

Urban- Regional Economics  
Review Questions  
Second Exam

1. Define the following terms from market area analysis.
  - (a) market area
  - (b) net price
  - (c) demand density
  
2. The algebraic formula for market area per firm is  $M = q \text{ OVER } de$  where the terms are defined as in the text. Describe the impact on the market area per firm of the following.
  - (a) an increase in economies of scale (per capita demand constant)
  - (b) a decrease in travel costs (per capita demand constant)
  - (c) an increase in per capita demand (output per store constant)
  - (d) an increase in population density (output per store constant)
  
3. The algebraic formula for market area per firm is  $M = q \text{ OVER } de$  Assume that consumers obey the law of demand. What is the impact on the market area per firm of the following?
  - (a) a decrease in travel cost
  - (b) an increase in economies of scale
  - (c) how does the price elasticity of demand influence the impact of (a) and (b)?
  
4. What are the principle assumptions of the simple central place model? The central place model describes the location patterns of what type of firm?
  
5. What are 4 characteristics of the simple central place model?
  
6. Discuss how each of the following affect the simple central place model.
  - (a) Diversity and scale economies
  - (b) Large means few
  - (c) Shopping paths

7. How do the following affect (a) the number of cities in a region and (b) the hierarchical pattern of cities?
  - (a) goods sold in the region are imperfect substitutes
  - (b) some of the goods sold in the region are complements
8. If resource and input oriented firms locate in a region, will this disrupt the hierarchical pattern of cities?
  - (a) describe a scenario in which the inclusion of these firms does disrupt the hierarchy of cities
  - (b) describe a scenario in which the inclusion of these firms does not disrupt the hierarchy of cities
9. Answer the following regarding city multipliers.
  - (a) What is the formula for the income multiplier? If  $m=0.6$  and  $\Delta x=100,000$ , then what is  $\Delta Y$  and the change in local income?
  - (b) What is the formula for the employment multiplier? If  $T$  is 50,000 and  $B$  is 20,000, what is the employment multiplier? If the export sector increases by 1000 jobs, what will be the increase in total employment and local industry jobs?
10. Answer the following regarding the city's labor demand curve.
  - (a) Describe why the labor demand curve has a negative slope by discussing the substitution and output effects.
  - (b) What economic variables would produce a shift in the labor demand curve? Explain the relationship between these variables and labor demand.
11. Answer the following regarding the city's labor supply curve.
  - (a) Why does the labor supply curve have a positive slope? What two assumptions are made regarding labor supply?
  - (b) What economic variables would produce a shift in the labor supply curve? Explain the relationship between these variables and labor supply.
12. How do agglomeration economies contribute to urban employment growth?

13. Describe the impact on the city's equilibrium wage and employment of each of the following.
  - (a) An increase in export sales
  - (b) An improvement in residential public services
  - (c) A local pollution tax
14. Explain how to calculate base employment using the location quotient method. What are the weaknesses of this method? What are the advantages and disadvantages of measuring base employment with the survey method?
15. Explain how to calculate the base multiplier using location quotients.
16. How do cities and local business firms use the economic base study?
17. What are the advantages of the I-O model compared to the economic base model? How do you interpret the rows and columns of the transactions table? How do you interpret the columns of the input coefficients table?
18. Explain and discuss the limitations of the economic base and I-O models.
19. According to Bartik, what are three ways that employment growth can increase real per capita income? According to Bartik, what is the quantitative relationship of total employment growth to real per capita income?
20. Other than new jobs and increases in per capita income, what are the benefits and costs of employment growth?