1.

Suppose the demand for good x is $\ln Q_x^d = 21 - 0.8 \ln P_x - 1.6 \ln P_y + 6.2 \ln M + 0.4 \ln A_x$. Then we know good x is:

- ○ an inferior good.
- ○ an elastic good.
- → ○ a normal good.
- ○ a Giffen good.

2.

Net benefits in the table:

Control variable	Total Benefits	Total Costs	Net Benefits	Marginal Benefit	Marginal Cost	Marginal Net Benefit
Q	B(Q)	C(Q)	N(Q)	MB(Q)	MC(Q)	MNB(Q)
0	0	0	0	-	-	-
1	900	100	800	900	100	800
2	1,700	300	C	800	200	600
3	2,400	600	1,800	700	E	400
4	A	1,000	2,000	600	400	200
5	3,500	1,500	2,000	500	500	F
6	3,900	2,100	1,800	D	600	-200
7	4,200	2,800	1,400	300	700	-400
8	4,400	B	800	200	800	-600
9	4,500	4,500	0	100	900	-800
10	4,500	5,500	-1,000	0	1,000	-1,000

- → ○ initially increase, reach a maximum, and then decrease.
- ○ initially decrease, reach a minimum, and then increase.
- ○ remain relatively stable over different values for the control variable.
- ○ initially remain relatively stable and then decrease.

3.

If the own price elasticity of demand is infinite in absolute value, then:

- ○ demand is perfectly inelastic.
- → ○ the demand curve is horizontal.
- ○ consumers do not respond at all to changes in price.
- ○ demand is neither perfectly inelastic nor is the demand curve horizontal.

4.

An ad valorem tax shifts the supply curve

- down by the amount of the tax.
- up by the amount of the tax.
- → by rotating it counter-clockwise.
- by rotating it clockwise.

5.

If the demand function for a particular good is $Q = 25 - 10P$, then the price elasticity of demand (in absolute value) at a price of $1 is:

- 8.
- 2.
- → 2/3.
- 1/8.

6.

Suppose total benefits and total costs are given by $B(Y) = 100Y - 8Y^2$ and $C(Y) = 10Y^2$. Then marginal benefits are:

- → $100 - 16Y$.
- $100Y - 8Y^2$.
- $50 - 4Y$.
- $200Y - 10Y$.

7.

Suppose the own price elasticity of demand for good X is −0.5, and the price of good X increases by 10 percent. We would expect the quantity demanded of good X to:

- increase by 5 percent.
- increase by 20 percent.
- → decrease by 5 percent.
- decrease by 20 percent.

8.

If the interest rate is 5 percent, $100 received at the end of seven years is worth how much today?

- ○ $100/(0.05)^7$
- → ○ $100/(1 + 0.05)^7$
- ○ $100/(1 + 5)^7$
- ○ 100

9.

Which of the following is probably not a normal good?

- ○ Designer jeans.
- ○ Diamond rings.
- → ○ Intercity passenger bus travel.
- ○ New automobiles.

10.

Suppose supply decreases and demand increases. What effect will this have on the quantity?

- ○ It will fall.
- ○ It will rise.
- → ○ It may rise or fall.
- ○ It will remain the same.

11.

If the interest rate is 5 percent, the present value of $200 received at the end of five years is:

- ○ $121.34.
- → ○ $156.71.
- ○ $176.41.
- ○ $132.62.

12.

New firms have incentive to enter an industry when there is(are):

- new production technologies.
- → positive economic profits.
- an abundance of labor.
- high capital costs.

13.

In a competitive market, the market demand is $Q^d = 70 - 3P$ and the market supply is $Q^s = 6P$. A price ceiling of $4 will result in a

- shortage of 24 units.
- → shortage of 34 units.
- surplus of 58 units.
- surplus of 34 units.

14.

At what level of output does marginal cost equal marginal revenue?

No. units produced	Total Revenue	Total costs
0	0	0
1	100	50
2	180	110
3	250	180
4	290	270
5	310	380

- 1
- 2
- → 3
- 4

15.

When the own price elasticity of good X is −3.5, then total revenue can be increased by:

- increasing the price.
- decreasing the quantity supplied.
- → decreasing the price.
- neither increasing the price, decreasing the price, nor decreasing the quantity supplied.

