# **Question Bank**

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## **Introduction to Economics**

### Multiple choice

- 1. Specialized labours:
  - a) Have higher productivity and are low paid workers
  - b) Have higher productivity and are highly paid workers
  - c) Have lower productivity and are low paid workers
  - d) Have lower productivity and are highly paid workers
- 2. Microeconomics examines which of the following?
  - a) gross national product
  - b) trade policy
  - c) exchange rates
  - d) firm competition
- 3. Stock of assets in a point in time is:
  - a) Money
  - b) Wealth
  - c) Income
  - d) Resources
- 4. Making most out of what we have is
  - a) Economizing
  - b) Economies of scale
  - c) Scarcity
  - d) Concept of opportunity cost
- 5. We have to forgo some thing when we make a choice, because of
  - a) Unlimited wants
  - b) Limited resources
  - c) Consumption of goods
  - d) All of above
- 6. Money is:
  - a) Medium of exchange
  - b) Income
  - c) Price of product
  - d) Opportunity cost
- 7. National wealth is:
  - a) Social wealth
  - b) Private wealth
  - c) Both of above
  - d) None of above
- 8. Income can be defined as:
  - a) Stock of monetary value received by a person during a given period of time
  - b) Stock of monetary value possessed by a person at point in time
  - c) Flow of monetary value possessed by a person at a point in time
  - d) Flow of monetary value received by a per son during a period of time
- 9. Free Goods

- a) Are gifs from relatives
- b) Have no price and no opportunity cost
- c) No price but they may have opportunity cost
- d) None of above
- 10. Production involves
  - a) Output of goods
  - b) Any kind of work which helps satisfying consumer's want
  - c) Paid work
  - d) B and C
- 11. Consumer durable goods
  - a) Last for fairly long period of time
  - b) Provide their service instead of consumption
  - c) Only A
  - d) A and B
- 12. Non durable consumer goods can be defined as
  - a) Products that last for fairly large period of time
  - b) Goods that are used up in a short period of time
  - c) Paid assistance
  - d) None of above
- 13. Consumers want consists of
  - a) Services and durable consumer goods
  - b) Durable consumer goods and non durable consumer goods
  - c) Services and consumer goods
  - d) Services and nondurable consumer goods
- 14. Scarcity of a commodity in economics means:
  - a) Commodity is rare
  - b) Very small quantity of commodity is available
  - c) Not enough of commodity is available to satisfy every one
  - d) None of above
- 15. There is a limit to goods and services that could be produced in a society because of
  - a) Unlimited wants
  - b) Limited resources
  - c) Government tax on capital
  - d) Diminishing return to scale
- 16. Opportunity cost is
  - a) The sacrifice of next most desirable alternative
  - b) Price of the product we purchase
  - c) Cost of inputs used in production of the product
  - d) All of above
- 17. The value of the best alternative to any action you undertake is referred to as its
  - a) Production cost.
  - b) Opportunity cost.
  - c) resource cost
  - d) increasing cost

18. If all of the resources are used efficiently, suppose that a firm can produce the following combinations

of goods A and B:

Good A	Good B
63	0
54	10
45	20
36	30
27	40
18	50
9	60

What is the opportunity cost of producing 45 units of Good A?

- a. 10 units of Good B
- b. 70 units of Good B
- c. 20 units of Good B
- d. none of the above
- 19. Using the same information, what is the opportunity cost of producing an additional 10 units of Good B?
- a. 54 units of Good A
- b. 9 units of Good A
- c. 63 units of Good A
- d. all of the above
- 20. Public goods
- a. are run by the government because they are very profitable.
- b. are such that the more people use them, the more it costs to provide.
- c. are such that they cannot be excluded from any consumer's use.
- d. are goods like airline travel.
- 21. The study of economics focuses on:
  - a. the behaviour of successful businesses.
  - b. The role of money in our economy.
  - c. How best to allocate scarce resources.
  - d. The elimination of opportunity costs.
- 22. Which of the following are macroeconomic topics/issues and which are microeconomic ones?

(a)	The level of consumer spending	Micro / Macro
(b)	Subsidies paid to farmers	Micro / Macro
(c)	The level of UK exports	Micro / Macro
(d)	The price of DVDs	Micro / Macro

(e) The rate of unemployment

Micro / Macro

(f) The average wage rate paid to textile workers

- Micro / Macro
- (g) The total amount spent by UK consumers on clothing and footwear *Micro / Macro*
- (h) The amount saved last year by UK households

Micro / Macro

In China the government is concerned about the level of poverty and the need for more resources in the western regions of the country. As a result it is increasing its expenditure there and cutting it in the wealthier eastern regions.

What economic concept does this government policy illustrate best?

- A diminishing returns
- B market forces
- C opportunity cost
- D specialisation

An unemployed worker accepts a job.

Which of the following is the opportunity cost of this decision?

- A the cost of travel to work
- B the income from the new job
- C the leisure time lost
- D the training in the new job

A hospital cannot treat all the people that need treatment. This is an example of

- A excess supply.
- B limited wants.
- C scarcity.
- D unlimited resources.

Which statement best explains why drought is an economic problem?

- A Drought cannot be controlled.
- B Rainfall is unreliable.
- C The effects of drought involve the government.
- D Water is a scarce good.

In 2002 the government of Zimbabwe diverted US\$18 million, originally intended to support private business, to help feed millions of people threatened by famine. Some of the money was used to import up to 1.8 million tonnes of corn.

What was the opportunity cost to Zimbabwe of this decision?

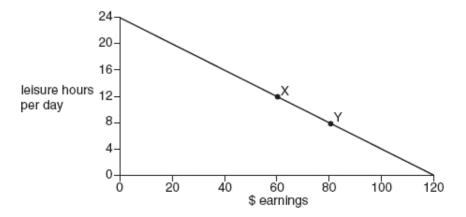
- A the cost of the extra food
- B the cost of the 1.8 million tonnes of corn
- C the effect on private business
- D the US\$18 million

Although people may satisfy their basic needs there is always something more that they wan

To what economic issue does this statement refer?

- A exchange
- B income distribution
- C market forces
- D scarcity

The diagram shows the choices for an individual between leisure and earnings.



What is the opportunity cost to the individual of the extra earnings when moving from position X to position Y?

- A \$20
- B \$80
- C 4 hours' leisure
- D 8 hours' leisure

The table shows the various combinations of food and clothing which a village can produce using all its resources.

food units	clothing units
0	500
100	400
200	250
300	50
400	0

What is the opportunity cost to the village of increasing the production of food from 200 to 300 units?

- A 50 units of dothing
- B 100 units of clothing
- C 200 units of clothing
- D 250 units of clothing

A woman playing a quiz game starts with no money, but correctly answers the question that is worth \$4000. The next question is worth \$10000 but if she answers incorrectly she will leave the game with no money.

What is her opportunity cost of choosing to answer the \$10 000 question if her answer is incorrect?

A nothing

B \$4000

C \$6000

D \$10 000

#### TRUE-FALSE

- 1. T F Microeconomics focuses on the economy as a whole
- 2. Economists assume that economic decisions are made *rationally*. In the case of consumers, rational decision making means:
  - (a) That consumers will not buy goods which increase their satisfaction by only a small amount.

True / False

(b) That consumers will attempt to maximise their individual satisfaction for the income they earn.

True / False

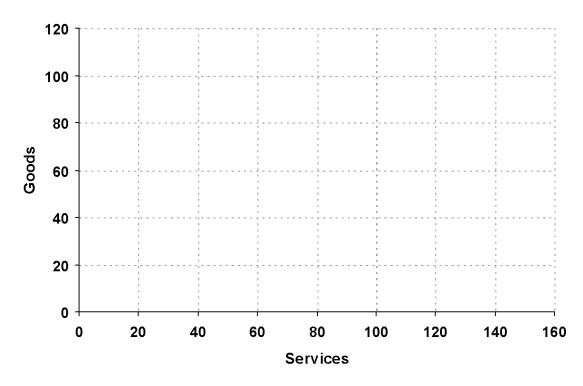
- (c) That consumers buy the sorts of goods that the average person buys. *True / False*
- (d) That consumers seek to get the best value for money from the goods they buy. *True / False*

#### Essay

- 1. Make a list of three things you did yesterday. What was the opportunity cost of each? Have a look at your neighbours' lists and see if you agree with their estimates of the opportunity costs.
- 2. A country is capable of producing the following combinations of goods and services per period of time, assuming that it makes full use of its resources of land, labour and capital.

Goods (units)	100	80	60	40	20	0
Services (units)	0	50	90	120	140	150

a. Draw the production possibility curve for this country on the following diagram.



