# 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 I Intuition Coach

- Read each MC item as a **causal chain**: shock -> curve shift -> new equilibrium.
- If a policy is non-binding, it cannot change allocation because it does not constrain the equilibrium.
- For GDP questions, ask: "Is this current domestic production?" If no, it is not in current GDP.
- For unemployment categories, map each story to one driver: search, mismatch, cycle, or season.

## 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.

### Intuition Debrief (How to Think Fast Under Time Pressure)

- **Markets clear through price unless blocked:** controls create wedges between buyer and seller plans.
- **External balance is linked to domestic balance:** (NX = S - I) says trade outcomes mirror saving-investment gaps.
- **Labor statistics are stock ratios:** always identify numerator and denominator before calculating.
- **Interest rates re-time spending:** higher real rates reward postponement, so current (C) and (I) usually soften.
- **Growth accounting logic:** sustained growth in living standards needs persistent productivity gains, not one-time factor boosts.