

## Practice Examination 1 "B" (Actual questions from Fall 2007)

### DIRECTIONS:

? Choose the **one best** answer to each question.

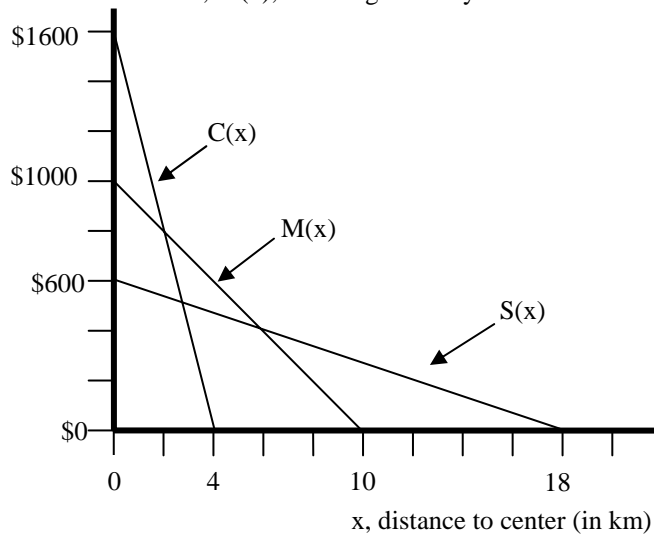
○ Mark the answer you choose on the SCANTRON form.

✗ If you change an answer, erase completely.

☺ Answer all 40 questions.

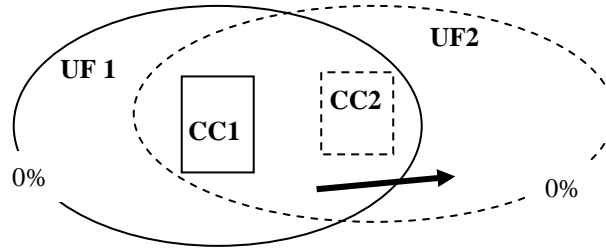
🔔 When you finish, exit your row quietly so as not to disturb others; bring your booklet and Scantron form to the front of the room.

1-3. Use the diagram below. The graph shows bid-rent lines for Commercial land use,  $C(x)$ , Multifamily residential land use,  $M(x)$ , and Single-family residential land use,  $S(x)$ , in the Planeville urban area:



1. What land use(s) would you expect to occupy the land 8 kilometers from the center?
  - (A) Single-family Residential Only
  - (B) Multifamily Residential Only
  - (C) Both Multifamily Residential and Single-family Residential
  - (D) Both Commercial and Multifamily Residential
  - (E) All three: Commercial, Multifamily Residential and Single-family Residential
2. Which of the following is the equation for the **bid rent** line for Multifamily Residential land use?
  - (A)  $M(x) = \$100x / 1000$
  - (B)  $M(x) = \$100x + \$1000$
  - (C)  $M(x) = \$1000 e^{-4x}$
  - (D)  $M(x) = \$1000 - \$100x$
  - (E)  $M(x) = 200x + \$900$
3. At what distance from the center is the boundary between the concentric zones of Commercial and Multifamily Residential land use?
  - (A)  $x = 2$  km
  - (B)  $x = 4$  km
  - (C)  $x = 6$  km
  - (D)  $x = 10$  km

4. Two overlapping Urban Fields (UF1 and UF2) with their Central Cities (CC1 and CC2) are shown on the diagram:



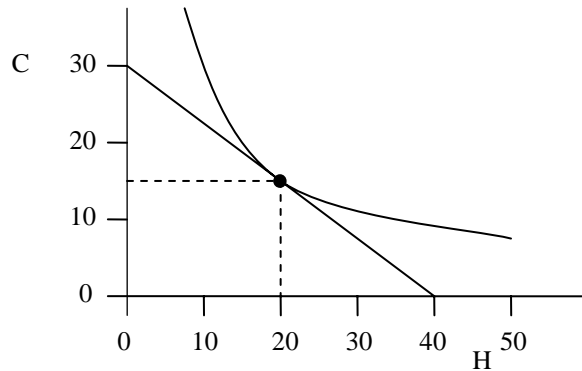
According to the Plane typology discussed in class, the commuting trip represented by the arrow would be classified as a(n) \_\_\_\_\_ flow for Urban Field 1, but as a(n) \_\_\_\_\_ flow for Urban Field 2.

