CHAPTER 4 Labor Demand Elasticities

*In addition to the multiple choice problems listed below, complete the following end of chapter questions: Review questions 1, 3, 5 and 7. Problems 1, 3 and 5.*

**Multiple-Choice**

1. The own-wage elasticity of demand measures
   A) change in wages divided by change in quantity of labor demanded.
   B) change in quantity of labor demanded divided by change in wages.
   C) percentage change in wages divided by percentage change in quantity of labor demanded.
   D) percentage change in quantity of labor demanded divided by percentage change in wages.

2. If an increase in the minimum wage leads to higher aggregate earnings by the workers affected, then the own-wage elasticity of demand is
   A) elastic.
   B) inelastic.
   C) of unit elasticity.
   D) uncertain; more information is needed.

3. Moving from the upper to the lower portion of a straight labor demand curve, the elasticity
   A) changes from elastic to inelastic.
   B) changes from inelastic to elastic.
   C) stays the same.
   D) could change from inelastic to elastic, or from elastic to inelastic.

4. If the quantity of steel workers demanded falls from 30,000 to 20,000 when the equilibrium wage increases from $9.00 per hour to $11.00 per hour, then the own-wage elasticity of demand for these workers is
   A) -2.0
   B) -0.5
   C) -0.4
   D) -0.2

5. If the quantity of auto workers demanded decreases from 66,000 to 54,000 when the equilibrium wage increases from $12.00 per hour to $14.00 per hour, then the own-wage elasticity of demand for these workers is
   A) inelastic.
   B) elastic.
   C) zero.
   D) neither elastic nor inelastic.

6. If Industry A can substitute capital for labor easily and Industry B can not, then (other things equal)
   A) Industry A's own-wage elasticity of demand will be higher than Industry B's.
   B) Industry B's own-wage elasticity of demand will be higher than Industry A's.
   C) the industries' own-wage elasticities of demand will be equal.
   D) we cannot predict which firm's own-wage elasticity of demand will be higher.

7. If two inputs are gross complements, the cross-wage elasticity of demand for the two inputs will be
   A) zero.
   B) one.
   C) positive.
   D) negative.
8. If teenagers and adults are substitutes in production, and the wage of teenagers falls, then
   A) they must be gross substitutes and the employment of adults will fall.
   B) they must be gross complements and the employment of adults will fall.
   C) they could be either gross substitutes or gross complements and the employment of adults could rise or fall.
   D) they must be gross substitutes and the employment of adults will rise.

9. Own-wage elasticities of demand are
   A) always positive.
   B) always negative.
   C) either positive or negative.
   D) positive for gross complements, negative for gross substitutes.

10. If the own-wage elasticity of demand for professors is -0.5, then an increase in the wage of professors from $45,000 to $55,000 will cause the quantity demanded to fall by
    A) 2%.
    B) 5%.
    C) 10%.
    D) 20%.

11. The short run own-wage labor demand elasticity
    A) includes only part of the scale effect.
    B) includes only part of the substitution effect.
    C) includes both scale and substitution effects.
    D) includes all the scale effect.

12. According to empirical estimates, when wages are increased by 10% the quantity of labor demanded typically falls by about
    A) 3% in the short run, but 6% in the long run.
    B) 5% in the short run, but 10% in the long run.
    C) 10% in the short run, but 20% in the long run.
    D) more in the short run than in the long run.

13. Cross wage elasticities of demand are
    A) always positive in magnitude.
    B) always negative in magnitude.
    C) either positive or negative in magnitude.
    D) positive for gross complements, negative for gross substitutes.

14. Empirical estimates of cross-wage elasticities show that
    A) well-educated labor is more likely to be complementary with capital than is unskilled labor.
    B) the extent of substitution in production between immigrant and native workers is very high.
    C) labor and energy are complements in production.
    D) labor and raw materials are complements in production.

15. Empirical estimates of the short-run employment effects of minimum wage increases
    A) have produced a consensus that teen employment will fall by almost 10% for every 10% increase in the minimum wage.
    B) are very low, partly because it takes a long time for employers to adjust fully to changes in the minimum wage.
    C) are very high, partly because it takes a long time for employers to adjust fully to changes in the minimum wage.
    D) have produced a consensus that teen employment will not fall at all when the minimum wage is increased by 10%.
16. Other things equal, an elastic demand for an industry's output will tend to make the industry's own wage elasticity of demand
   A) high.
   B) low.
   C) positive.
   D) zero.

17. If labor is a small percentage of the total costs of an industry, this will tend to make the own wage elasticity of labor demand
   A) high.
   B) low.
   C) positive.
   D) zero.

18. Own wage elasticity of labor demand tends to
   A) increase with skill level.
   B) decrease with skill level.
   C) be unrelated to skill level.
   D) remain unchanged with skill level.

19. Other things equal, the own-wage elasticity of demand for a category of labor is higher when
   A) the price elasticity of demand for the product being produced is low.
   B) other factors of production can be easily substituted for the category of labor.
   C) the supply of other factors of production is highly inelastic.
   D) the cost of employing the category of labor is a small share of the total costs of production.

20. The introduction of new forms of capital generally
   A) decreases the own-wage elasticity of labor demand.
   B) increases the bargaining power of unions.
   C) increases the own-wage elasticity of labor demand.
   D) shifts the labor demand curve to the right.

21. The minimum wage is a relatively blunt instrument with which to reduce poverty because
   A) only about half the labor force is covered by the minimum wage.
   B) only about half the employers comply with the law.
   C) most workers whose wages are affected by minimum wage increases do not live in poor families.
   D) minimum wage increases cause large increases in unemployment.

22. If the labor market is competitive and coverage is complete, then legislation to enact a minimum wage above the equilibrium wage level would
   A) increase both wages and employment.
   B) decrease both wages and employment.
   C) decrease wages and increase employment.
   D) increase wages and decrease employment.

23. Employment often increases after an increase in the minimum wage because
   A) more people want to work at the new, higher wage.
   B) independently, labor demand increases significantly at the same time.
   C) the minimum wage is below the equilibrium level of wages.
   D) the labor supply curve is vertical.

MC Answers: 1d, 2b, 3a, 4a, 5b, 6a, 7d, 8c, 9b, 10c, 11a, 12b, 13c, 14a, 15b, 16a, 17b, 18b, 19b, 20c, 21c, 22d, 23b