- b. Is it possible for this country to produce the following combinations of goods and services?
  - (i) 80 units of goods and 50 units of services

Yes / No

(ii) 70 units of goods and 90 units of services

Yes / No

(iii) 40 units of goods and 100 units of services

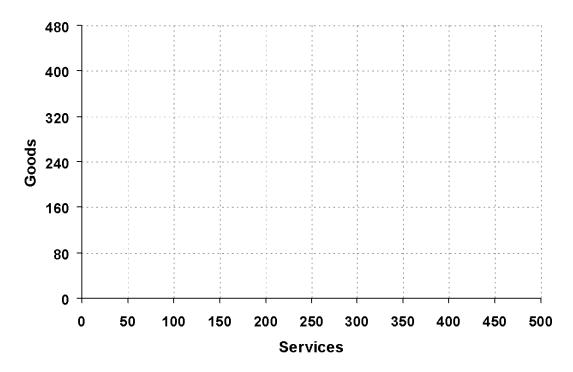
Yes / No

c. What is the opportunity cost (in terms of services) of producing 20 extra units of goods when this country is initially producing:

- (i) 60 units of goods
- (ii) 20 units of goods
- 1. Referring back to question 4, assume now that technological progress allows a four-fold increase in the output of goods and double the amount of services for any given amount of resources. Assuming that the country's total amount of resources stays the same, fill in the new figures on the following table to show the new production possibilities.

Goods (units)			
Services (units)			

2. Draw the new production possibility curve on the following diagram.



- 3. How has this technological progress affected the opportunity cost of a unit of goods. (Tick the correct one of the following answers.)
- A. Stays the same.
- B. Doubles.
- C. Halves.
- D. Increases four times.
- E. Decreases four times.

4.

# **Economic Resources**

# **Economics Systems \_ Resource Allocation**

## Multiple choice

- 1. If the economy relies entirely on markets to answer the WHAT, HOW, and FOR WHOM questions, it tends to:
  - a. Overproduce goods that yield external benefits and overproduce goods that yield external costs.
  - b. Overproduce goods that yield external benefits and underproduce goods that yield external costs.
  - c. Underproduce goods that yield external benefits and overproduce goods that yield external costs.
  - d. Underproduce goods that yield external benefits and underproduce goods that yield external costs
- 2. Public goods
  - a. are run by the government because they are very profitable.
  - b. are such that the more people use them, the more it costs to provide.
  - c. are such that they cannot be excluded from any consumer's use.
  - d. are goods like airline travel.
- 3. External costs are:
  - a. the difference between social costs and private costs.
  - b. The difference between benefits and costs.
  - c. The difference between average and marginal costs.
  - d. The difference between marginal social benefits and marginal social costs.
- 4. Governments usually build highways because it is difficult to exclude people who don't pay for the highways from using those highways. What can best explain building of highways by government?
  - a. Inequity.
  - b. Public goods.
  - c. Government failure.
  - d. Market power.
- 5. The purpose of an emission charge is to:
  - a. Decrease the difference between social and private costs.
  - b. Induce firms to internalize pollution externalities.
  - c. Maximize social welfare.
  - d. All of the above.
- 6. Which of the following is a criticism of *laissez-faire* competitive market economies?
  - a. The distribution of goods and services may be inequitable.
  - b. Public goods cannot be priced and sold through a system of private markets alone.
  - c. The market price may not include the effects of externalities, for example, pollution
  - d. All of the above.
- 7. In economics, a public good:
  - a. is any good produced by the government.
  - b. has social costs of production that are lower than private costs of production.

- c. Is provided in an optimal amount by the market.
- d. Cannot be denied to consumers who do not pay.
- 8. Which of the following is most likely a private good?
  - a. Natural gas.
  - b. National defence.
  - c. Roads.
  - d. Flood control projects.
- 9. In economics, a public good:
  - a. is any good produced by the government.
  - b. Generates government failure.
  - c. Is provided in an optimal amount by the market.
  - d. Allows free riders when it is provided by the market.
- 10. Social costs:
  - a. Are less than private costs.
  - b. Include private costs.
  - c. Are unrelated to private costs.
  - d. Do not affect society
- 11. If the economy relies entirely on markets to answer the WHAT, HOW, and FOR WHOM questions, it tends to:
  - a. Overproduce private goods and overproduce public goods.
  - b. Overproduce private goods and underproduce public goods.
  - c. Underproduce private goods and overproduce public goods.
  - d. Underproduce private goods and underproduce public good
- 12. A public good is:
  - a. any good produced by a unit of government.
  - b. Priced in the market like private goods.
  - c. The source of the free-rider dilemma.
  - d. Characterized by exclusive consumption.
- 13. When negative externalities are generated by firms, the government should:
  - a. subsidize the companies or regulate them.
  - b. Subsidize the companies or apply antitrust sanctions.
  - c. Tax the companies or regulate them.
  - d. Tax the companies or apply antitrust sanctions.
- 14. The federal government's role in protecting the environment is justified by considerations of:
  - a. Equity.
  - b. Public goods and externalities.
  - c. Market power.
  - d. Macro failure.
- 15. The market adjustment mechanism is not
  - a. an illustration of the law of supply and demand.
  - b. an economic model showing the tendency toward equilibrium.
  - c. always working ideally in all markets.
  - d. affected by externalities such as pollution

#### TRUE-FALSE

- 1. T F A mixed economy is an economy that uses both market and non market signals to allocate goods and services.
- 2. T F A public good is a good or service for which consumption by one person excludes consumption by others
- 3. T F The free-rider dilemma occurs in the provision of public goods because one citizen can realize the benefits of another citizen's purchase (consumption) of a public good
- 4. T F Firms that are able to push part of their costs onto society by polluting will produce a smaller output of their product than society desires

5.

# **Consumer Spending and Saving**

# **Production and Productivity**

## Multiple choice

- 1. As labour productivity increases, which of the following shifts in the labour market should result, ceteris paribus?
  - a. Supply of labour should shift to the left.
  - b. Supply of labour should shift to the right.
  - c. Demand for labour should shift to the left.
  - d. Demand for labour should shift to the right.
- 2. Which of the following is a source of productivity increase?
  - a. Research and development.
  - b. Improvements in the quality of labour.
  - c. Capital investment.
  - d. All of the above.

#### TRUE-FALSE

1. T F Education leads to increased productivity of the labour force.

# Productivity and the cost of production

## Multiple choice

- 1. If you own your own business, your real gain is
  - a) the revenue minus what you pay for costs.
  - b) the total revenue minus what you could sell your own resources for.
  - c) the revenue minus what you pay for costs minus the best return elsewhere for your labour and resources.
  - d) the revenue minus what you pay for costs plus the value of your own resources.
- 2. An employer hire the amount of labour at the level where
  - a) the wage equals the extra amount the worker adds to production.
  - b) the wage equals the average amount the worker produces.
  - c) the total wages of all workers is greater than what they all add to production.
  - d) the productivity of the last worker hired is the maximum possible.
- 3. Suppose a firm has an annual budget of \$120 million in wages and salaries, \$50 million in materials, \$20 million in new equipment, \$70 million in rented property, and \$10 million in interest costs on capital. The opportunity cost for stockholder investments is \$90 million per year, and there are five owner-managers who could earn a maximum of \$1 million each for their services if they worked elsewhere.

What are the annual economic costs for the firm described above?

- a. \$270 million.
- b. \$275 million.
- c. \$365 million.
- d. \$95 million.

Labour and Output Data		
Units of Labour	Units of Output	
0	0	
1	10	
2	25	
3	35	
4	43	

- 4. What is the marginal physical product of the second unit of labour in the above table?
  - a. 10.
  - b. 15.
  - c. 25.
  - d. 5.

- 5. The long run is:
  - a. a time period longer than 1 year.
  - b. The time period required to produce a unit of the firm's output.
  - c. A period of time long enough for all inputs to be varied.
  - d. Approximately one year
- 6. The change in total output which results from increasing an input by 1 unit is:
  - a. the opportunity cost of the output.
  - b. The average total cost.
  - c. The marginal physical product of the input.
  - d. The total product from the input.