16.

To maximize profits, a firm should continue to increase production of a good until:

- ○ total revenue equals total cost.
- ○ profits are zero.
- → ○ marginal revenue equals marginal cost.
- ○ average cost equals average revenue.

17.

When a demand curve is linear,

- ○ the elasticity is the same as the slope of the demand curve.
- → ○ demand is elastic at high prices.
- ○ demand is unitary elastic at low prices.
- ○ the elasticity is constant at all prices.

18.

Suppose $B(Q) = 5Q - Q^2$ and $C(Q) = 1 + Q^2$. Then, net benefits are _____ when Q equals _____ units since the second-order condition is _____.

- → ○ maximized; 5/4; negative
- ○ minimized; −1; positive
- ○ maximized; 4/5; positive
- ○ minimized; 4/5; negative

19.

When marginal revenue is zero, total revenue:

- ○ will increase when price increases.
- → ○ is maximized.
- ○ will decrease when price decreases.
- ○ will decrease as quantity decreases.

20.

What is the level of net benefits when 20 units are produced?

No. units produced	Total Revenue	Total Costs
0	0	0
10	120	40
20	200	100
30	270	170
40	310	260
50	330	370

- ○ -100
- ○ 80
- → ○ 100
- ○ 10

21.

Graphically, an increase in the number of vegetarians will cause the demand curve for Tofu (a meat substitute) to

- → ○ shift rightward.
- ○ shift leftward.
- ○ become flatter.
- ○ become steeper.

22.

Which of the following is the incorrect statement?

- ○ The marginal benefits curve is the slope of the total benefits curve.
- ○ dB(Q)/dQ = MB.
- → ○ The slope of the net benefit curve is vertical where MB = MC.
- ○ The vertical difference between the total benefit curve and the total cost curve is maximized at the optimal level of Q.

23.

Which of the following is incorrect?

- ○ Accounting profits generally overstate economic profits.
- ○ Accounting profits do not take opportunity cost into account.
- ○ Economic costs include not only the accounting costs but also the opportunity costs of the resources used in production.
- → ○ Managers should only be interested in accounting profits.

24.

Suppose good X is a normal good. Then a decrease in income would lead to

- ○ an outward shift of the demand curve.
- → ○ an inward shift of the demand curve.
- ○ no shift of the demand curve.
- ○ a movement along the demand curve.

25.

Which of the following is the main goal of a continuing company?

- → ○ To maximize the value of the firm
- ○ To minimize costs
- ○ To improve product quality
- ○ To enhance service to its customers

26.

The supply function

- ○ describes how much of good X will be produced at an alternative price of good X, given all the other variables being constant.
- → ○ recognizes that the quantity of a good produced depends on its price and supply shifters.
- ○ shows the relationship between the quantity supplied of X and variables other than its price.
- ○ does not include technology.

27.

Which of the following is NOT an important factor that affects the magnitude of the own price elasticity of a good?

- ○ Available substitutes
- → ○ Supply of the good
- ○ Time
- ○ Expenditure share

28.

A firm derives revenue from two sources: goods X and Y. Annual revenues from good X and Y are $10,000 and $20,000, respectively. If the price elasticity of demand for good X is −4.0 and the cross-price elasticity of demand between Y and X is 2.0, then a 2 percent decrease in the price of X will:

- ○ increase total revenues from X and Y by $520.
- → ○ decrease total revenues from X and Y by $200.
- ○ leave total revenues from X and Y unchanged.
- ○ decrease total revenues for X and Y by $600.

29.

You are the manager of a popular shoe company. You know that the advertising elasticity of demand for your product is 0.15. How much will you have to increase advertising in order to increase demand by 10 percent?

- ○ 0.02 percent
- ○ 38.6 percent
- → ○ 66.7 percent
- ○ 4.3 percent

30.

To an economist, maximizing profit is:

- → ○ maximizing the value of the firm.
- ○ maximizing the current year's profits.
- ○ minimizing the permanent total costs.
- ○ minimizing the future risks.

31.

