Answers to Study Union Slides

Note: Some of these answers have not been peer reviewed. Because of this, please know that there may be some errors.

All content and information came from PowerPoint slides and lecture videos created by Dr. Nora Underwood-Caputo.

Chapter Two PPF

- Where is it being used inefficiently?
    - A
- Where is production unattainable?
    - X
- Why might the graph move outwards or inwards?
    - Increase in resources.
    - Increase in hours worked
    - Technology increases
- How do you calculate the opportunity cost of one chair?
    - Maximum chairs produced – 80
    - Maximum Tables produced – 45
    - Divide 45/80 (We want to know one chair, so chairs go in the denominator
    - The opportunity cost of one chair is 0.5

Chapter Three

- Law of Demand
    - The idea that as price increases, the quantity demanded decreases. As the price decreases, the quantity demand increases.
    - What causes movement along the demand curve?
        - Changes in price
    - What causes the demand curve to shift?

        - E - Expectations
        - D – Number of Demanders
        - S - Substitutes
        - T – Tastes
        - I – Inferior goods/Income
        - C - Compliments
- Law of Supply
    - The idea that as price increases, quantity supplied also increases. As the price decreases, the quantity supplied also decreases.
- What causes movement along the Supply curve?
    - Changes in prices.
- What causes the Supply curve to shift?
    - I – Input Prices
        - Wages, rent, materials
    - S - # Of Suppliers
    - T - Technology
    - E - Expectations
        - FP – Future Prices
        - S – Seasonality
- Equilibrium
    - Surplus – points where the quantity demanded is less than the quantity supplied.
    - Shortage - points where the quantity demanded is greater than the quantity supplied.
    - Equilibrium – At point (50,30), or where supply is equal to demand.

Chapter Seven

- What counts and what does not count in GDP?

    - Counts – the market value of Final goods and services that are produced within borders for a given period of time.
    - Doesn't count – used goods, intermediate goods, financial transactions, and illegal transactions.
- What is the double-counting problem?
    - Accidentally counting intermediate goods that can also be used as final goods twice.
- What are the four aspects of GDP?
    - Government spending, Investments, Consumption, and Net exports.
- What are the three different approaches to calculating GDP?
    - Value added approach, expenditure approach, and income approach.
- What is the RGDP in 2014 if the base year is 2012? What about the nominal GDP in 2014?
    - RGDP= (20*$7) + (9*$15) = 140+135= 275
        - RGDP uses base year prices.
    - NGDP = (20*$9) +(9*29) = 180+ 261 =441
    - BONUS GDP Deflator = 441/275 = 160
- What are the limitations of GDP?
    - GDP does not measure healthcare in the country, crime, literacy, or life expectancy.

Chapter Eight

- Calculate the percent change in prices from 2024 to 2025
    - (5-8)/8 = -3/8
    - (6-2)/2= 4/2 = 2
    - (15-12)/12 = 3/12 = 1/4
- Calculate the CPI of 2024 and 2025 using the 2024 base year prices
    - 2024 Current year Prices = (8*3) + (2*2) + (12*4) = 24+4+48 =76
    - 2024 Base year prices = (8*3) + (2*2) + (12*4) = 24+4+48 =76
    - CPI 2024 = (Current year)/(Base Year) = (76/76)*100 =100
        - Base year prices are current year prices.
    - 2025 Current year Prices = (5*3) + (6*2) + (15*4) = 15+12+60 =87

    - 2025 Base year prices = (8*3) + (2*2) + (12*4) = 24+4+48 =76
    - CPI 2025 = (Current year)/(Base Year) = (87/76)*100 =114
- Using the values from above, calculate the inflation rate
    - (114-100)/100 = 14%
- How can CPI be used to calculate real and Nominal wages?
    - Divide the real values by the nominal values
    - Then multiply that value by what their nominal wage is.

Chapter Nine Unemployment

- Unemployment Rate = (Unemployed population/ Labor Force) *100 = (35,000/800,000) *100 = 4.375%
- Labor Force Participation Rate = (Labor Force/ Adult population) *100 = (800,000/1,000,000) *100= 80%
- What is an example of frictional unemployment?
    - Moving jobs
- What is an example of structural unemployment?
    - Employers are demanding different skills than those that the average person has.
- What is an example of real wage unemployment?
    - The wages of data analysts are really high, so many people want to be data analysts. There are not enough jobs to keep up with the demand.

Chapter 10

- Calculate the Growth Rate of Nominal GDP
    - [(16,768.1-16,163.2)/16,163.2] *100 = 3.74%
- Calculate the Growth Rate of the inflation rate
    - [(232.957.229.594)/229.594] * 100 = 1.46%
- Calculate the population growth rate
    - [(316,148,990-313,894,601)/ 313,894,601 = 1.56%
- Find the growth rate of RGDP per capita
    - Subtract these values

        - Growth rate of NGDP – Inflation rate – Population Growth Rate = 1.56%

Chapter 11

- More factors that affect consumption spending
    - Wealth, Expected future income, the interest rate, consumer confidence, taxes, and current income.
- Factors of Investment Spending
    - Purchase and replacement of new capital by firms, expected profitability, the interest rate, and business taxes.
- Factors of government spending
    - Decided by Congress and the President
    - Spending on new goods and services, military, infrastructure, parks, and law enforcement.
- Key factors of net exports
    - Foreign income – the more foreign income, the more exports there are.
    - Domestic Income – the more income we have, the more imports we have.
    - Exchange rates – The value of the dollar increases, then there are fewer exports.
    - Tastes and preferences increase and decrease imports.
    - Trade policy
- Unplanned inventory change
    - 18-19.5= -1.5 (Increase)
    - 19-20= -1 (Increase)
    - 20-20.5=-0.5 (Increase)
    - 21-21= 0 (No Change)
    - 22-21.5= 0.5 (Decrease)
    - 23-22= 1 (Decrease)
    - 24-22.5= 1.5 (Decrease)

Chapter 15

- If the required reserve ratio is 10%, and $100, what portion will be loaned out?
    - (Deposit) (1-Required Reserve) = (100) (1-0.10) = $90
- How do you calculate excess reserves?
    - Multiply the required reserve ratio by the deposit. Subtract required reserves from total current reserves.
- How do you calculate the required reserve ratio when there is no excess?
    - Total amount in reserves/total deposits