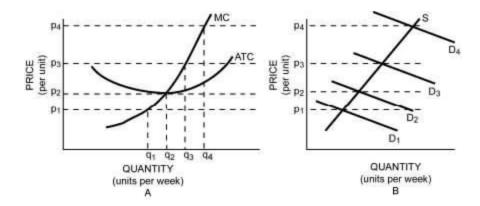
Labour and Output Data			
Units of Labour	Units of Output		
0	0		
1	10		
2	25		
3	35		
4	43		

- 7. With which unit of labour do diminishing marginal returns first appear in the above table?
  - a. The first.
  - b. The second.
  - c. The third.
  - d. The fourth.
- 8. Marginal cost can best be approximated by the formula:
  - a. Total cost/Output
  - b. Change in total cost/Change in output
  - c. Change in total cost/Change in input
  - d. Total cost/Input cost
- 9. Which of the following is equivalent to TC?
  - a. FC + VC.
  - b. 1 / MPP.
  - c. Change in total cost divided by change in output.
  - d. Average total cost divided by total output
- 10. Between any two given rates of output, if marginal cost is less than average total cost, then greater output means:
  - a. Total cost is declining.
  - b. Average total cost must decline.
  - c. Total variable cost must decline.
  - d. Total fixed cost must decline.

- 11. Suppose a firm has an annual budget of \$100,000 in wages and salaries, \$50,000 in materials, \$20,000 in new equipment, \$10,000 in rented property, and \$20,000 in interest costs on capital. The opportunity cost for stockholder investments is \$30,000 per year, and there is an owner-manager who could receive income of \$50,000 by working elsewhere. The firm earns revenues of \$210,000 per year. What is the economic profit for the firm described above?
  - a. Loss of \$10,000.
  - b. \$10,000.
  - c. Loss of \$70,000
  - d. \$70,000.
- 12. If a firm is producing a rate of output for which MC exceeds price:
  - a. the firm must have an economic loss.
  - b. The firm can increase its profits by increasing output.
  - c. The firm can increase its profits by decreasing output.
  - d. The firm is maximizing profit.
- 13. The change in total revenue that results from a one-unit increase in the quantity of output sold is:
  - a. Marginal cost.
  - b. Total revenue.
  - c. Marginal profit.
  - d. Marginal revenue.

Use the following diagram to answer question 14:

The graph (a) presents the cost curves that are relevant to a firm's production decision, and graph (b) shows the market-demand and market-supply curves for the calculator market.



- 14. If the demand curve is *D2* in the figure, then in the long run:
  - a. Returns to the firm are below average, and firms will exit.
  - b. Returns are above average, and firms will expand production.
  - c. There are zero economic profits, and there will be no entry or exit.
  - d. Firms will enter the market.

Use the table below to answer the next question

Units of Output	Total Cost (dollars)
100	11,000
200	20,000
300	29,400
400	39,500
500	50,500

- 21. The schedule of total costs for a chair-manufacturing firm is presented in the table above. If the market price of chairs is \$100, which output should this price-taker firm produce to maximize profit?
  - a. 200
  - b. 300
  - c. 400
  - d. 500
- 22. Suppose table below shows total costs at different output levels for a given plant.

		Plant Costs		
Output (units per day)	0	10	20	30
Total cost (\$ per day)	40	60	80	100

The marginal cost at all levels of output in the above table is:

- a. Less than \$5 per unit.
- b. between \$5 and \$15 per unit.
- c. between \$15 and \$25 per unit.
- d. Greater than \$25 per unit.
- 23. Which of the following is most likely a variable cost?
  - a. Contractual lease payments.
  - b. Interest payments on borrowed funds.
  - c. Property taxes.
  - d. Labour and materials costs.
- 24. In defining economic costs, economists recognize:
  - a. Explicit and implicit costs while accountants recognize only implicit costs.
  - b. Explicit and implicit costs while accountants recognize only explicit costs.
  - c. Only explicit costs while accountants recognize only implicit costs.
  - d. Only explicit costs while accountants recognize explicit and implicit costs.
- 25. Minimum marginal cost occurs at what level of output?
  - a. 1
  - b. 2

- c. 3
- d. 4

The following table shows how many dental appointments a dentist can schedule per week based on the number of available dental chairs. Assume that the dentist charges \$30 per appointment. The dental chairs could be leased for \$100 per week.

Dental Appointments and Revenues		
Dental Chairs	Dental Appointments (per week)	
0	0	
1	40	
2	50	
3	55	
4	57	

- 26. How many dental chairs should a profit-maximizing dentist use?
  - a. 1
  - b. 2
  - c. 3
  - d. 4
- 27. A firm's total costs
  - a) are equal to its total revenue at its break-even point.
  - b) are equal to total
  - c) are equal to the total physical product at that output level.
  - d) cannot be graphed.
- 28. Marginal physical product
  - a) is the additional amount of satisfaction a consumer gets from buying one more unit of good.
  - b) is the change in total physical product for each additional unit of an input added to production.
  - c) is equal to the cost of one unit of input at the optimal level of output.
  - d) is equal to total physical product divided by the output quantity.
- 29. Which of the following is not a cost of inputs to production?
  - a) rental rate for equipment
  - b) wage rate for employees
  - c) raw materials
  - d) none of the above'
- 30. Which is not part of a firm's cost structure?

- a) average cost curve
- b) average physical product curve
- c) marginal cost curve
- d) average variable cost curve
- 31. Fixed costs
  - a) do not have to be paid if the firm shuts down.
  - b) may include lease agreements and price of equipment.
  - c) are not part of total costs.
  - d) are part of a firm's total utility.
- 32. Marginal revenue product is not
  - a) equal to marginal physical product multiplied by the price of the good.
  - b) subject to law of diminishing returns.
  - c) a firm's profit on each additional unit of the good that is sold.
  - d) the additional amount of revenue earned by the addition of revenue earned by the addition of one unit of input.

#### TRUE-FALSE

- 1. T F When the average total cost curve is above the marginal cost curve, the marginal cost curve must be rising
- 2. T F Marginal costs cannot be fixed costs, but must be variable costs in the short run.
- 3. T F If a firm maximizes revenue, it is maximizing profit.

# PROBLEMS (SHOW ALL WORK)

Production Costs				
Q	TFC	TVC	TC	MC
0			100	*
1			120	
2				10
3		50		
4				30
5				45

1.

a) Using the above table, what are total fixed costs? (2.5 points)

b) Using the above table, what is the total cost for a quantity of 5 units? (2.5 points)

Demand Schedule for Automobiles			
Price of auto (\$ per auto)	Number of new autos (millions per year)		
\$10,000	11		
\$9,000	15		

- 2. What is the numerical value of the appropriate elasticity of demand which can be calculated from the information in the above table? (3 points)
- 3. (6 points) Assume that Jack runs a perfectly competitive firm that makes wallets and faces the following cost schedule:

Quantity	Total Cost
0	\$60
1	70
2	80
3	90
4	120
5	200
6	360
7	630

Assuming the market price of wallets is \$40, what is the profit maximizing output level for the firm?

If the price rises to \$80, what would be the maximum profit that Jack could earn?

- 4. (7 points) You are a producer of Rotgut Ripple, which sells for \$1 per gallon. You have to pay \$3 an hour for labour, which is your only cost.
- a) Complete the table.

Wage	Labour	Quantity Produced	IPrice	Revenue	Marginal Revenue Product
3	0	0	1		
3	1	25	1		
3	2	46	1		
3	3	50	1		
3	4	52	1		
3	5	53	1		

- b) How many workers should you hire to maximize profits?
- 5. Internalizing external pollution costs can result in an:
  - a. Upward shift in the polluting firm's MC curve.
  - b. Upward shift in the polluting firm's ATC curve.
  - c. Upward shift in the polluting firm's TC curve.
  - d. All of the above

# Large firms and Small Firms

## Multiple choice

- 1. The law of diminishing returns occurs with each additional unit of variable input when:
  - a. Total output begins to decline.
  - b. Marginal physical product becomes negative.
  - c. Total output begins to rise.
  - d. Marginal physical product is declining.

Labour and Output Data		
Units of Labour	Units of Output	
0	0	
1	10	
2	25	
3	35	
4	43	

- 2. With which unit of labour do diminishing marginal returns first appear in the above table?
  - a. The first.
  - b. The second.
  - c. The third.
  - d. The fourth.
- 3. The law of diminishing returns explains:
  - a. why marginal cost eventually increases in the short run as more output is produced.
  - b. Why the demand curve of the competitive firm is perfectly elastic.
  - c. Why the total cost curve diminishes as long as output increases.
  - d. Why marginal cost decreases as more output is produced.
- 4. If a firm's long run average costs increase as output increases, then
  - a. it is experiencing constant returns to scale.
  - b. it is experiencing decreasing returns to scale.
  - c. it is experiencing increasing returns to scale.
  - d. it is operating below its break-even point.
- 5. An economy-of-scale
  - a. is a short-run concept
  - b. is impossible to achieve.

- c. means that a firm has reached its maximum level of production.
- d. means a firm is experiencing increasing returns to scale in the long run.

