## Economics 102 Introduction to Macroeconomics Prof. Alan Deardorff Midterm Exam 2 Solutions March 20, 2002

1.	d
2.	e
3.	b
4.	c
5.	a
	b
7.	a
8.	d
9.	c
10.	a
11.	b
12.	c
13.	
14.	
15.	e
16.	b
17.	
18.	
19.	
20.	e
21.	
22.	
23.	
24.	c
25.	c
26.	d

1. 6	2
2. l	
3. 0	
4. l	
5. 6	
6. 6	
7. l	
8. l	
9. (	
10.	
11.	
12.	
13.	
14.	
15.	
16.	
17.	
18.	
19.	
20.	
21.	
22.	
23.	
24.	
25.	
26.	

## Part B: Short Answer Questions(20 points)

a) Inflation reduces people's real purchasing power

This is generally false, because people's wages are corrected for inflation. So if we have a general inflation of 5%, in most cases we see an increase in wages to correct for the lost purchasing power. If you are receiving a fixed income and there is no inflation indexation, then you will lose purchasing power, making this statement true in certain cases.

b) An increase in oil prices will shift the long-run aggregate supply to the left, leading to higher prices in the long run.

False, Shifts in aggregate supply come from changes in the determinants in potential output via our production function, Y=AF(K,L,N,H). We can see that capital, labor, natural resources, technology, and human capital have not changed, so Y, or LRAS does not change.

c) In 1999 velocity increased from 100 to 105, the GDP deflator increased from 180 to 189, and the Federal Reserve held money supply constant at 300 million dollars. According to the quantity equation, nominal GDP does not change.

False. If we solve for the percent changes and use our percent change quantity equation, we have:

```
%DV+%DM=%DP+%DY, which simplifies to 5%=5%+%DY, or %DY=0.
```

So it is the percent change in real GDP, not the percent change in nominal GDP that is zero. Nominal GDP grows by 5% here.

d) Government budget deficits can lead to hyperinflation.

True. If a government has large deficits and finances it's spending through the printing of currency, then a hyperinflation is possible. A couple of examples would be Russia after the fall of communism and Germany following the First World War.

e) Allowing foreigners to invest in the US market for loanable funds harms US borrowers, assuming that US citizens do not invest outside of the country.

If we exist in a world where US citizens cannot invest outside of the country and foreigners cannot invest in the US, then no NFI occurs. Imagine, then, opening the domestic economy to foreign investment. This would add NFI to our open economy model and shift the demand for loanable funds to the left. A leftward shift in loanable funds will lower the interest rate, making borrowers better off by paying lower interest rates.