ECON 205 Midterm 1 Mock Exam B - Key

Section I: Multiple Choice

1. C
2. B
3. C
4. C
5. B
6. B
7. C
8. B
9. C
10. B
11. C
12. A

Section II: Graphing and Market Analysis

13) City Bus Fares

1. Correct graph with P=*3.00,* Q=2,000,000 and ceiling at 2.20.
2. Binding (2.20 < 3.00).
3. Shortage = 2,400,000 - 1,700,000 = 700,000 rides.
4. Any two: rationing, crowding/queues, reduced service quality, side payments.
5. Rightward supply shift reduces shortage.

14) Avocado Market Two-Shock

1. Supply left (cost up), demand right (preference up).
2. Price rises.
3. Quantity ambiguous due to opposing effects on Q.
4. Ceteris paribus: isolate each shock before combining.

Section III: Quantitative Problems

15) National Accounts and Deflator

Data: - 2025: software 200x500, bicycles 800x90 - 2026: software 220x560, bicycles 860x96

1. Nominal GDP

- 2025: 200*500 + 800*90 = 100,000 + 72,000 = 172,000
- 2026: 220*560 + 860*96 = 123,200 + 82,560 = 205,760

2. Real GDP (base 2025)

- Real 2025 = 172,000
- Real 2026 = 200*560 + 800*96 = 112,000 + 76,800 = 188,800

3. Real growth

- (188,800 - 172,000)/172,000 = 9.77%

4. Deflator and inflation

- Deflator 2025 = 100.00
- Deflator 2026 = (205,760 / 188,800)*100 = 109.00
- Inflation = 9.00%

16) Labor Market Metrics

Given adults 180, E=111, U=9 (millions):

1. LF = 120
2. u = 9/120 = 7.50%
3. LFPR = 120/180 = 66.67%
4. EPOP = 111/180 = 61.67%
5. If 3 million unemployed stop searching:

- U=6, LF=117
- New u = 6/117 = 5.13%

17) Saving, NX, and Interpretation

Given Y=5400, C=3500, T=900, G=1000, I=950

1. Savings:

- Sp = 5400 - 3500 - 900 = 1000
- Sg = 900 - 1000 = -100
- S = 900

2. NX = S - I = 900 - 950 = -50

3. Trade deficit (NX $<$ 0)

4. Higher real interest:

- C tends to decrease
- I tends to decrease

Section IV: Short Concept Responses

18) Elasticity + Revenue

1. Elasticity approx = 9% / -6% = -1.5
2. Elastic
3. With price down and elastic demand, total revenue increases.

19) Production and Returns

1. If K and L both double, Y doubles.
2. Constant returns to scale.
3. Valid channels: R&D support, education/human capital, innovation incentives; all can raise A over time.