To maximize net benefits in the table, it is most appropriate to use:

Control variable	Total Benefits	Total Costs	Net Benefits	Marginal Benefit	Marginal Cost	Marginal Net Benefit
Q	B(Q)	C(Q)	N(Q)	MB(Q)	MC(Q)	MNB(Q)
0	0	0	0	-	-	-
1	900	100	800	900	100	800
2	1,700	300	C	800	200	600
3	2,400	600	1,800	700	E	400
4	A	1,000	2,000	600	400	200
5	3,500	1,500	2,000	500	500	F
6	3,900	2,100	1,800	D	600	-200
7	4,200	2,800	1,400	300	700	-400
8	4,400	B	800	200	800	-600
9	4,500	4,500	0	100	900	-800
10	4,500	5,500	-1,000	0	1,000	-1,000

- ○ four units of the control variable, since the marginal benefit exceeds marginal cost.
- ○ six units of the control variable, since the marginal cost exceeds marginal benefit.
- → ○ five units of the control variable, since net marginal benefits are zero.
- ○ None of the statements associated with this question are correct.

32.

The statistical analysis of economic phenomena is defined as:

- ○ standard error.
- ○ confidence intervals.
- ○ the t-statistic.
- → ○ econometrics.

33.

A price ceiling is

- ○ the minimum legal price that can be charged in a market.
- → ○ the maximum legal price that can be charged in a market.
- ○ above the initial equilibrium price.
- ○ equal to the initial equilibrium price.

34.

Which of the following is not a supply shifter?

- Level of technology.
- Prices of inputs.
- → Average income level.
- Weather.

35.

Suppose the demand for a product is $\ln Q_x^d = 10 - \ln P_x$, then product x is:

- elastic.
- inelastic.
- → unitary elastic.
- Cannot be determined without more information.

36.

The curve which summarizes the total quantity producers are willing and able to produce at differing prices is the:

- market demand curve.
- consumer surplus curve.
- average cost curve.
- → market supply curve.

37.

What is the marginal net benefit of producing the twentieth unit?

No. units produced	Total Revenue	Total Costs
0	0	0
10	120	40
20	200	100
30	270	170
40	310	260
50	330	370

- → 2
- -5
- -2
- 8

38.

The law of demand states that, holding all else constant:

- ○ as price falls, demand will fall also.
- ○ as price rises, demand will also rise.
- ○ price has no effect on quantity demanded.
- → ○ as price falls, quantity demanded rises.

39.

If the cross-price elasticity between goods X and Y is zero, we know the goods are:

- → ○ independent.
- ○ complements.
- ○ inelastic.
- ○ substitutes.

40.

The demand for good X has been estimated by $Q_x^d = 6 - 2P_X + 5P_Y$. Suppose that good X sells at $3 per unit and good Y sells for $2 per unit. Calculate the own price elasticity.

- ○ −0.3
- ○ −0.4
- ○ −0.5
- → ○ −0.6

41.

Assume that the price elasticity of demand is −2 for a certain firm's product. If the firm raises price, the firm's managers can expect total revenue to:

- → ○ decrease.
- ○ increase.
- ○ remain constant.
- ○ either increase or remain constant, depending upon the size of the price increase.

42.

If A and B are complements, an increase in the price of good A would:

- ○ have no effect on the quantity demanded of B.
- ○ lead to an increase in demand for B.
- → ○ lead to a decrease in demand for B.
- ○ none of the statements associated with this question are correct.

43.

Which of the following can explain an increase in the demand for housing in retirement communities?

- ○ A drop in real estate prices.
- → ○ An increase in the population of the elderly.
- ○ A drop in the average age of retirees.
- ○ Mandatory government legislation.

44.

Consider a market characterized by the following inverse demand and supply functions: $P_X = 50 - 4Q_X$ and $P_X = 10 + 2Q_X$. Compute the surplus producers receive when a $30 per unit price floor is imposed on the market.

- → ○ $75.
- ○ $25.
- ○ $35.
- ○ $50.

45.

Changes in the price of a good lead to:

- → ○ changes in the quantity supplied of the good.
- ○ changes in supply.
- ○ changes in demand.
- ○ no effects in quantity supplied or demanded.