- (A) lateral / lateral  
 (B) lateral / impossible  
 (C) impossible / lateral  
 (D) lateral / cross  
 (E) cross / lateral
5. Which shows the most likely match-up between one of the underlying dimensions of urban social structure found in a factorial ecology study and its likely geographic pattern?
- (A) Socioeconomic status / Concentric zone pattern  
 (B) Family status or stage in lifecycle / Sector pattern  
 (C) Ethnic status / Multiple nuclei pattern  
 (D) Family status or stage in lifecycle / Urban realms pattern  
 (E) Socioeconomic status / Multiple nuclei pattern

**6 – 10. Match each model on the left with the correct description on the right:**

- |   |  |
|---|--|
| <p>6. ___ Urban Realms</p> <p>7. ___ Social Area Analysis</p> <p>8. ___ Sector</p> <p>9. ___ Multiple Nuclei</p> <p>10. ___ Concentric Zone</p> | <p>A. Proposed by a land economist, Homer Hoyt, it posits that different price categories of housing occupy wedge-shaped areas radiating in different directions away from the CBD.</p> <p>B. First set forth by a geographer, Vance, and based on the Los Angeles region, its key element is the emergence of large, self sufficient suburban sectors each focused on a downtown independent of the traditional CBD.</p> <p>C. Emerging from the works of Stanford sociologists Shevky, Williams and Bell, and based on patterns in the Bay Area of northern California, it was an integrative theory positing three underlying dimensions or “constructs” of urban social structure.</p> <p>D. Contained within a book titled <i>The City</i> authored by Burgess, a sociologist, it was based on Chicago and on concepts of ‘social ecology’; it shows how different groups occupy ring-like zones of territory at various distances away from a CBD.</p> <p>E. Based on Seattle, it was set forth immediately after World War II by two University of Washington Geographers, Chauncy Harris and Edward Ullman, to describe the polycentric nature of Auto Age development patterns.</p> |
|---|--|

11–13. Use the diagram below. The graph is based on the equilibrium analysis of household consumption presented in class. It shows the budget line and the point of tangency of this line with an indifference curve for the Fester family if they choose to live right at the center of Hypoville (distance  $x = 0$ ). The family’s monthly disposable income if they choose to live at  $x = 0$  is \$1200.



11. How many units of housing,  $H^*(0)$ , should the Festers purchase monthly to maximize utility given their budget constraint?
- (A) 15
  - (B) 20
  - (C) 30
  - (D) 40
  - (E) 120
12. What is the price,  $P_C$ , of composite consumer good in Hypoville?
- (A) \$10
  - (B) \$15
  - (C) \$20
  - (D) \$30
  - (E) \$40
13. If the Festers choose to live not at location  $x=0$  but instead at  $x=5$  miles from the center, which statement is FALSE concerning their optimal purchases of housing and composite consumer good?
- (A) The price per unit of housing will be lower at this location; thus they will buy more units.
  - (B) The amount of disposable income available to buy units of housing and composite consumer good will be lower because of the additional expense of commuting.
  - (C) They will buy fewer units of composite consumer good living at this location than at  $x=0$ .
  - (D) They will experience a lower level of utility if they live here because they cannot afford to buy the same amounts of housing and composite consumer good as they could at location  $x=0$ .
14. The following functions specify the bid rents in Monoburgh for single-family residential land use,  $R_S(x)$ , and multi-family residential land use,  $R_M(x)$ , where  $x$  is the distance in kilometers from the center of the CBD:
- $$R_S(x) = 20,000 - 2,000x$$
- $$R_M(x) = 160,000 - 30,000x$$
- Suppose Agricultural land use can pay \$2000 per unit of land regardless of how far out it is from the center:
- $$R_A(x) = 2,000$$
- At what distance  $x_{\max}$  would we expect to find the outer edge of the urbanized area?
- (A) 5 kilometers
  - (B) 5.333 kilometers
  - (C) 9 kilometers
  - (D) 10 kilometers

