Last Name:__________________________

First Name:__________________________

Score:__________________________/100

ECN102: Introductory Macroeconomics
Section 001

Final Exam
Form 0101

<u>Instructions:</u> **Fill in the correct bubble on the answer sheet. Each True/False question is worth one point. Each Multiple Choice question is worth two points.**

1. **The investment component of GDP refers to purchasing physical assets like houses, factories, machines, etc.**
   A. **True** B. False
2. **If the current year CPI is 110, then the price level has decreased by 10 percent since the base year.**
   A. True B. **False**
3. **If the value of an economy's exports exceeds the value of that economy's imports, then net exports is a negative number.**
   A. True B. **False**
4. **The largest sector in the consumer price index market basket is housing costs.**
   A. **True** B. False
5. **An example of foreign direct investment is Huawei, a Chinese company, building a manufacturing plant in Alabama.**
   A. **True** B. False
6. **The most important determinant of a society's standard of living is technological knowledge.**
   A. **True** B. False
7. **GDP can be measured using the production, expenditure, and income approach.**
   A. **True** B. False
8. **The GDP deflator includes the same basket of goods and services each year since the economy produces the same goods and services each year.**
   A. True B. **False**
9. **According to the efficient markets hypothesis, it is impossible to systematically beat the market year-by-year.**
   A. **True** B. False
10. **Cryptocurrencies do not serve all the functions of money.**
    A. **True** B. False
11. **If the Fed increases reserve requirements, the money supply will increase.**
    A. True B. **False**
12. **Inflation makes it easier for debtors to pay off their debts.**
    A. **True** B. False

13. **According to the Fisher effect, an increase in the inflation rate would increase nominal interest rates.**
A. **True** B. False

14. **For an open economy, national savings always equals national investment.**
A. True B. **False**

15. **Over the long run, there is a weak relationship between a country's inflation rate and nominal exchange rate to the dollar.**
A. True B. **False**

16. **An example of commodity money would be the US$.**
A. True B. **False**

17. **As the price level increases, so does the value of money.**
A. True B. **False**

18. **A trade deficit exists when imports exceed exports, leading to negative net capital outflows.**
A. **True** B. False

19. **Macroeconomic variables like investment, employment, and GDP fluctuate together.**
A. **True** B. False

20. **The short-run aggregate supply curve slopes up as firms and workers respond to deviations from the expected price level.**
A. **True** B. False

21. **Any event that shifts the short-run aggregate supply curve will also shift the long-run aggregate supply curve.**
A. True B. **False**

22. **An increase in the price level shifts the whole aggregate demand curve out.**
A. True B. **False**

23. **An example of contractionary fiscal policy would be the government reducing taxes.**
A. True B. **False**

24. **When the crowding out effect is large, increasing government purchases has a smaller effect on aggregate demand than the size of the increase.**
A. **True** B. False

25. **The larger the marginal propensity to consume, the smaller the multiplier effect.**
A. True B. **False**

26. **An example of automatic stabilizers would be the increase in welfare payments during recessions.**
A. **True** B. False

27. **The long-run Phillips curve and short-run Phillips curve intersect at the expected inflation rate.**
A. **True** B. False

28. **Rational expectations states that people optimally use all information available about government policies when forecasting the future.**
A. **True** B. False

29. **A trade-off exists between inflation and unemployment exists in the long-run.**
A. True B. **False**

30. **For the US economy, the most important reason the aggregate demand curve slopes down is the net export effect.**
A. True B. **False**

31. **What is the present value of $1100 paid one year from now discounted at 10%?**

   A. $995.50
   B. **$1000**
   C. $1090
   D. $1100

32. **Since 1980, India's GDP per capita has grown about 5% per year. Currently, India's GDP per capita is around $4,000. If India's GDP per capita continues to grow at the same rate, in what year will it be $16,000?**

   A. 2034
   B. **2048**
   C. 2062
   D. 2076

33. **Which of the following are accounted for in GDP?**

   A. depletion of natural resources
   B. enjoying time with friends
   C. equitable income distribution
   D. **none of the above**

	Oranges		Pumpkin Spice Lattes	
Year	Price	Quantity	Price	Quantity
2019	\$4	1000	\$2	250
2020	\$3	1000	\$5	250
2021	\$2	500	\$8	500

For the questions on this page, refer to the table above describing an economy that only produces Oranges (O) and Pumpkin Spice Lattes (PSL). Use 2020 as the base year for prices. The CPI basket of goods consists of 5 Oranges and 5 Pumpkin Spice Lattes.