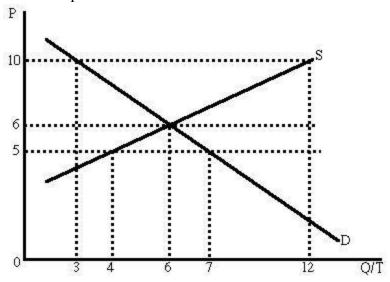
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#### **Prices and Markets**

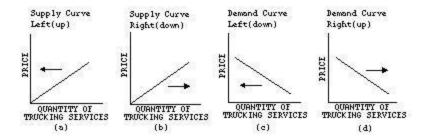
## Multiple choice

- 1. The "effective demand" for a good means
  - a) the total amount people buy during some period of time.
  - b) A schedule of prices and the quantities bought at those prices during some time.
  - c) People insisting on and successful in getting some good.
  - d) The desire of people for a good even if they don't buy it.
- 2. A tax on a produced good
  - a) raises the price the consumer pays, but does not affect the quantity, since folks want the good just as much.
  - b) always raises the price of the good by the full amount of the tax.
  - c) raises the price by less than the tax, and reduces the quantity sold.
  - d) raises the price by more than the tax, since the seller makes an extra profit on the tax.
- 3. When a price is below the market equilibrium price, there is a:
  - a) shortage and quantity demanded exceeds quantity supplied.
  - b) shortage and quantity supplied exceeds quantity demanded.
  - c) surplus and quantity demanded exceeds quantity supplied.
  - d) surplus and quantity supplied exceeds quantity demanded.
- 4. As the price of crude oil falls:
  - a) the demand for gasoline will likely decrease.
  - b) the demand for gasoline will likely increase.
  - c) the supply of gasoline will likely increase, and its price will likely decrease.
  - d) the supply of gasoline will likely decrease, and its price will likely increase.
- 5. If government collects a tax on land rent,
  - a) suppliers (owners) must bear the entire burden of the tax, since it reduces the rent they keep.
  - b) suppliers will raise the price of land, since the yield or return on land will become equalized to that of other investments.
  - c) the renter will bear the entire burden of the tax, since all taxes can be passed on to consumers and users.
  - d) the owner and renter share the burden of the tax, depending on the demand.
- 6. Which of the following can change without shifting demand?
  - a. Income.
  - b. Taste.
  - c. The price of the good itself.
  - d. The prices of other goods.
- 7. Which of the following events would cause a rightward shift in the market-supply curve for large automobiles?
  - a. A technological improvement which reduces the cost of production.
  - b. An increase in the wages of auto workers.

- c. An excise tax on automobiles.
- d. A decrease in the number of sellers.
- 8. A downward or rightward shift in the supply curve is characterized by:
  - a. A smaller quantity supplied and a greater price.
  - b. A greater quantity supplied and a greater price.
  - c. A smaller quantity supplied and a lower price.
  - d. A greater quantity supplied and a lower price.
- 9. Consider the market shown below. If an effective price floor is imposed at a price of 10 the result will be:
  - a. a surplus of 9 units.
  - b. a shortage of 9 units.
  - c. a surplus of 12 units.
  - d. a shortage of 3 units.
  - e. a surplus of 3 units.



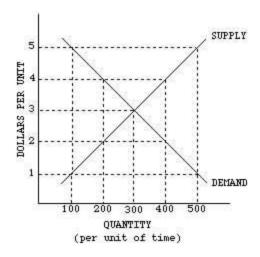
10. Answer this question by selecting the letter of the following diagrams showing supply and demand shifts which best represents the effect on the trucking transportation market, ceteris paribus.



In 1973, OPEC raised oil prices, which caused a significant increase in the cost of providing trucking service.

a. A.

- b. B.
- c. C.
- d. D.
- 11. A recent study conducted at the Jack Daniels Institute for Advanced Studies determined that consumption of beets is beneficial in reducing hangover symptoms. Using simple supply and demand analysis you predict that when the findings are published:
  - a. the equilibrium beet price will rise and quantity will fall.
  - b. the equilibrium beet price will fall and quantity will rise.
  - c. the equilibrium beet price will fall and quantity will remain constant.
  - d. the equilibrium beet price will rise and quantity will rise.
  - e. the equilibrium beet price will fall and quantity will fall.
- 12. A buyer is said to have a demand for a good only when:
  - a. the buyer wants to own the good.
  - b. The buyer is both willing and able to purchase the good.
  - c. The price of the good is low.
  - d. There is a good supply of the good available for purchase.



- 13. If the actual market price were \$2 per unit in the above figure:
  - a. there would be a surplus of 100 units.
  - b. There would be a shortage of 100 units.
  - c. There would be a surplus of 200 units.
  - d. There would be a shortage of 200 units.
- 14. Which of the following causes a movement along a market-demand curve, but not a shift of the demand curve? A change in:
  - a. Buyers' expectations.
  - b. The number of buyers.

- c. Price of the good.
- d. Price of other goods
- 15. A decrease in the supply of gasoline, ceteris paribus, will cause:
  - a. Price to rise and quantity to fall.
  - b. Price and quantity to rise.
  - c. Price to fall and quantity to rise.
  - d. Price and quantity to fall
- 16. When effective rent controls are imposed:
  - a. Quantity supplied of apartments will be less than the equilibrium quantity, and rents will be less than the equilibrium rents.
  - b. Quantity supplied of apartments will be less than the equilibrium quantity, and rents will be greater than the equilibrium rents.
  - c. Quantity supplied of apartments will be greater than the equilibrium quantity, and rents will be less than the equilibrium rents.
  - d. Quantity of apartments supplied will be greater than the equilibrium quantity, and rents will be greater than the equilibrium rents
- 17. When the demand for coffee increases and at the same time the supply of coffee falls:
  - a. Price must rise, but the change in quantity is indeterminate.
  - b. Price must fall, but the change in quantity is indeterminate.
  - c. Quantity must fall, but the change in price is indeterminate.
  - d. Quantity must rise, but the change in price is indeterminate
- 18. If consumers expect automakers to offer rebates next month, consumers will:
  - a. Increase their demand for cars today.
  - b. Decrease their demand for cars today.
  - c. Keep demand the same, but increase the quantity demanded for cars.
  - d. Keep demand the same, but decrease the quantity demanded for cars.
- 19. Choose the description that best represents the change in the market for oil for the following quotation: Iraq "invaded Kuwait and shut down its oil production."
  - a. the supply curve shifts left.
  - b. the supply curve shifts right.
  - c. the demand curve shifts left.
  - d. the demand curve shifts right
- 20. If consumers expect automakers to offer rebates next month, consumers will:
  - a. Increase their demand for cars today.
  - b. Decrease their demand for cars today.
  - c. Keep demand the same, but increase the quantity demanded for cars.
  - d. Keep demand the same, but decrease the quantity demanded for cars.
- 21. As new firms enter a market and market supply increases:
  - a. Equilibrium market price is bid downward.
  - b. Equilibrium market price is bid upward.
  - c. Price will remain constant, but profits will rise.
  - d. Price will remain constant, but profits will fall.

Answer this question by selecting the letter of the following diagrams showing supply and demand shifts which best represents the effect on the trucking transportation market, ceteris paribus.

- 1. The Motor Carrier Act of 1980 permitted railroads to lower rail prices which took long-distance business away from trucking firms.
  - a. A.
  - b. B.
  - c. C.
  - d. D.

Use the figure below to answer this question.

- 22. If the actual market price were \$2 per unit in the above figure:
  - a. There would be a surplus of 100 units.
  - b. There would be a shortage of 100 units.
  - c. There would be a surplus of 200 units.
  - d. There would be a shortage of 200 units
- 23. Which of the following causes a movement along a market-demand curve, but not a shift of the demand curve? A change in:
  - a. Buyers' expectations.
  - b. The number of buyers.
  - c. Price of the good.
  - d. Price of other goods.
- 24. When effective price ceilings are set for a market:
  - a. Quantity demanded will be less than the equilibrium quantity, and price will be less than the equilibrium price.
  - b. Quantity demanded will be less than the equilibrium quantity, and price will be greater than the equilibrium price.
  - c. Quantity demanded will be greater than the equilibrium quantity, and price will be less than the equilibrium price.
  - d. Quantity demanded will be greater than the equilibrium quantity, and price will be greater than the equilibrium price.
- 25. Other things being equal, if the price of coffee increases significantly, the:
  - a. Demand for coffee substitutes will decrease.
  - b. Demand for coffee will decrease.
  - c. Demand for coffee substitutes will increase.
  - d. Quantity demanded of coffee will increase.
- 26. A change in the demand of bread will take place:
  - a. When the price of bread changes.
  - b. When the price of wheat changes.

