Principles of Microeconomics
Supply, Demand, and Market Equilibrium Quiz – Answer Key

1. **(B) A movement along the demand curve.** Price changes cause movements along the curve. Only non-price factors (income, preferences, etc.) shift the entire curve.

2. **(B) Increase demand for the other good.** Substitutes are goods that can replace each other. If coffee prices rise, demand for tea (a substitute) increases as consumers switch.

3. **(B) A shortage.** A binding price ceiling prevents the market from reaching equilibrium. At the artificially low price, quantity demanded exceeds quantity supplied, creating a shortage.

4. **(B) The responsiveness of quantity demanded to price changes.** Elasticity is calculated as the percentage change in quantity demanded divided by the percentage change in price.

5. **(B) Increase total revenue.** When demand is inelastic ($|E_d| < 1$), the percentage decrease in quantity is smaller than the percentage increase in price, so total revenue rises.

6. **False.** This is true only for normal goods. For inferior goods (e.g., instant noodles, public transit), increased income shifts demand to the left as consumers substitute toward higher-quality alternatives.

7. **True.** Market equilibrium occurs at the price where $Q_s = Q_d$. At this point, there is no tendency for price to change, and the market clears.

8. **False.** Technological improvements reduce production costs, making it profitable to supply more at every price. This shifts the supply curve to the right (outward), not left.

9. **Key distinction:** A change in quantity demanded is a movement along a fixed demand curve caused by a price change. A change in demand is a shift of the entire curve caused by non-price factors.

   Factors shifting demand:

   (1) *Consumer income:* Rising incomes increase demand for normal goods. Example: Economic growth increases demand for automobiles.

   (2) *Prices of related goods:* Higher prices of substitutes increase demand for a good. Example: Rising beef prices increase demand for chicken.

   (3) *Consumer preferences:* Changing tastes shift demand. Example: Health awareness has shifted demand toward organic foods.

   (4) *Expectations:* Expected future price increases raise current demand. Example: Anticipated tariffs cause consumers to buy imported goods now.

   (5) *Population/demographics:* More consumers increase market demand. Example: Aging populations increase demand for healthcare.

10. **Mechanism:** A minimum wage above equilibrium creates a price floor in the labor market. At the higher wage, quantity of labor supplied (workers seeking jobs) exceeds quantity demanded (jobs offered), resulting in unemployment (surplus of labor).

Benefits:

- Workers who retain employment earn higher wages
- Reduced poverty and income inequality for employed workers
- Increased consumer spending from low-wage workers with high marginal propensity to consume
- Reduced worker turnover and training costs for firms

Drawbacks:

- Unemployment among low-skilled workers priced out of the market
- Reduced hours for some workers
- Higher prices passed to consumers
- Potential business closures in labor-intensive industries

Conclusion: The net effect depends on elasticity of labor demand. Empirical evidence shows moderate minimum wage increases have smaller disemployment effects than traditional theory predicts.