34. **What is the consumer price index for 2021?**

    A. 75
    B. 100
    C. **125**
    D. 150

35. **What is the inflation rate for 2020?**

    A. 0%
    B. 20%
    C. 25%
    D. **33%**

36. **What is real GDP in 2020?**

    A. \$4000
    B. **\$4250**
    C. \$5000
    D. \$5250

37. **What is the rate of real GDP growth from 2020 to 2021?**

    A. **-6.25%**
    B. 0%
    C. 6.25%
    D. 18.75%

38. **A Nobel laureate in economics predicted in his 1960 textbook that the Soviet Union would overtake the US economy because the Soviet Union had a higher rate of investment than the US. In 1960, the Soviet Union and US were both capital rich countries, so the Soviet Union was never able to overtake US economic production through investing more because:**

    A. increasing returns to capital
    B. constant returns to capital
    C. **diminishing returns to capital**
    D. none of the above

39. **Most economists believe that the classical dichotomy and money neutrality holds**

    A. in the long-run and the short-run.
    B. **in the long-run but not the short-run.**
    C. in the short-run but not the long-run.
    D. not in the long-run and not in the short-run.

40. **The inflation tax refers to**

    A. the increase in the price of a product as a result of an increase in taxes
    B. the fact that income tax rates rise with inflation
    C. **the revenue the government creates by printing money**
    D. the inflationary effect of a decrease in taxes

41. **For which reason might purchasing-power parity not hold?**

    A. some goods and services are not easily traded across countries
    B. some goods and services are not perfect substitutes across countries
    C. **both of the above**
    D. neither of the above

42. **In 2016, for each $1 you could get 0.95 Euros. Today, for each $1 you can get 0.90 Euros. Everything else constant, the dollar has**

    A. appreciated and can buy more European goods and services.
    B. appreciated and can buy fewer European goods and services.
    C. depreciated and can buy more European goods and services.
    D. **depreciated and can buy fewer European goods and services.**

43. **Which type of unemployment occurs when people leave their job to search for a job that more closely matches their skills and preferences?**

    A. Cyclical
    B. **Frictional**
    C. Structural
    D. Unnatural

44. **Suppose the reserve requirement in a fractional reserve banking system is 5%. If the central bank created $100 of new bank reserves, how much money could be created?**

    A. $0
    B. $100
    C. $1900
    D. **$2000**

45. **A US mutual fund sells American stocks and buys Mexican stocks. Holding all else constant, in the market for foreign-currency exchange**

    A. demand for dollars rises
    B. demand for dollars falls
    C. **supply of dollars rises**
    D. supply of dollars falls

46. **Trade policies, like import tariffs and export quotas, affect**

    A. the trade balance.
    B. net capital outflows.
    C. **specific firms and industries.**
    D. none of the above.

47. **If the Fed sells government bonds, which of the following has only actions that would each counter the effect of government bond sales on the money supply?**

    A. increase reserve requirements, decrease the discount rate
    B. increase reserve requirements, increase the discount rate
    C. **decrease reserve requirements, decrease the discount rate**
    D. decrease reserve requirements, increase the discount rate

48. **An investment bank before the financial crisis had $100 billion in assets and $90 billion in debt. What would be the value of bank capital if the value of assets falls to $95 billion?**

   A. $10 billion
   B. **$5 billion**
   C. -$5 billion
   D. -$10 billion

49. **Which of the following would lead to a decrease in aggregate demand?**

   A. an increase in physical or human capital
   B. a decrease in the availability of natural resources
   C. an advance in technological knowledge
   D. **none of the above**

50. **If the price level increases, then**

   A. interest rates increase and investment demand increases.
   B. **interest rates increase and investment demand decreases.**
   C. interest rates decrease and investment demand increases.
   D. interest rates decrease and investment demand decreases.

51. **Which of the following represent a large positive aggregate demand shift?**

   A. the Great Depression
   B. the Great Recession
   C. **World War II**
   D. none of the above

52. **Suppose the marginal propensity to consume is 0.5. If the government believes aggregate demand is $500 billion below potential and any increase in government spending will experience $100 billion in crowding out, how much does the government need to increase spending to have aggregate demand reach potential?**

   A. **$300 billion**
   B. $400 billion
   C. $500 billion
   D. $600 billion

53. **According to the theory of liquidity preference, an increase in the money supply causes the interest rate to**

    A. **fall which increases investment spending**
    B. fall which decreases investment spending
    C. rise which increases investment spending
    D. rise which decreases investment spending