- c. When the income of consumers changes.
- d. None of the above.
- 27. Given a downward-sloping market-demand curve for product X, if the price of X is reduced from \$10 to \$8, then, ceteris paribus:
  - a. Demand for X will increase.
  - b. The quantity demanded of X will increase.
  - c. Demand for X will decrease.
  - d. The quantity demanded of X will decrease
- 28. A buyer is said to have a demand for a good only when:
  - a. The buyer wants to own the good.
  - b. The buyer is both willing and able to purchase the good.
  - c. The price of the good is low.
  - d. There is a good supply of the good available for purchase
- 29. A decrease in the supply of gasoline, ceteris paribus, will cause:
  - a. Price to rise and quantity to fall.
  - b. Price and quantity to rise.
  - c. Price to fall and quantity to rise.
  - d. Price and quantity to fall.
- 30. To say that the demand for a product has increased means:
  - a. That consumers are willing and able to pay only lower prices for any given quantity of the product.
  - b. That consumers desire to have more of the product.
  - c. That consumers are willing and able to purchase greater quantities of the product at any given price.
  - d. That consumers have moved down the existing demand curve.
- 31. According to the law of supply, as the price of a good falls
  - a. buyers will buy more of the good.
  - b. sellers will produce more of the good.
  - c. buyers will buy less of the good.
  - d. sellers will produce less of the good.
- 32. Which of the following would most likely cause the demand for Coca-Cola to decrease?
  - a. a decrease in consumer income
  - b. an increase in the price of Dr Pepper
  - c. an increase in the price of Pepsi
  - d. a reduction in the price of sugar, which is used to make Coca-Cola

The following table shows how many dental appointments a dentist can schedule per week based on the number of available dental chairs. Assume that the dentist charges \$30 per appointment. The dental chairs could be leased for \$100 per week.

#### **Dental Appointments and Revenues**

Dental Chairs	Dental Appointments (per week)
0	0
1	40
2	50
3	55
4	57

- 33. How many dental chairs should a profit-maximizing dentist use?
  - a. 1
  - b. 2
  - c. 3
  - d. 4
- 34. If the price of a substitute good rises, which of the following would most likely occur?
  - a. The supply of the good it substitutes will increase.
  - b. The supply curve of the good it substitutes will move to the right.
  - c. The quantity demanded of that good will decrease.
  - d. The quantity supplied of that good will increase.
- 35. Which of the following does not influence the demand for a product?
  - a. consumer income
  - b. number of firms in the market
  - c. price of complement goods
  - d. price of substitute goods
- 36. A price floor
  - a. is a legal restriction on the minimum price for which a good can be sold.
  - b. usually causes a shortage.
  - c. is an attempt by government to remain separate from the microeconomics.
  - d. has no effect on the market adjustment mechanism.
- 37. Equilibrium tends to occur because of
  - a. the law of supply and demand.
  - b. consumers and producers easily agree on prices of goods.
  - c. the law of demand.
  - d. the law of diminishing returns.
- 38. Quantity demanded
  - a. refers to the tendencies of consumers to buy goods in relation to their prices.
  - b. responds to the price of the product.
  - c. is the amount of good consumers willing to buy at a specific price.
  - d. both b and c
- 39. The slope of a straight line is

- a. the ratio of the vertical change in a line to the horizontal change in the line.
- b. negative if the line extends up and to the right.
- c. equal to rise over run
- d. all of the above

Suppose that these are the demand and supply schedules for Good X:

Demand		Supply		
Price	quantity	price	quantity	
\$12	0	\$16	120	
\$10	30	\$13	100	
\$8	60	\$10	80	
\$6	90	\$7	60	
\$4	120	\$4	40	
\$2	150	\$1	20	

- 40. Where would the equilibrium price occur?
  - a. at a quantity of 60
  - b. at \$7
  - c. at \$8
  - d. between \$7 and \$8
- 41. If the number of consumers in a market increases, which of the following is most likely to occur?
  - a. Quantity demanded for the good will decrease.
  - b. Demand for the good will increase.
  - c. Demand for the good will decrease.
  - d. The price will remain the same in the long run.
- 42. Demand for which of the following increases as consumer income rises?
  - a. normal goods
  - b. superior goods
  - c. inferior goods
  - d. none of the above
- 43. A price ceiling
  - a. usually causes a shortage in a market.
  - b. usually results in the quantity supplied exceeding the quantity demanded.
  - c. is a form of self-regulation by a group of firms in a market.
  - d. is set above the equilibrium price.
- 44. Supply

- a. is directly influenced by the number of consumers in a market.
- b. refers to the tendencies of firms to produce goods in relation to their prices.
- c. refers to the quantity of a good that firms are willing to produce at a specific price.
- d. is not affected by technological advances.

#### TRUE-FALSE

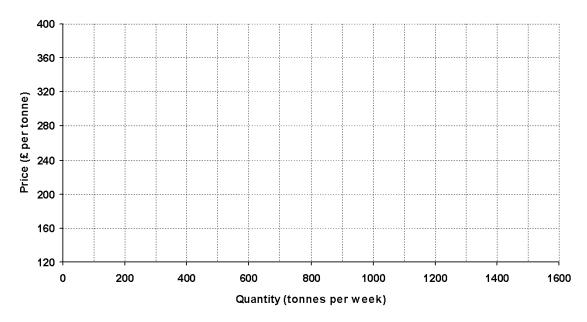
- 1. T F A market-demand curve can always be found by adding horizontally, the demand curves of all the buyers in a given market.
- 2. T F A lower price leads to greater demand.
- 3. T F To be effective price floors should be set above equilibrium prices and price ceilings should be set below equilibrium prices.

# PROBLEMS (SHOW ALL WORK)

1. The demand and supply schedules for wheat in a free market are as follows:

Price per tonne (£)	120	160	200	240	280	320	360	400
Tonnes demanded per week	725	700	675	650	600	550	500	425
Tonnes supplied per week	225	300	400	500	600	750	1000	1300

a. Draw the demand and supply curves on the following diagram:



- b. What is the equilibrium price?
- c. Suppose the government fixes a maximum price of £200 per tonne. What will

be the effect?

d. Suppose that supply now increases by 150 tonnes at all prices. Enter the new figures.

Price per tonne (£)	120	160	200	240	280	320	360	400
Tonnes demanded per week	725	700	675	650	600	550	500	425
(old) Tonnes supplied per week	225	300	400	500	600	750	100 0	130 0

(new) Tonnes supplied per week

e. How much will price change from the original equilibrium (assuming that the government no longer fixes a maximum price)? How much more will be sold?

Change in price

Change in quantity

#### **ESSAY**

- 1. Suppose Florida increases the cigarette tax by 10 cents a pack. What do you expect to happen to the equilibrium price and quantity of cigarettes? Explain your answer using both words and a diagram
- 2. "If a study showed that carrots raise people's IQs the result would be an increase in both demand and supply, and an increase in equilibrium price and quantity." Indicate whether this statement is true or false. Explain your answer using both words and a diagram.
- 3. Suppose consumer incomes rise. What do you expect to happen to the equilibrium price and quantity of TVs? Explain your answer using both words and a diagram
- 4. Suppose that an engineer invented a new process for making windshields that cut the cost of making windshields in half. What do you expect to happen to the equilibrium price and quantity of cars? Explain your answer using both words and a diagram
- 5. The following passage refers to the operation of a free-market economy. Delete the words (in italics) which are incorrect.
  - a. In a totally free-market economy, the quantities of each type of good that are bought and sold, and the amounts of factors of production (labour, land and capital) that are used, are determined by the decisions of individual households and firms through the interaction of demand and supply.

- b. In goods markets, households are *suppliers / demanders* and firms are *suppliers / demanders*. In labour markets, households are *suppliers / demanders* and firms are *suppliers / demanders*.
- c. Demand and supply are brought into balance by the effects of changes in price. If supply exceeds demand in any market (a surplus), the price will rise/fall/stay the same. This will lead to a rise in the quantity both demanded and supplied / a rise in the quantity demanded but a fall in the quantity supplied / a rise in the quantity demanded but a fall in the quantity supplied / a rise in the quantity supplied but a fall in the quantity demanded. If, however, demand exceeds supply in any market (a shortage), the price will fall / rise / stay the same. This will lead to a fall / rise in the quantity demanded and a fall / rise in the quantity supplied. In either case the adjustment of price will ensure that demand and supply are brought into equilibrium, with any shortage or surplus being eliminated.
- 6. How will the market demand curve for a 'normal' good shift (i.e. **left**, **right** or **no shift**) in each of the following cases?

