ECON 104 Goffe – Final Exam – Practice Exam Solutions

1. **B** – Prices and quantities of specific goods are determined using microeconomics.

2. **C** – Although all of these factors affect economic growth, technology will have the biggest impact because it shifts the per-worker production function upward. There are limits to how much the population and labor force participation can grow, and we will see diminishing returns to capital.

3. **B** – The deficit is the difference between tax revenue and government expenditures in a given year. The federal debt accumulates from year to year.

4. **D** – North Korea

5. **C** – The personal stimulus checks represent fiscal policy, not monetary policy.

6. **A** – The avocados are an intermediate good because they become part of the final product sold by Chipotle.

7. **D** – Increasing technology would shifts SRAS to the right, causing a decrease in P (deflation) and an increase in Y (expansion).

8. **D** – New inventions, improved processes, and increased human capital all result in technological change.

9. **A** – The Fed was created to manage and reduce bank panic.

10. **B** – A decrease in interest rates promotes economic growth which leads to higher employment. The Fed is not in charge of changing taxes, so C and D are not valid options.

11. **C** – The only household purchase that falls under investing is the purchase of a new house/apartment.

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12. **A** – Higher interest rates lead to lower inflation. The Fed may take action to increase interest rates in order to achieve their 2% inflation goal.

13. **A** – Use the subtraction method when the nominal rate and inflation rate are known.

    Subtraction Method: % Δ in Real Price = % Δ in Nominal Price – Inflation Rate

14. **A –** Transfer payments and interest on federal debt are not included in GDP because they do not result in the production of new goods or services.

15. **C** – CPI only uses a market basket which represents the goods and services consumed by the typical household. They are both measurements of the price level.

16. **D** – GDP measures total income, total production, and total expenditures.

17. **B** – The printer is a manufactured good that will be used to create the final goods sold by the bookstore.

18. **A** – Real GDP per capita provides the best measure of standard of living. A country's real GDP per capita is related to the availability of modern medicine and health care, as well as many comforts of life.

19. **D** – Housing, transportation, and food & beverage are the three biggest categories of the market basket used to calculate CPI.

20. **C** – Although "price stability" is a goal of monetary policy, the Fed actually aims for 2% inflation rather than attempting to eliminate inflation completely. This makes the inflation rate predictable and helps avoid periods of deflation.

21. **C** – The GDP deflator compares the nominal GDP (in current year prices) to the real GDP (in base year prices). A GDP deflator of 300 would mean that the nominal GDP is three times the real GDP, meaning prices have tripled since the base year.

    GDP deflator = $\frac{\text{Nominal GDP}}{\text{Real GDP}}$ x 100

    The GDP deflator alone does not tell us anything about the inflation rate. We would need to know the percent change in the GDP deflator to find the inflation rate, but we are unable to calculate the percent change without knowing the GDP deflator from the previous year.

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22. **B** – Use the division method when you want to adjust for inflation when comparing values from two separate years.

    Division Method: Year B Price, Reported in Year A Values = Nominal Price x $\frac{\text{CPI in Year A}}{\text{CPI for Year B}}$

23. **B** – The underemployment rate includes the "marginally attached" workers who've stopped looking for a job due to discouragement or personal reasons.

24. **C** – $2,130

Real GDP 2019	2019 Quantity	2000 (BY) Price	Total
Coffee	250	$2	$500
Scarves	90	$7	$630
Books	100	$10	$1,000
Total Real GDP 2019			**$2,130**

25. **B** – $3,950

Nominal GDP 2020	2020 Quantity	2020 Price	Total
Coffee	300	$5	$1,500
Scarves	150	$11	$1,650
Books	50	$16	$800
Total Nominal GDP 2020			**$3,950**

26. **A** – 184

Nominal GDP 2020	2020 Quantity	2020 Price	Total
Coffee	300	$5	$1,500
Scarves	150	$11	$1,650
Books	50	$16	$800
Total Nominal GDP 2020			**$3,950**

Real GDP 2020	2020 Quantity	2000 (BY) Price	Total
Coffee	300	$2	$600
Scarves	150	$7	$1,050
Books	50	$10	$500
Total Real GDP 2020			**$2,150**

GDP Deflator = (Nominal GDP / Real GDP) * 100
GDP Deflator 2020 = ($3,950 / $2,150) * 100 = 184

27. **B** – 19%

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Nominal GDP 2019	2019 Quantity	2019 Price	Total
Coffee	250	$4	$1,000
Scarves	90	$10	$900
Books	100	$14	$1,400
Total Nominal GDP 2019			**$3,300**

Real GDP 2019	2019 Quantity	2000 (BY) Price	Total
Coffee	250	$2	$500
Scarves	90	$7	$630
Books	100	$10	$1,000
Total Real GDP 2019			**$2,130**

GDP Deflator = (Nominal GDP / Real GDP) * 100
GDP Deflator 2019 = ($3,300 / $2,130) * 100 = 155

GDP Deflator 2020 = 184 (see question 33)

$$\%\,\Delta \text{ in GDP deflator} = \text{Inflation} = \frac{\text{New GDP deflator} - \text{Old GDP deflator}}{\text{Old GDP deflator}} \times 100\%$$

$$\%\,\Delta \text{ in GDP deflator} = \text{Inflation} = \frac{184 - 155}{155} \times 100\% = \mathbf{19\%}$$

28. **A** – Frictional unemployment occurs when a worker is looking for a job that is a good match.

29. **C** – An increase in the expected future price level would cause employees to demand higher wages in their current negotiations. This would raise costs for firms and cause them to decrease production at any price level, shifting SRAS to the left.