15. **Name that term...** Prior to the industrial revolution the urban percentage of the population was small because most people had to be engaged in producing agricultural goods. New technology, however, made it possible for more people to be employed in other sectors of the economy and to live in cities.
- (A) increasing agricultural surplus
  - (B) anti-basicalism
  - (C) the demise of mercantilism
  - (D) the development of habeus corpus
  - (E) exurbanization
16. **Name that transportation mode...** First introduced in San Francisco, it was a transitional mode popular during the period after the introduction of the horsecar railway and before the advent of the electric trolley or streetcar.
- (A) hackney coach
  - (B) elevated railway
  - (C) cable car
  - (D) omnibus
  - (E) monorail
17. In 1949 in a U.S. federal court case, General Motors and other automobile interests were convicted of conspiracy involving a front company called National City Lines. What did National City Lines do?
- (A) Extended lines of credit to auto buyers; it was later renamed GMAC
  - (B) Operated auto-assembly lines using non-union labor.
  - (C) Bought up electric streetcar systems and replaced them with diesel bus routes.
  - (D) Squeezed independent local mechanics out of business; now known as 'Mr. Goodwrench.'
18. Which is **TRUE** of *Urbanized Areas*?
- (A) They are based on population density and their boundaries closely approximate the "built-up" land in and surrounding major cities.
  - (B) They must have a minimum population of 1 million.
  - (C) They were first defined in 1790 and represent an outdated reality because they may be settlements having as few as 2,500 people.
  - (D) They are defined based on county boundary lines.

**19–24. TRUE-FALSE.** Mark "A" on your answer sheet if the statement is TRUE. Mark "B" if it is FALSE

19. \_\_\_\_ The **multiple nuclei** model of Harris and Ullman (based on Seattle, Washington) can be classified as a **polycentric** representation of urban form.
20. \_\_\_\_ According to the equilibrium analysis of the household location decision discussed in class, in order for utility levels to be constant throughout the city, households locating farther out must be able to afford to purchase more units of composite consumer good than those locating close to the center of the city.
21. \_\_\_\_ During the pedestrian-city era there was **less** separation of land uses than in modern cities.
22. \_\_\_\_ The boundaries of the **Tucson Metropolitan Statistical Area (MSA)** are the same as those of Pima County, Arizona.
23. \_\_\_\_ Metropolitan Statistical Areas (MSAs) tend to be **overbounded**, especially in the West where counties are large.
24. \_\_\_\_ **Census Tracts** are subdivisions of MSAs and contain ca. 2,500 to 8,000 people.

