Whitman College Economics 107 Final Exam May 20, 2003

Write all answers on your exam.

1. Assume that each of the 100 firms in a perfectly competitive industry has fixed costs of $300, and the following variable cost schedule. Use this information to answer questions (a)-(g).

Output	Variable Cost ($)
0	0
1	100
2	150
3	210
4	290
5	400
6	540
7	720
8	950
9	1240
10	1600

(a) (10 pts) Complete the market supply schedule in the table below.

Quantity Demanded	Price ($)	Quantity Supplied
600	360	
700	290	
800	230	
900	180	
1000	140	
1100	110	
1200	80	
1300	60	

(b) (5pts) What will be the price of the product in the short-run equilibrium?

(c) (5pts) What quantity will each firm produce in the short-run?

(d) (5pts) What will be each firm's profits in the short-run?

(e) (5pts) What will be the price of the product in the long-run equilibrium?

(f) (5pts) What quantity will each firm produce in the long-run?

(g) (5pts) How many firms will there be in the industry in the long-run?

2. (25pts) Consider a monopolist who faces a straight-line market demand curve. Explain why a profit-maximizing monopolist would never produce anywhere on the inelastic portion of this demand curve.

3. (30pts) Suppose that using leaf blowers generates external costs, in the form of noise pollution. If leaf blowers are produced in a perfectly competitive market, will the socially optimal quantity be produced? Explain your answer, with reference to a supply and demand diagram for leaf blowers. In your explanation, state whether a dead-weight loss exists at the perfectly competitive quantity. If you say that a dead-weight loss does exist, then indicate the dead-weight loss on your diagram.

4. Consider the information below.

THE WALL STREET JOURNAL.

MONDAY, MAY 19, 2003

Having Defeated Inflation, Fed Girds for New Foe: Falling Prices

By GREG IP
And JON E. HILSENRATH

The Federal Reserve's historic shift from fighting inflation to resisting deflation didn't come a moment too soon.

Less than two weeks after the central bank indicated falling prices were a bigger threat to the U.S. economy than rising prices, the government said the underlying inflation rate hit a 37-year low.

The American economy is beset with excess capacity. Factory usage is at its lowest level in two decades. Hundreds of jet liners are mothballed and the rest fly more

THE OUTLOOK

than a quarter empty. Rising apartment vacancies are forcing landlords to cut rents. And unemployment is at an eight-year high.

(a) (5pts) Define deflation.

(b) (15pts) Use the quantity theory of money to explain what causes deflation in the long term.

(c) (10pts) Describe the economic costs of deflation.

5. Consider the information below.

THE WALL STREET JOURNAL.

MONDAY, MAY 19, 2003

Income, Dividend Effects of Tax Bill Come Into Focus

By TOM HERMAN

CONGRESS CONTINUES TO tinker with key details, but it is clear that Washington is moving closer to passing a substantial tax cut that will reduce marginal rates, especially for higher-income individuals, and probably also slash taxes on stock dividends.

(a) (20pts) Explain the economic rationale for proposing tax cuts now. Refer to a Keynesian Aggregate Demand-Aggregate Supply diagram in your answer.

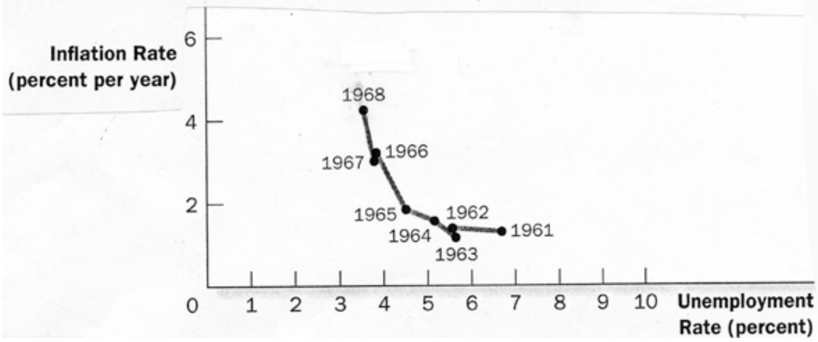
(b) (10pts) Alan Greenspan, Chairman of the Federal Reserve Board of Governors, has indicated that he does not support tax cuts now. Describe his economic reasoning.

(c) (10pts) Economists who support active attempts to manage the business cycle generally suggest that policy-makers use monetary rather than fiscal policy to do so. Explain their reasoning.

6. Use the Short Run Phillips Curve shown below to answer parts (a)-(c) of this question.

The Phillips Curve in the 1960s

This figure uses annual data from 1961 to 1968 on the unemployment rate and on the inflation rate (as measured by the GDP deflator) to show the negative relationship between inflation and unemployment.



(a) (15pts) With reference to a Keynesian Aggregate Demand and Aggregate Supply diagram, explain why unemployment rates fell at the same time that inflation rates rose over the course of the 1960's.

(b) (15pts) During the 1960's, most economists believed that policy-makers could trade a higher inflation rate for a lower unemployment rate, according to the Short Run Phillips Curve shown on the preceding page. Explain what happened in 1970 to change their minds. Refer to an AD-AS diagram in your explanation.

(c) (5pts) On the Short Run Phillips Curve graph on the preceding page, draw in the Long Run Phillips Curve for the 1960's.