

Brigham Young University Department of Economics
Economics 110 – Principles of Economics
Professor Kerk Phillips – Spring Term 2008, section 1

Final Exam key

6/18 – 6/19 Testing Center

This test is multiple choice, fill in your answers on the answer sheet and do not write on this exam. It is closed book and closed notes. There is no time limit and you may use calculators; either those provided by the testing center or your own. Read all questions carefully before answering. There are 50 questions and 11 pages to this exam.

1. Suppose that at a price of \$3, Cougar Burgers sells 12,000 cheeseburger per week. Then, when it rises to \$5, 4000 cheeseburgers per week are sold. By the midpoint method, the price elasticity of demand for cheeseburgers is: $((12,000 - 4000)/8000)/((3-5)/4) = (1/1)/(-2/4) = -2$

- a) -.20
- b) -.25
- c) -.80
- d) -1.25
- e) **none of the above**

2. For an income normal good, an increase in consumer income, all else equal, will cause price in a market to ____, and quantity exchanged to ____.

- a) **rise, rise**
- b) rise, fall
- c) fall, rise
- d) fall, fall
- e) it is impossible to tell with the given information

3. The unitary elastic portion of a straight-line (also called linear) demand curve is...

- a) the section above and to the left of the midpoint
- b) **the midpoint only**
- c) the section below and to the right of the midpoint
- d) the entire demand curve
- e) none of the above

4. Which of the following factors would tend to make the price elasticity of demand more elastic?

- a) The good is a necessity, rather than a luxury
- b) The good has few close substitutes
- c) The good is consumed only by people with very low incomes
- d) **The time horizon over which we are looking is relatively long**
- e) none of the above

5. If the elasticity of supply is greater than the elasticity of demand, then the burden of a tax ...

- a) **falls more heavily on consumers than producers**
- b) falls more heavily on producers than consumers
- c) falls equally on consumers and producers
- d) is almost zero
- e) none of the above

6. A binding price floor causes...

- a) a shortage of the good
- b) **a surplus of the good**
- c) an equilibrium allocation where supply equals demand
- d) sometimes a shortage and sometimes a surplus
- e) none of the above

Use the following *unit labor requirements* for questions 7 – 9:

	Japan	USA
Cars	50	75
Airplanes	2500	1500

7. The relative cost of one airplane in Japan is...

- a) 100 cars per airplane
- b) **50 cars per airplane**
- c) 20 cars per airplane
- d) 10 cars per airplane
- e) none of the above

8. _____ has the absolute advantage in producing cars, and _____ has the absolute advantage in producing airplanes.

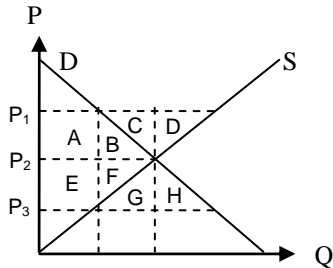
- a) Japan, Japan
- b) **Japan, the U.S.**
- c) the U.S., Japan
- d) the U.S., the U.S.
- e) it is impossible to tell with the given information

9. _____ has the comparative advantage in producing corn, and _____ has the comparative advantage in producing movies. (this was a typo)

- a) Japan, Japan
- b) Japan, the U.S.
- c) the U.S., Japan
- d) the U.S., the U.S.
- e) **it is impossible to tell with the given information**

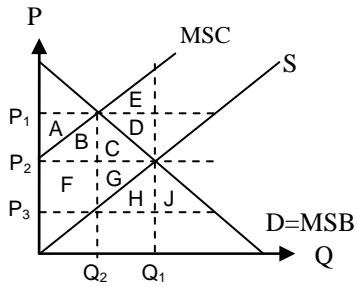
10. When the price of wheat is \$10 per unit 4.5 million units are supplied. When the price falls to \$2 per unit only 3.5 million units are supplied. If the only thing that caused the quantity supplied to change was the change in price, then the price elasticity of supply is...
- $$\frac{(4.5 - 3.5)/4}{((10-2)/6)} = \frac{(1/4)}{(8/6)} = 1/3$$
- a) $\frac{1}{4}$
 b) $\frac{1}{2}$
 c) 1
 d) 4
 e) **none of the above**

Use the following figure to answer questions 11 – 14. This figure illustrates a *price floor of P_1* .



11. The change in government revenue is...
- a) $+(A+E)$
 b) $+(A+B+C)$
 c) $+(E+F+G)$
 d) $+(A+B+C+E+F+G)$
 e) **none of the above (zero)**
12. The change in producer surplus is...
- a) $+(A+B+C+D)$
 b) $-(E+F)$
 c) $-(A+B)$
 d) $+(E+F+G+H)$
 e) **none of the above (A+E-F)**
13. The change in consumer surplus is...
- a) $+(A+B+C+D)$
 b) $-(E+F)$
 c) **$-(A+B)$**
 d) $+(E+F+G+H)$
 e) none of the above
14. The net loss to society or deadweight loss (ignoring the minus sign) is at least...
- a) **(B+F)**
 b) (C+G)
 c) (D+H)
 d) (C+D+ G+H)
 e) none of the above

Use the following figure to answer questions 15 – 18. MSB stands for “marginal social benefit” and MSC stands for “marginal social cost”.