(a) The price of a substitute good falls left / right / no shift

(b) Population rises left / right / no shift

(c) Tastes shift away from the good left / right / no shift

(d) The price of a complementary good falls left / right / no shift

(e) The good becomes more expensive left / right / no shift

- 7. How will the market supply curve of a good shift (i.e. **left**, **right** or **no shift**) in each of the following cases?
  - (a) Costs of producing the good fall. left / right / no shift
  - (b) Alternative products (in supply) become more profitable. left / right / no shift
  - (c) The price of the good rises. left / right / no shift
- (d) Firms anticipate that the price of the good is about to fall. left / right / no shift8. How will the following changes affect the market price of wheat flour (assuming that the market is initially in equilibrium)? In each case, sketch what happens to the demand and/or supply curves and, as result, what happens to the equilibrium price.
  - a. People consume more bread.
- 9. The diagram below shows the demand for and supply of petrol. The market is initially in equilibrium at point *x*.

There is then a shift in the demand and/or supply curves, with a resulting change in equilibrium price and quantity.

To which equilibrium point (a, b, c, d, e, f, g or h) will the market move from point x after each of the following changes?

#### The market for petrol

- (a) A rise in the cost of refining petrol.
- (b) A fall in bus and train fares.
- (c) A fall in the price of crude oil and an increase in the price of cars.
- (d) A rise in tax on petrol and a reduction in tax on cars.

# **Elasticity of Demand and elasticity of supply**

## Multiple choice

- 1. The price elasticity of demand is defined as the:
  - a. Percentage change in quantity demanded times the percentage change in price.
  - b. Unit change in price divided by the unit change in quantity demanded.
  - c. Percentage change in quantity demanded divided by the percentage change in price.
  - d. Unit change in quantity demanded times the unit change in price
- 2. A price cut will increase the total revenue a firm receives, ceteris paribus, only if the demand for its product is:
  - a. Elastic.
  - b. Inelastic.
  - c. Unitary elastic.
  - d. Perfectly elastic.

Use the following table to answer to the following question.

Demand Schedule for Cigarettes		
Price of cigarettes (\$ per pack)	Number of packs (packs per day)	
3	10	
2	20	
1	30	

- 3. Compute the appropriate elasticity of demand between 20 and 30 packs of cigarettes demanded per day in the above table
  - a. Between 0.0 and 0.7.
  - b. Between 0.7 and 1.4.
  - c. Between 1.4 and 2.0.
  - d. 2.0 or above.
- 4. Which of the following causes demand to be more elastic with respect to price?
  - a. Shorter periods of time to adjust to a change in price.
  - b. A higher ratio of price to income.
  - c. Fewer substitutes.
  - d. A steeper demand curve for a given price and quantity.
- 5. If the (own) price elasticity of demand for school's student permit parking was -0.5. If FSU was only interested in maximizing their revenue from these student parking permits, they should:
  - a. raise the price of the student permits
  - b. lower the price of the student permits

- c. don't change the price of the student permits
- d. raise the elasticity of the student permits
- 6. Other things being equal, as more firms enter a market, the market-supply curve appears to:
  - a. Become more inelastic.
  - b. Shift upward.
  - c. Shift downward.
  - d. Intersect the demand curve at a higher price
- 7. Suppose the quantity demanded of typewriters at an office supply store falls from 40 to 20 typewriters per month as a result of an increase in price from \$150 to \$200. The absolute value of the price elasticity which can be calculated is:
  - a. Less than or equal to zero.
  - b. Between zero and 1.0.
  - c. Equal to 1.0.
  - d. Greater than 1.0.
- 8. If the price elasticity of demand is 2.0, and a firm raises its price by 10%, the quantity sold by the firm will, ceteris paribus:
  - a. Rise by 10%.
  - b. Fall by 10%.
  - c. Fall by 20%.
  - d. Rise by 20%.
- 9. If a small percentage increase in the price of a good result in a large percentage decrease in the quantity demanded of the good, then demand is said to be
  - a. of unitary elasticity.
  - b. relatively inelastic.
  - c. relatively elastic.
  - d. perfectly inelastic
- 10. Price elasticity
  - a. determines how much the demand curve shifts to the left or right.
  - b. is elastic if the elasticity coefficient is greater than one.
  - c. measures the responsiveness of quantity demanded to the price.
  - d. is inelastic if the elasticity coefficient is zero.

The table illustrates the demand and supply for rice in a market in Africa.

price per kg (\$)	quantity demanded (kg)	quantity supplied (kg)
10	50	10
20	40	20
30	30	30
40	20	40

When the price rises from \$20 to \$30 per kg, what is the approximate price elasticity of demand for rice?

A 0.2

**B** 0.5

C 1.0

D 2.0

A bus company knows that demand for travel before 09 00 hours is inelastic and that after 09 00 hours it is elastic.

How is the company certain to increase total revenue?

- A by increasing all fares
- B by increasing fares before 09 00 hours
- C by reducing all fares
- D by reducing fares before 09 00 hours

Which of the following is true for any inelastic demand curve?

- A price cut causes a fall in expenditure.
- B A price rise has no effect on demand.
- C A price rise has no effect on total profit.
- D The percentage change in demand is greater than the percentage change in price.

The demand for cocoa beans is price-inelastic.

What is most likely to increase as a result of a decrease in demand for cocoa beans?

- A income of cocoa bean producers
- B price of cocoa bean products
- C production of cocoa beans
- D unemployment among cocoa bean farmers

A product has totally inelastic price elasticity of demand.

What will happen to total revenue if the price of the product rises by 10%?

- A It will fall by 10%.
- B It will fall to zero.
- C It will remain unchanged.
- D It will rise by 10%.

The demand for a product is known to be price-elastic.

Which fall in quantity demanded could follow a 10% price rise?

- A 0%
- **B** 5%
- C 10%
- D 15%

Demand for Japanese video-recorders on sale in Germany is price-elastic.

Which statement will therefore be true?

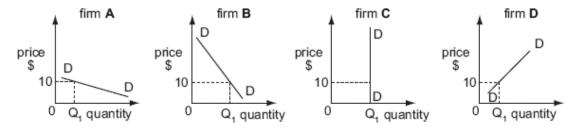
- A tariff will keep all the Japanese video-recorders out of Germany.
- B German manufacturers cannot compete in the video-recorder market.
- C Japanese manufacturers' profits will decrease if the price is reduced.
- D Japanese manufacturers' revenue from sales will increase if the price is reduced.

If 'Sunshine Oranges' were successfully advertised with the statement 'They help you live longer', which would be likely to occur?

	price elasticity of demand	total revenue
Α	fall	fall
В	fall	rise
С	rise	fall
D	rise	rise

The graphs, drawn to the same scale, show the demand curves of four firms. The market price is \$10. The price then falls to \$8.

Which firm will have the largest increase in total revenue?



### TRUE-FALSE

- 1. T F A flat demand curve has an elasticity of zero
- 2. T F Price elasticity of demand is constant along straight-line demand curves.
- 3. T F A flat demand curve has an elasticity of zero.

### Essay

- 1. The price elasticity of demand measures the responsiveness of *the quantity demanded/price* to a change in *the quantity demanded/the quantity supplied/price*.
  - a. Give the formula for price elasticity of demand.
- 2. In the mid 1990s, the **3.** In each of the following pairs, tick which of the two items is likely to have the more elastic demand. Give reasons for your answer.

(a) Petrol (all brands)	Esso petrol	
(a) Holidays abroad	Bread	

(a) Salt Clothing

- 3. government in the UK announced that for every 10 per cent rise in the price of cigarettes, the demand is likely to fall by 6 per cent. If this information is correct, what is the value of the price elasticity of demand for cigarettes?
- 4. What is the formula for income elasticity of demand?
  - (b) Which of the following would you expect to have a demand which is elastic with respect to income? (There are more than one.)

(i) Flour Yes / No / Possibly (ii) Ready-prepared meals for the microwave Yes / No / Possibly (iii) Champagne Yes / No / Possibly (iv) Socks Yes / No / Possibly (v) Designer jeans Yes / No / Possibly (vi) Electricity Yes / No / Possibly Yes / No / Possibly (vii) Bus journeys Yes / No / Possibly (viii)Insurance

5.

# **Types of Business Organizations**

# Multiple choice

- 1. Proprietorships:
  - a. Are each owned by many individual stockholders.
  - b. Are owned by one individual.
  - c. Account for most business sales and assets.
  - d. All of the above.