25. **Name that term...** Leaving behind undeveloped parcels of land as development takes place farther and farther out from the center.
- (A) Leapfrog development
  - (B) Chessboard speculation
  - (C) Decentralization
  - (D) Exurbanization
26. Which of these cities was NOT featured in the video: *Subdivide and Conquer: A Modern Western*?
- (A) Phoenix
  - (B) Denver
  - (C) Portland, OR
  - (D) Los Angeles
27. Which urban land use model most likely best describes the patterns of the Family Status (or Stage in Lifecycle) dimension found in a factorial ecology study of an American urban area?
- (A) Urban Realms
  - (B) Sector
  - (C) Concentric Zone
  - (D) Multiple Nuclei
28. **Name that term...** “An abstract system of carefully separated pods of single use. Daily needs are located within driving distance...” (From the book: *Suburban Nation* cited in class.)
- (A) Exurbanization
  - (B) Social Area Analysis
  - (C) Micropolitanization
  - (D) Urban sprawl
29. **Name that term...** During the horsecar era this equine respiratory illness killed large number of horses in East Coast U.S. cities; it hit hardest the workhorse population of Philadelphia.
- (A) Harnessitis
  - (B) Bubonic Plague (or the ‘Black Death’)
  - (C) Hoof-and-Mouth Disease
  - (D) Dysentary
  - (E) The Great Epizootic
30. Where was the only heavy manufacturing located in the pre-Industrial Revolution pedestrian city?
- (A) In brick multistory knitting mills
  - (B) In ship-building yards along the waterfront
  - (C) In large assembly plants outside of town along the railroad tracks
  - (D) In the Central Business District (CBD) clustered along the horsecar lines

**31–34. Matching.** Match each urban transportation mode on the left with its correct description on the right.

- |                                  |  |
|----------------------------------|--|
| 31. ____ Trolleycar or Streetcar | A. A horse carriage for hire (like a modern day taxi cab)                                      |
| 32. ____ Hackney Coach           | B. The major public transport mode in the 1850s to 1870s                                       |
| 33. ____ Horsecar Railway        | C. The first real public transportation mode: A cart pulled by two horses through city streets |
| 34. ____ Omnibus                 | D. Its electric power source is accessed by a pole on the roof running along overhead lines.   |

*Note: Questions 35–40 are based on the textbook reading*

35. Where were the earliest identifiable cities located?
- (A) In the Punjab, in modern-day India
  - (B) In Sumeria (southern Mesopotamia) in modern-day Iraq
  - (C) In the Inca territory of South America, in modern-day Peru
  - (D) In the Huang He River Valley in northern China
  - (E) Off the coast of Greenland; the ancient civilization of Atlantis has since been covered by the sea.
36. What measure is used in the textbook to illustrate the concept of **Metropolitan Dominance**?
- (A) Aggregate value of industrial output
  - (B) Size of the labor force engaged in high-order service functions
  - (C) Number of air passengers emplaned
  - (D) Attendance at the games of major league sports franchises in baseball, basketball, football and hockey
37. **Name that term...** The urban history of the United States largely follows a cycle of economic expansion and contraction. Five such periods of expansion noted in the textbook are: The Industrial Revolution (1770-1815); The Steam Engine (1840-1865); Fordism (1890-1920); Consumer Goods (1945-1980); Digital Telecommunications (2000-2035).
- (A) Wyckoff-Meyer Epochs
  - (B) Kondratiev (or 'Long') Waves
  - (C) Set (or 'Fixed') Points of Settlement
  - (D) Chernobyl Cycles
38. A box in the textbook reading identifies which three characteristics of 'urban sprawl'?
- (A) Impermanence, 'Cul-de-sac-ization'; Little spending on public infrastructure
  - (B) Automobility; Governmental fragmentation; Low-rise construction
  - (C) Uncoordinated development; Poor air quality; Social isolation
  - (D) Dispersal; Discontinuity; Functional segregation or homogeneity
39. A box in the textbook reading illustrates the use of the 62 Lifestyle Clusters developed by the Claritas Corporation for delineating areas of a metropolitan area where one or the other of two related products are more likely to be consumed. Which metro area is mapped, and which are the two products featured?
- (A) Albuquerque, NM; tacos and hamburgers
  - (B) Buffalo, NY; mini-vans and sports cars
  - (C) Chicago; men's dark-blue business suits and light-blue work shirts
  - (D) Washington, DC; Brie cheese and Velveeta cheese
40. The Erickson model of the suburban space economy features three phases. Which of the following is NOT one of those three?
- (A) Spillover and Specialization
  - (B) Infilling and Multinucleation
  - (C) Castigation and Exoneration
  - (D) Dispersal and Diversification