15. The figure above can best be described as illustrating...
- A positive consumption externality
 - A negative consumption externality
 - A positive production externality
 - A negative production externality**
 - none of the above
16. The socially optimal quantity in this case is an amount...
- less than Q_2
 - exactly equal to Q_2**
 - greater than Q_2 but less than Q_1
 - exactly equal to Q_1
 - greater than Q_1
17. The socially optimal allocation is arrived at by imposing...
- a subsidy of size $(P_1 - P_3)$
 - a tax of size $(P_1 - P_3)$**
 - a subsidy of size $(P_1 - P_2)$
 - a tax of size $(P_2 - P_3)$
 - none of the above
18. The gain to society as a whole associated with moving from the market allocation to the socially optimal one is...
- $+(D+E)$**
 - $+(C+G)$
 - $+(C+D+E+G)$
 - $+(C+D+G+H)$
 - none of the above
19. A market structure with large numbers of buyers and sellers of identical goods is called...
- monopoly
 - oligopoly
 - monopolistic competition
 - perfect competition**
 - none of the above

20. A perfectly competitive firm will maximize profits if...

- a) marginal revenue equals price
- b) marginal cost equals price**
- c) marginal revenue equals marginal fixed costs
- d) price equals marginal fixed cost
- e) none of the above

21. Use the following data to calculate GDP

Private Consumption	\$100 billion
Private Investment	\$ 30 billion
Government Purchases of Goods and Services	\$ 40 billion
Government Transfer Payments	\$ 20 billion
Exports	\$ 50 billion
Imports	\$ 30 billion

- a) \$230 billion
- b) \$190 billion**
- c) \$170 billion
- d) \$150 billion
- e) none of the above

22. Which of the following is commonly used method of calculating GDP?

- a) The transfer approach
- b) The value-added approach**
- c) The direct measurement approach
- d) ALL of the above are commonly used methods of calculating GDP
- e) NONE of the above are commonly used methods of calculating GDP

Use the following data for questions 23 – 25

	Price		Quantity Produced	
	2000	2006	2000	2006
Good 1	\$ 10	\$ 20	100	125
Good 2	\$100	\$150	10	20

Assume these are the only two goods in the economy. Also assume 2000 is the base year.

23. Nominal GDP in 2006 was... **$125 \times 20 + 20 \times 150 = \5500**

- a) \$4000
- b) \$4375
- c) \$4775
- d) \$5125
- e) none of the above**

24. Real GDP in 2006 was... **$125 \times 10 + 20 \times 100 = 3250$**
- a) \$2000
 b) \$2500
 c) \$3000
 d) \$5500
 e) **none of the above**
25. The approximate value of the GDP deflator in 2006 was... **$100 \times (5500/3250) = 169.2$**
- a) 134.6
 b) 144.8
 c) **169.2**
 d) 181.7
 e) none of the above is even close

Use the following data for questions 26 – 27

	Price			Quantity in Market Basket
	2000	2006	2007	
Good 1	\$10	\$12	\$15	50
Good 2	\$10	\$15	\$20	100

26. The value of the CPI in 2006 was...
- a) 110.0
 b) 120.0
 c) 130.0
 d) **140.0**
 e) none of the above
27. The approximate inflation rate between 2006 and 2007 was...
- a) 28.2%
 b) **31.0%**
 c) 37.1%
 d) 42.1%
 e) none of the above is even close
28. Growth accounting studies like those done by Solow reveal that the biggest factor behind the growth of real GDP in most countries over the past several decades is...
- a) **the growth of technology**
 b) the growth of capital stocks
 c) the growth of the labor force
 d) the growth of government services
 e) none of the above

Use the following data to answer questions 29 – 31

Data from the quaint, but mythical country of Zalchistan:

Employed Workers	14 million
Military & Institutionalized	1 million
Unemployed Workers	1 million
Not in the Labor Force	10 million
Children under the Age of 16	5 million

29. The labor force is...

- a) 13 million
- b) 14 million
- c) **15 million**
- d) 20 million
- e) none of the above

30. The labor force participation rate is approximately...

- a) 46.6%
- b) 50.0%
- c) 58.3%
- d) **60.0%**
- e) none of the above

31. The unemployment rate is approximately... $1/15 = 6.67\%$

- a) 3.33%
- b) 7.00%
- c) 7.14%
- d) 13.35%
- e) **none of the above**

32. In the US, GDP is calculated and reported by...

- a) The Bureau of the Census
- b) **The Bureau of Economic Analysis**
- c) The Bureau of Labor Statistics
- d) The Federal Reserve
- e) none of the above

33. The monthly employment data released each month are based on...

- a) an establishment (firm) survey only
- b) a household survey only
- c) **both a household survey and an establishment survey**
- d) a household survey, an establishment survey, and a survey of federal, state and local governments
- e) none of the above