# **Competition and Monopoly**

# Multiple choice

- 1. In a very competitive market
  - a) Firms make no profit above normal returns, and they produce at the lowest possible cost.
  - b) Firms make very high profits, because competition makes firms profitable.
  - c) Firms don't necessarily produce at minimum cost, because competition is costly.
  - d) The price of goods is above average cost, because consumers also compete to buy goods, raising the price above cost.
- 2. In a monopoly with only one producer in the industry,
  - a) the firm can set whatever price and quantity it wants.
  - b) the firm maximizes profit where its average cost equals the extra revenue from selling one more unit.
  - c) the firm sets the quantity where its extra profit just equals its extra cost.
  - d) The profit-maximizing quantity is less than the revenue- maximizing quantity if the costs are positive.
- 3. Which of the following is a characteristic of perfectly competitive markets?
  - a. Non standardized products.
  - b. A large number of firms.
  - c. Price below marginal cost.
  - d. Significant barriers to entry.
- 4. A catfish farmer, as an individual perfectly competitive producer, faces a firm demand curve that:
  - a. Slopes downward to the right.
  - b. Slopes upward to the right.
  - c. Appears flat (horizontal).
  - d. Is the same as the market-demand curve
- 5. If a competitive firm is producing a rate of output for which price exceeds marginal cost:
  - a. The firm must be earning economic profit.
  - b. The firm can increase its profits by increasing output.
  - c. The firm can increase its profits by decreasing output.
  - d. The firm is maximizing profit.
- 6. If the entire output of a market is produced by a single seller, the firm:
  - a. Is a monopoly.
  - b. Is competitive.
  - c. Is an oligopolist.
  - d. Faces a perfectly inelastic demand.
- 7. The marginal revenue of a monopolist:
  - a. Is equal to price at all output levels.
  - b. Is below price.

- c. Is constant up to the rate of output that maximizes total revenues.
- d. Is the same as the demand curve
- 8. Both a competitive firm and a monopolist:
  - a. Use marginal cost pricing.
  - b. Maximize profit where MR = MC.
  - c. Face downward-sloping demand curves from the point of view of the firm.
  - d. Earn zero economic profit in the long run.
- 9. A monopoly:
  - a. Maximizes profits at the output where P = MC.
  - b. Is one of many sellers in a given market.
  - c. Charges higher prices than competitive firms, ceteris paribus.
  - d. All of the above
- 10. Which of the following is true of pure monopoly?
  - a. Monopoly severely limits the options available to consumers.
  - b. Monopoly results in allocative inefficiency.
  - c. Profits and losses do not properly induce firms to enter and exit from industries.
  - d. All of the above are true under monopoly
- 11. Other things being equal, if a perfectly competitive firm is forced to switch to a more expensive, non-polluting production process:
  - a. The average cost curve will shift downward.
  - b. The profit-maximizing level of output will be increased.
  - c. The marginal cost curve will shift downward.
  - d. Total profits will decrease.
- 12. If a single perfectly competitive firm raises its price above the market price:
  - a. It will sell some, but less, output.
  - b. It will sell more output.
  - c. It will not sell any output.
  - d. Not enough information is provided to determine what happens to quantity demanded
- 13. If economic profits are earned in a competitive market, in long run:
  - a. More firms will enter the market.
  - b. The market-supply curve will shift upward.
  - c. Equilibrium price will rise.
  - d. All of the above.
- 14. Which of the following conditions is a characteristic of a perfectly competitive market?
  - a. Competition between sellers is marked by interdependence of firms.
  - b. Products of all sellers in the industry are homogeneous.
  - c. The individual sellers advertise heavily.
  - d. The market price is determined by an organization of sellers.
- 15. In monopoly and competition, a firm should expand production when:
  - a. Price is below marginal cost.
  - b. Price is above marginal cost.
  - c. Marginal revenue is below marginal cost.
  - d. Marginal revenue is above marginal cost.

- 16. Compared to a competitive market with the same cost and market-demand circumstances, monopoly results in:
  - a. Higher prices and higher output.
  - b. Higher prices and lower output.
  - c. Lower prices and higher output.
  - d. Lower prices and lower output.
- 17. Markets that exhibit economies of scale over the entire range of market output:
  - a. Are natural monopolies.
  - b. Are perfectly competitive.
  - c. Have marginal cost curves that are above the average cost curve.
  - d. Have upward-sloping average cost curves
- 18. *Ceteris paribus*, a competitive firm will have an incentive to produce more output when:
  - a. The MC is above the ATC.
  - b. The MR is greater than the price.
  - c. The MR is greater than the MC.
  - d. Demand is above the ATC
- 19. Market supply in a competitive market is determined by:
  - a. Income.
  - b. The number of buyers.
  - c. The cost of factor inputs.
  - d. All of the above.
- 20. The equilibrium price of a good or service in a competitive market is:
  - a. Higher than it should be because profits are included in the price.
  - b. Is a reflection of opportunity cost of producing the product.
  - c. Lower than it should be because bankruptcies are common in competitive markets.
  - d. Higher than the opportunity cost of producing the product
- 21. The price charged by a profit-maximizing monopolist occurs:
  - a. At the minimum of the average total cost curve.
  - b. At the price where MR = MC.
  - c. At a price on the demand curve above the intersection where MR = MC.
  - d. At a price on the average cost curve below the point where MR = MC
- 22. If the firms in a competitive market become plants owned by a monopoly:
  - a. The monopoly would move upward along the market-demand curve as it raises price.
  - b. The monopoly would maximize profit where market supply equals market demand.
  - c. The monopoly would move upward along the market-supply curve to a higher price.
  - d. The monopoly would no longer operate as a monopoly.

Given the following schedule, what price and output level would a profit-maximizing monopolist choose?

Units of Output	Price	Total Cost
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#### **Question Bank**

1	\$60	\$60
2	\$45	\$66
3	\$35	\$70
4	\$30	\$72
5	\$25	\$75
6	\$20	\$80

- a. price of \$45, output of 2 units
- b. price of \$35, output of 3 units
- c. price of \$30, output of 4 units
- d. price of \$25, output of 5 units
- 23. Which of the following would present the greatest obstacle to a monopoly firm's effort to establish both higher prices and higher total revenue?
  - a. Inelastic consumer demand for the output of the monopolist.
  - b. Economies of scale.
  - c. Elastic consumer demand for the output of the monopolist.
  - d. High barriers to entry
- 24. Markets that exhibit economies of scale over the entire range of market output:
  - a. Are natural monopolies.
  - b. Are perfectly competitive.
  - c. Have marginal cost curves that are above the average cost curve.
  - d. Have upward-sloping average cost curves.
- 25. If the entire output of a market is produced by a single seller, the firm:
  - a. Is a monopoly.
  - b. Is competitive.
  - c. Is an oligopoly.
  - d. Faces a perfectly vertical demand curve
- 26. A monopolist maximizes profit by producing the rate of output for which:
  - a. P = MC.
  - b. MR = MC.
  - c. MR = ATC.
  - d. P = ATC.
- 27. If a monopolist can sell nine units at a price of \$6, or it can sell ten units at a price of \$5.75, what is the marginal revenue of the tenth unit?
  - a. \$1.
  - b. \$3.50
  - c. \$5.75
  - d. \$6.
- 28. In a perfectly competitive market with positive economic profits:
  - a. Firms will enter until economic profits are zero.
  - b. Firms will enter until accounting profits are zero.
  - c. Firms will exit until economic profits are zero.
  - d. No entry or exit will occur.

- 29. A catfish farmer, as an individual producer, faces a firm demand curve that:
  - a. Slopes downward to the right.
  - b. Slopes upward to the right.
  - c. Appears flat (horizontal).
  - d. Is the same as the market-demand curve.
- 30. Compared to a competitive market with the same cost and market-demand circumstances, monopoly results in:
  - a. Higher prices and higher output.
  - b. Higher prices and lower output.
  - c. Lower prices and higher output.
  - d. Lower prices and lower output
- 31. Markets that exhibit economies of scale over the entire range of market output:
  - a. Are natural monopolies.
  - b. Are perfectly competitive.
  - c. Have marginal cost curves that are above the average cost curve.
  - d. Have upward-sloping average cost curves.
- 32. Assume that Jack runs a perfectly competitive firm that makes wallets and faces the following cost schedule:

Quantity	<u>Total Cost</u>
0	40
1	60
2	85
3	115
4	155
5	200

Assuming the market price of wallets is \$42, what is the maximum profit that Jack could earn?

- a. 8
- b. 11
- c. 13
- d. 16
- 33. Assume that Jill runs a monopoly firm that sells electricity and faces the following revenue and cost schedule:

Quantity	<u>Price</u>	<u>Total Cost</u>
0	13	1
1	12	4
2	11	8
3	10	14
4	9	19
5	8	26

#### **Question Bank**

6	7	34
7	6	43

What is the profit maximizing output level for the firm?