30. **B** – 5%

$$g = \left(\frac{x_n}{x_0}\right)^{\left(\frac{1}{n}\right)} - 1$$

$$g = \left(\frac{\$4{,}000}{\$1{,}000}\right)^{\left(\frac{1}{30}\right)} - 1$$

g = 0.05 = 5%

31. **D** – The <u>percent change</u> in the GDP deflator or <u>percent change</u> in the CPI can be used to measure inflation, but the GDP deflator and CPI alone do not measure inflation.

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32. **C** – A decrease in government transfer payments would cause AD to shift to the left, causing a decrease in the price level (deflation) and a decrease in the real GDP (recession).

33. **A** – The CPI tends to overstate the inflation rate (see pg 16 in review packet)

34. **A** – It was shorter and more severe.

35. **C** – The GDP deflator has not decreased in value since 1970 (meaning there have not been periods of deflation).

36. **C** – Use the deflating method to report a current-year value in base-year dollars, making it a real value.

37. **B** – 6%

    Real interest rate = Nominal interest rate – Inflation rate
    Real interest rate = 8% - 2% = **6%**

38. **C** – Inflation causes firms to raise prices, which results in menu costs. Because wages and prices both increase during inflation, it does not reduce affordability for the average consumer. Also, high inflation is good for borrowers because it reduces the real interest rate on debt.

39. **C** – The production of new capital goods is included in GDP, while the production of homemakers and the underground economy are not.

40. **D** – Economic growth was the highest from 1900 – 2000. However, it did not begin until after 1300, it is <u>not</u> zero-sum, and growth is likely to slow in the foreseeable future.

41. **B** – The Fed has a goal of 2% inflation. This helps maintain a predictable and manageable inflation rate while also avoiding periods of deflation.

42. **A** – Compounding growth causes small differences in growth rates to create big differences in real GDP over time.

43. **B** – 14 years

    Rule of 70:
    Years to double = (70 / growth rate)
    Years to double = (70 / 5) = **14 years**

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44. **C** – The price level (P), measured by the GDP deflator, is on the vertical axis of the AD and SRAS model.

45. **B** – The sale of <u>used</u> goods is not included in GDP.

46. **C** – Human capital is part of technology, and technological change shifts the production function.

47. **B** – If the dollar becomes more valuable relative to foreign currency, net exports decrease (U.S. goods become relatively more expensive: less exports, more imports) and AD shifts to the left.

48. **C** – The U.S. is a mixed economy; most decisions are made by firms and households, but there is some government intervention.

49. **C** – Unemployed individuals are those who are available for work, have not worked in the past week, and have actively looked for a job within the past four weeks.

50. **B** – Structural unemployment occurs when a worker's skillset does not line up with demand in the economy.

51. **C** – During recessions, decreased spending causes inflation to decrease and unemployment to increase.

52. **A** – Because prices usually increase over time (from the base year), real GDP is typically less than nominal GDP.

53. **B** – Even in full employment, structural and frictional unemployment will exist. Full employment refers to a time period during which cyclical unemployment equals 0%.

54. **A** – Real GDP (Y) is the horizontal axis of the AD and SRAS model.

55. **A** – An increase in the price of a natural resource would increase firms' costs, shifting SRAS to the left. This would cause an increase in the price level (inflation) and a decrease in real GDP (recession).

56. **C** – The "Great Moderation" refers to the period between 1950 and 2000 during which there were no severe recessions.

57. **B** – An increase in interest rates will cause a decrease in investment spending, which would shift AD to the left.

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58. **C** – Cyclical unemployment is unemployment caused by recessions.

59. **D** – Reasons the AD curve is downward sloping include the wealth effect, the interest rate effect, and the international trade effect.

60. **D** – 5.0%

    Okun's Law:
    % Δ in Real GDP = 3 – 2 * Δ in the Unemployment Rate
    2 = 3 – 2 * Δ in the Unemployment Rate
    Δ in the Unemployment Rate = 0.5

    This year's unemployment rate = Last year's unemployment rate + Δ in the Unemployment Rate
    This year's unemployment rate = 4.5% + 0.5% = **5.0%**

61. **C** – At the beginning of a recession, unemployment typically increases.

62. **A** – Changes in the price level are difficult to predict, and the failure to accurately predict the price level is one of the reasons for the upward sloping SRAS.

63. **B** – The core CPI excludes the prices of volatile goods like food and energy.

64. **B** – Macroeconomic equilibrium is the intersection between AD and SRAS which shows us the price level and real GDP in an economy.

65. **B** – A decrease in federal taxes would cause AD to shift to the right. This would cause an increase in the price level (inflation) and an increase in real GDP (expansion).

66. **B** – Between 4% and 5%

    Interest rate = (Face Value – Price of Bond)/Price of Bond = ($100 - $96)/96 = 0.042 = **4.2%**

67. **B** – Banks owe money to the customers who've deposited it.

68. **A, D, E** – Stock represents ownership in a company, which comes with dividend payments. It is higher risk, which leads to higher potential returns.

69. **B** – As you get older, you should invest in more bonds and less stock because stock has higher risk of loss.

70. **B, C, F** – Bonds offer fixed future payments (face values) and coupon payments. They are lower risk because they have a fixed future value.

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71. **B** – To a homeowner, a mortgage is an amount that they owe.

72. **A** – A bank will collect mortgage payments from a customer, so the mortgage is an asset to the bank.

73. **C** – Most employers offer defined contribution plans but not defined benefit plans.

74. **A** – Stock is riskier than bonds, as stock does not have a fixed future payment value.

75. **D** – A life cycle fund is an all-in-one fund. It chooses diversified assets for you and automatically adjusts risk as you approach retirement age, which makes it the easiest to maintain.

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