34. Which of the following cities is NOT home to a US Federal Reserve Bank?
- a) Cleveland
 - b) Denver**
 - c) San Francisco
 - d) New York
 - e) All of the above cities have Federal Reserve Banks
35. The current chairman of the Federal Reserve Board is...
- a) Ben Bernanke**
 - b) Alan Greenspan
 - c) Paul Volker
 - d) Larry Summers
 - e) none of the above
36. KP Enterprises offers several thousand simple one-year bonds for sale on the bond market. They sell for \$1.75 million. The interest rate on these bonds is...
- a) 12.5%
 - b) 14.3%
 - c) 25.0%
 - d) impossible to calculate with the given information**
 - e) none of the above
37. Which of the following is NOT a commonly used method of transferring funds from savers to borrowers?
- a) Commodity Futures**
 - b) Stocks
 - c) Bank deposits & loans
 - d) Mutual Funds
 - e) All of the above are widely used
38. Which of the following is an example of fiat money?
- a) Checking Account Deposits
 - b) 100% Gold Spanish Milled Dollars
 - c) US Treasury Silver Certificates
 - d) Federal Reserve Notes (dollar bills)**
 - e) All of the above are fiat money

39. Funds held by banks that meet legal reserve requirements include...
- a) Stocks
 - b) Vault Cash**
 - c) Demand Deposits
 - d) Time Deposits
 - e) none of the above
40. The US banking system today is best described as...
- a) a 100% reserve-backed system
 - b) a fractional currency system
 - c) a free banking system
 - d) a fractional reserve system**
 - e) none of the above are even close to accurate
41. The number of regional Federal Reserve Banks in the US is...
- a) 1
 - b) 10
 - c) 12**
 - d) 15
 - e) none of the above
42. The purchase or sale of bonds by the central bank on the bond market is called...
- a) An open-market operation**
 - b) Discount rate lending
 - c) A currency swap
 - d) Reserve lending
 - e) none of the above
43. The interest rate that the Federal Reserve System tends to target in the short run is...
- a) The discount rate
 - b) The federal funds rate**
 - c) The prime lending rate
 - d) The treasury lending rate
 - e) none of the above

44. If the reserve requirement is 5%, then the simple money multiplier from the textbook is...
 $1/rr = 1/.05 = 20$
- a) 5
 - b) 10
 - c) **20**
 - d) 50
 - e) none of the above
45. Formally, monetary policy for the US is set by...
- a) The President of the New York Federal Reserve Bank
 - b) The Federal Reserve Board of Governors
 - c) The Chairman of the Federal Reserve Board
 - d) **The Federal Reserve Open Market Committee**
 - e) none of the above
46. Dr. Landsburg illustrates the Coase Theorem using...
- a) a dairy farm and neighbors upset by the smell
 - b) **a doctor whose office is plagued by noise from a nearby candy factory**
 - c) a pair of economists walking down the street in New Orleans
 - d) a neighbor in Rochester who refuses to mow his lawn
 - e) none of the above
47. The Springville aquarium fable in Landsburg's book was meant to illustrate...
- a) that the government can improve citizens' welfare by correcting an externality
 - b) free provision of goods via taxes is clearly less efficient than providing them through the market
 - c) sharks are scary
 - d) **even free goods & services like an aquarium provide no net benefit due to non-monetary opportunity costs like standing in line**
 - e) none of the above
48. One of the reasons Dr. Landsburg was critical of Richard J. Dennis' article in *Atlantic Monthly* was because...
- a) he failed to count the tax revenue that would be gained from a sales tax on drugs as a net benefit
 - b) he counts the incarceration of drug users as a cost to society when it is only a cost to the drug users themselves, not society
 - c) **he counts the full value of goods stolen to feed a drug habit as a net social cost, which would be true only if the goods ceased to exist.**
 - d) he fails to cite one of Dr. Landsburg's scholarly articles on the subject
 - e) none of the above

49. Dr. Landsburg views the political relationship between the Democratic and Republican parties as the political version of which market structure?

- a) Perfect competition
- b) Monopoly
- c) **Collusion between duopolists**
- d) It is impossible to tell from what he has written in the book
- e) none of the above

50. Which best describes Dr. Landsburg's view of environmentalism?

- a) **It is a mixture of myth, superstition and ritual that has much in common with religious cults**
- b) It is a well-meant, often successful, but occasionally misguided attempt to balance the need to preserve nature against other human needs.
- c) It is the natural conclusion any rational, logical person will reach if they just think seriously about the environment.
- d) It is a moral imperative to preserve and protect the environment and this is one of the few areas where economic thinking leads people astray.
- e) none of the above

1	E	26	D
2	A	27	B
3	B	28	A
4	D	29	C
5	A	30	D
6	B	31	E
7	B	32	B
8	B	33	C
9	E	34	B
10	E	35	A
11	E	36	D
12	E	37	A
13	C	38	D
14	A	39	B
15	D	40	D
16	B	41	C
17	B	42	A
18	A	43	B
19	D	44	C
20	B	45	D
21	B	46	B
22	B	47	D
23	E	48	C
24	E	49	C
25	E	50	A