services. As a result, overall demand increases. Conversely, when incomes fall, consumers reduce spending on many goods and services, causing demand to decrease. However, for inferior goods, demand may increase when incomes decline because consumers switch to cheaper alternatives.
64. The substitution effect occurs when consumers replace a product with a cheaper alternative after its price rises significantly. As the product becomes more expensive, buyers look for substitutes that provide similar benefits at a lower cost. For example, if the price of butter increases sharply, many consumers may switch to margarine. This change in buying behavior reduces the quantity demanded of the higher-priced product and increases demand for its substitute, helping consumers manage their spending more efficiently.
65. An illegal exchange system, known as a black market, emerges primarily when a legal maximum price restriction (price ceiling) creates a shortage of a good. This scarcity incentivizes some buyers to pay above the legal price to secure the product or avoid inconvenience like long queues. Concurrently, some sellers are motivated by the prospect of higher profits than the ceiling allows. Individuals might also purchase limited goods at the legal price and then resell them illegally at inflated rates, leading to transactions outside the regulated system at higher prices.
66. a. Demand refers to the quantity of a good or service that consumers are willing and able to purchase at different prices during a specific period. Demand reflects consumer preferences, purchasing power, and market conditions affecting buying decisions.
    b. When demand increases faster than supply, a shortage occurs. Consumers want to buy more goods than producers can provide at the current price. This creates upward pressure on prices, encouraging producers to increase production and supply.
    c. Initially, higher temperatures increased demand for coolers while supply remained limited, creating a shortage. Prices rose as consumers competed for available products. Producers then increased output in response to higher prices. As additional coolers entered the market, supply gradually matched demand, establishing a new equilibrium with a higher price and greater quantity sold than before.
67. a. Perishable goods are commodities that spoil or decay rapidly, such as fresh fish, milk, or tomatoes, creating immense time pressure for sellers.
    b. If suppliers expect prices to rise in the near future, they may hold back current stocks and hoard inventory, reducing the market supply today.
    c. Perishability forced the trader to ignore normal profit margins and slash tomato prices to zero out stock before decay. Concurrently, future strike expectations bypassed current supply realities, causing buyers to panic-buy storable items and inflate prices based entirely on anticipation.
68. a. The Law of Demand governs this relationship, stating that other factors remaining constant, the quantity demanded of a good falls when its price rises.
    b. Luxury goods (or non-essential goods) exhibit highly responsive demand shifts, as consumers can easily reduce consumption or find alternative substitutes when prices fluctuate.
    c. Insulin demand remained virtually unchanged because it is an essential necessity with no substitutes; patients must purchase it to survive. Conversely, designer boots are non-essential luxuries with abundant alternatives, allowing buyers to easily abandon or defer purchases when prices rose.

USP

69. a. A price ceiling is a legally mandated maximum price that sellers are permitted to charge for an essential good or service, set by governments to protect consumers.
    b. Two non-price allocation methods that emerge are physical queuing (waiting lines) and administrative rationing (putting fixed limits on purchases per customer).
    c. Forcing the price below equilibrium caused severe shortages as demand outstripped supply. Unintended consequences included massive time wastage in queues, product degradation as millers stopped cleaning the flour to cut costs, and property neglect by cash-strapped landlords.
70. a. A change in demand occurs when consumers are willing to buy more or less of a product at the same price due to factors other than the product's own price. It causes the entire demand curve to shift.
    b. Changes in tastes and preferences can increase demand. When consumers develop a stronger liking for a product due to fashion trends, advertising, or celebrity influence, demand rises even if the price remains unchanged.
    c. Greater consumer preference shifts the demand curve to the right. At the original price, a shortage develops because demand exceeds supply. This shortage pushes prices upward and encourages producers to increase output. The new equilibrium generally results in a higher market price and a larger quantity sold compared to the previous equilibrium.
71. An unexpected major technological advancement in smartphone manufacturing would significantly reduce production costs, as new methods might enable faster, more efficient, or cheaper assembly. This reduction in costs would increase the profitability for producers at any given price, leading to an increase in the supply of smartphones (a rightward shift in the supply curve). Assuming demand remains constant, the increased supply would create a surplus at the original equilibrium price. To clear this surplus, producers would lower prices. Consequently, the new market equilibrium would feature a lower equilibrium price and a higher equilibrium quantity of smartphones sold, making the technology more accessible and widespread.
72. A change in quantity demanded occurs solely due to a change in the product's own price, causing a movement along the existing demand curve. For example, if the price of a certain video game decreases, more players might buy it, representing an increase in quantity demanded. A change in demand, however, involves a shift of the entire demand curve, caused by factors other than the product's price, such as income, tastes, or prices of related goods. For instance, if a new fashion trend makes a particular clothing item popular, demand for that item would increase regardless of its price, shifting the demand curve to the right.
73. In a market economy, price acts as an important signal that provides information to both consumers and producers. For consumers, price indicates how affordable or expensive a product is. When prices rise, consumers may buy less or switch to substitutes, while lower prices often encourage more purchases. For producers, price signals potential profitability. Higher prices suggest strong demand and the opportunity to earn greater profits, motivating firms to increase production. Lower prices, on the other hand, may discourage production because profits decline. Thus, prices help coordinate the decisions of buyers and sellers, guiding the allocation of resources and contributing to market equilibrium.
74. Negative externalities occur when the production or consumption of a good imposes costs on third parties not directly involved in the transaction. This leads to market failure because the market price does not reflect the true social cost. For example, a factory producing goods may generate air pollution, affecting the health of nearby residents. The factory's production decisions are based on its private costs, not including the health costs borne by the community. Consequently, the good is produced in excessive quantities relative to the socially efficient level, as its market price is artificially low because the full societal cost is not factored in, leading to an over-allocation of resources.
75. A price ceiling is a legal maximum price set by the government that sellers cannot charge for a good or service. Its main objective is to keep essential goods and services affordable, especially during emergencies, shortages, or periods of rapid price increases. Governments often use price ceilings for items such as food, medicines, fuel, or housing to protect consumers from excessively high prices. The intended benefit is that more people, particularly low-income households, can continue to access basic necessities. By limiting prices, the government aims to reduce financial hardship and ensure that

USP

essential products remain within reach of the general public, promoting social welfare and economic stability.

USP