54. **To increase the Federal Funds rate, the Fed would**

    A. buy bonds, which decreases the money supply
    B. buy bonds, which increases the money supply
    C. **sell bonds, which decreases the money supply**
    D. sell bonds, which increases the money supply

55. **Suppose economists find that for every $100 increase in income, households increase consumption by $80. What is the government expenditures multiplier?**

    A. 5/4
    B. 9/5
    C. 4
    D. **5**

56. **According to the wealth effect, one of the reasons the slope of the aggregate demand curve is that falling prices**

    A. **increase the value of money holdings so consumer spending increases**
    B. decrease the value of money holdings so consumer spending decreases
    C. increase the value of money holdings so investment spending increases
    D. decrease the value of money holdings so investment spending decreases

57. **Which of the following policies can move the economy to a point on the Phillips curve with lower unemployment and higher inflation**

    A. decrease the money supply
    B. **increase government spending**
    C. increase taxes
    D. all of the above

58. **Using the Phillips curve equation with a = 1, what is the unemployment rate if the natural rate of unemployment is 5%, expected inflation is 2%, and actual inflation is 3%?**

   A. **4%**
   B. 5%
   C. 6%
   D. 7%

59. **A typical estimate of the sacrifice ratio is 5. How much GDP would have to be given up to reduce inflation from 4% to 2%?**

   A. 0%
   B. 5%
   C. **10%**
   D. 20%

60. **If people have rational expectations, a tight monetary policy, announced and believed to be credible by households and firms, would**

   A. **reduce inflation with a relatively small increase in unemployment**
   B. reduce inflation with a relatively large increase in unemployment
   C. increase inflation with a relatively small increase in unemployment
   D. increase inflation with a relatively large increase in unemployment

The following question is worth 10 points. Show all work to receive full credit.

1. Draw a graph showing the AD-AS model in long-run equilibrium. Label all curves and the equilibrium price level and level of real GDP. Show the effect of a global recession reducing demand for US exports. What is a fiscal or monetary policy that will help reach long-run equilibrium? Show the effect of your recommended fiscal or monetary policy on the graph.

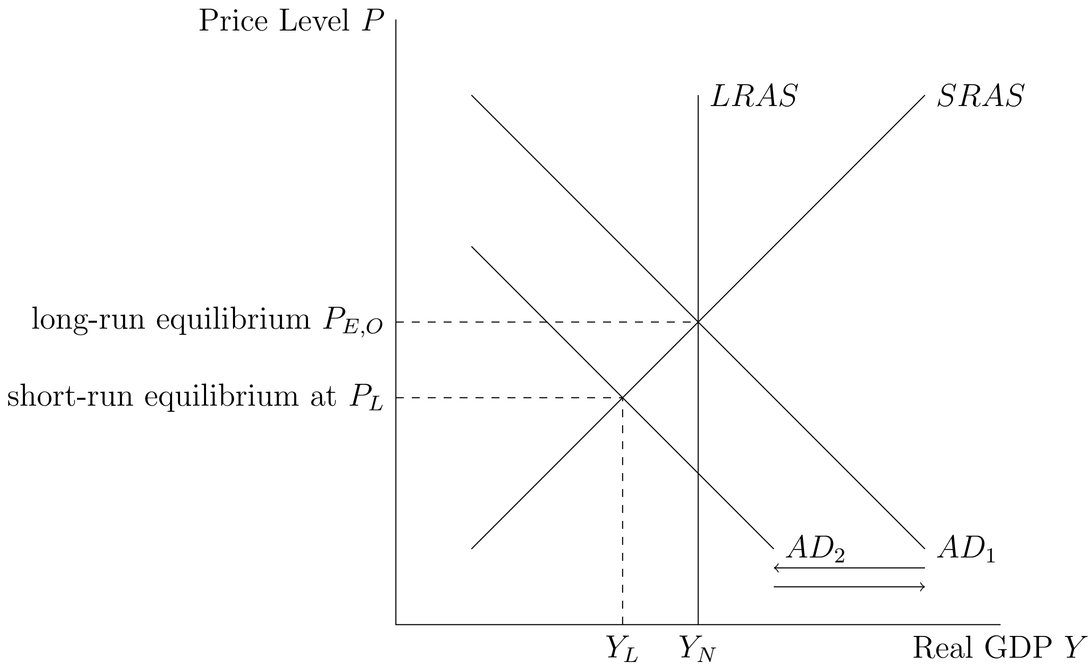

Figure 1: Global Recession in AD/AS model

Policymakers could implement expansionary fiscal policy lowering taxes and increasing spending or monetary policy increasing the money supply and lowering interest rates.