Directions:

- You have 75 minutes to complete this exam.

- Complete all problems.

- **Clearly label** and explain your answer to each problem and, if applicable, each part (a,b,c) in a clear, concise, yet comprehensive manner.

- **Graphs are mandatory** whenever appropriate.

- Your score is based on 100 possible points.
1) From the *Wall Street Journal*, Feb 22, 2000 (p. A4) (15 points)

"The Fed chairman intensified his plea to politicians to let budget surpluses keep running and pay down the national debt rather than boost spending or cut taxes."

Using the loanable funds model, show and explain how this would affect the economy. (20 points)
2) This was reported by CNN regarding the 'el Niño' weather disturbance and its potential economic impact on southern Africa:

"The drought from el Niño will wipe out agricultural crops, forcing poor African countries to spend their meager saving on imported food rather than on education and infrastructure. This loss of education spending will impair the economic performance of these countries for years to come due to lower productivity. Thus, el Niño’s temporary impact on the weather may seriously affect southern Africa’s long-term production and income."

Would a classical economist agree with this claim? If so, why? If not, why not? (20 points)
3) Suppose the substitution effect exactly balanced (equaled) the income effect regarding the leisure-labor decisions of workers. Given the labor supply curve associated with this case, how would an increase in technology affect the equilibrium level of employment, output and wages? (20 points)
4) a) Assume the following Keynesian Economy: \( C = 100 + 0.9Y^d; \) \( I = 200; \) \( G = 300; \) \( T = 100; \) \( EX = 0; \) \( IM = 0. \) Determine the equilibrium value of income (hence GDP, \( Y_E \)), as well as the autonomous expenditure multiplier. (10 points)

b) Graph the Keynesian Cross described above. Label it with the actual value of equilibrium GDP (\( Y_E \)) and the current value of autonomous expenditures. If \( Y > Y_E \), describe how changes in inventories provide a stable equilibrium. (10 points)

c) Assume that the government finds itself in a $100 billion “recessionary gap” (i.e. current GDP < full-employment GDP). Concisely describe exactly how government spending policy can eliminate this $100 billion gap. Illustrate this on your graph from (b). (10 points)
5) It has been argued that the Fed 'protects' the stock market by cushioning the fall in share prices when the stock market suffers large price decreases by lowering their interest rates, but does nothing to lessen large increases in stock markets. Thus, some say that the Fed is providing 'insurance' to stockholders. Consider an expanded version of our portfolio allocation model (the assumption that people hold wealth in the form of money, stocks, or bonds), demonstrate and explain how such behavior by the Fed affects individuals' portfolio allocations between 'safe' (bonds) and 'riskier' (stocks) assets. (10 points)

OR

5) Solve each of the following classical systems independently (a, then b) for the equilibrium real wage, employment and output.

(1) \[ y = F(K, N) = K + 2 \ln(N), \quad K = 4 \]

(2) \[ N^* = \left(\frac{1}{32}\right)\left(\frac{W}{P}\right) \]