- a. 1
- b. 2
- c. 3
- d. 4
- e. none of the above.
- 34. The marginal revenue of a monopolist:
  - a. Is equal to price at all output levels.
  - b. Is below price.
  - c. Is constant up to the rate of output that maximizes total revenues.
  - d. Is the same as the demand curve.
- 35. Compared to a competitive market with the same long-run cost and market-demand circumstances, a monopolist has:
  - a. Less pressure to reduce costs and less reason to improve quality.
  - b. Less pressure to reduce costs and more reason to improve quality.
  - c. More pressure to reduce costs and less reason to improve quality.
  - d. More pressure to reduce costs and more reason to improve quality
- 36. Both a competitive firm and a monopolist:
  - a. Use marginal cost pricing.
  - b. Maximize profit where MR = MC.
  - c. Face downward-sloping demand curves from the point of view of the firm.
  - d. Earn zero economic profit in the long run.
- 37. Compared to a competitive market with the same cost and market-demand circumstances, monopoly results in:
  - a. Higher prices and higher output.
  - b. Higher prices and lower output.
  - c. Lower prices and higher output.
  - d. Lower prices and lower output.
- 38. If a single perfectly competitive firm raises its price above the market price:
  - a. It will sell some, but less, output.
  - b. It will sell more output.
  - c. It will not sell any output.
  - d. Not enough information is provided to determine what happens to quantity demanded.
- 39. To maximize profits, a competitive firm produces up to the point at which:
  - a. Price equals demand.
  - b. Total revenue equals total cost.
  - c. The elasticity of demand equals zero.
  - d. Marginal cost equals price.
- 40. In a perfectly competitive market with economic losses:
  - a. Firms will enter until economic profits are zero.
  - b. Firms will enter until accounting profits are zero.

- c. Firms will exit until economic profits are zero.
- d. No entry or exit will occur.

Assume that Jack runs a perfectly competitive firm that makes wallets and faces the following cost schedule for the next <u>three</u> questions.

Quantity	Total Costs
0	60
1	80
2	95
3	112
4	140
5	180
6	225
7	280

- 41. 14. Minimum average total cost occurs at what level of output?
  - a. 3
  - b. 4
  - c. 5
  - d. 6
  - e. none of the above
- 42. Assuming the price of wallets is \$50, what is the profit maximizing output level for the firm?
  - a. 4
  - b. 5
  - c. 6
  - d. 7
- 43. Assume that Jill runs a monopoly firm that sells tractors and faces the follow revenue and cost schedule for the following two questions:

Output	Price	Total Fixed Costs	Total Variable Costs
4	\$1,100	\$500	\$4,000
5	\$1,000	\$500	\$4,300
6	\$900	\$500	\$4,900

7	\$800	\$500	\$5,800
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The price at which profit maximization is achieved is:

- a. \$800
- b. \$900
- c. \$1,000
- d. \$1,100
- 44. The maximum profit she could achieve is:
  - a. -\$700.
  - b. -\$100.
  - c. \$0
  - d. \$200
- 45. A monopolist has market power:
  - a. Because it faces a downward-sloping demand curve.
  - b. Because when it produces an extra unit of output, it must lower its price on all of its production.
  - c. Because its marginal revenue curve is below its demand curve.
  - d. All of the above
- 46. Monopolies occur for all but which one of the following?
  - a. legal restrictions
  - b. patents
  - c. technological superiority
  - d. government protection
- 47. Which of the following market structures occurs most often?
  - a. perfect competition
  - b. monopolistic competition
  - c. monopoly
  - d. Parcheesi
- 48. In which of the following do the suppliers have a great deal of control over the price of the good?
  - a. monopoly
  - b. oligopoly
  - c. cartel
  - d. all of the above
- 49. In the long run, a firm in perfect competition has a supply curve
  - a. that coincides with the part of its marginal cost curve that lies above its average cost curve.
  - b. that coincides with the fixed price line.
  - c. that coincides with its marginal revenue curve.
  - d. that coincides with the part of its average cost curve that lies above the price line.
- 50. A firm in perfect competition should shut down
  - a. if it is not making a profit.
  - b. if it is experiencing decreasing returns to scale.

- c. if it cannot cover its total costs.
- d. if it is operating below the minimum point on the average cost curve.
- 51. In perfect competition
  - a. there are very few firms in the market.
  - b. there is a homogeneous product.
  - c. there are large barriers to entry.
  - d. there is imperfect information between consumers and producer.

52.

#### TRUE-FALSE

- 1. T F The marginal cost curve is the short-run supply curve for a competitive firm.
- 2. T F A monopolist produces more output at a lower price than a competitive market would, ceteris paribus
- 3. T F Monopolists can charge any price and sell any amount of output that they want since no competition exists
- 4. T F A perfectly competitive firm will maximize total revenues by producing at an output level where price equals marginal cost (MC).
- 5. T F Firms that are able to push part of their costs onto society by polluting will produce a smaller output of their product than society desires
- 6. T F When businesses earn zero economic profit, they eventually are likely to go out of business

# PROBLEMS (SHOW ALL WORK)

1. (4 points) Assume that Jill runs a monopoly firm that sells electricity and faces the follow revenue and cost schedule:

Quantity	Price	Total Cost
1	12	5
2	11	10
3	10	16
4	9	23
5	8	31
6	7	40
7	6	50

What is the profit maximizing output level for the firm?
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What would be the maximum profit that Jill could earn? \_\_\_\_\_

2. (8 points) Assume that Jack runs a perfectly competitive firm that makes wallets and faces the following cost schedule:

2.

Quantity	Total Costs		
0	70		
1	80		
2	95		
3	115		
4	150		
5	200		
6	260		
7	330		
a. Assuming the price of wallets is \$40, what is the profit maximizing output level for the firm?			
b. Minimum average total cost occurs at what level of output?			

c. Minimum marginal cost occurs at what level of output? \_\_\_\_\_

d. Maximum revenue occurs at what level of output? \_\_\_\_\_

# Money and Banking

### Multiple choice

- 1. Suppose a bank has \$400,000 in deposits and a required reserve ratio of 15%. Then required reserves are:
  - a. \$6,000.
  - b. \$2,666,666.
  - c. \$6,000,000.
  - d. \$60,000.
- 2. Suppose the entire banking system has \$300 million in deposits, a required reserve ratio of 10%, and total bank reserves for the whole system of \$45 million. Then the whole system can make new loans in the amount of:
  - a. \$3,000,000.
  - b. \$15,000,000.
  - c. \$150,000,000.
  - d. \$45,000,000.
- 3. Suppose the banks in the Federal Reserve system have \$5 billion in transactions accounts, the minimum reserve ratio is 0.20, and there are no excess reserves in the system. If the minimum reserve ratio is changed to 0.25, then the amount of excess reserves would be:
  - a. -\$250 million.
  - b. -\$1.25 billion.
  - c. -\$6.25 billion.
  - d. +\$20 billion.
- 4. If the Fed wishes to reduce the money supply, it could:
  - a. Raise the discount rate.
  - b. Sell securities on the open market.
  - c. Raise the minimum reserve ratio.
  - d. All of the above.
- 5. A reduction in the money supply should shift:
  - a. The aggregate supply curve to the left.
  - b. The aggregate supply curve to the right.
  - c. The aggregate demand curve to the left.
  - d. The aggregate demand curve to the right.
- 6. Suppose a bank has \$400,000 in deposits and a required reserve ratio of 15%. Then required reserves are:
  - a. \$6,000.
  - b. \$2,666,666.
  - c. \$6,000,000.
  - d. \$60,000.
- 7. A bank may lend an amount equal to its:
  - a. Required reserves.

- b. Total reserves.
- c. Total assets.
- d. Excess reserves.
- 8. Other things constant, if the anticipated rate of inflation rises, we would expect the nominal interest rate to
  - a. remain unchanged
  - b. rise by the same amount as the increase in the anticipated rate of inflation
  - c. fall by the same amount as the increase in the anticipated rate of inflation rise, but by less than the anticipated increase in the rate of inflation
- 9. The interest rate
  - a. is determined in the money market and has no influence on the goods market.
  - b. is determined in the goods market and has no influence on the money market.
  - c. is determined in the money market and influences the level of planned investment and thus the goods market.
  - d. is determined in the goods market and influences the level of planned investment and thus the money market.
- 10. Other things constant, a decrease in the supply of money balances with a given money demand results in
  - (a) a reduction in the equilibrium interest rate and an increase in the equilibrium quantity of money balances held
  - (b) an increase in the equilibrium interest rate and a reduction in the equilibrium quantity of money balances held
  - (c) no change in the equilibrium interest rate but a decrease in the equilibrium quantity of money balances held
  - (d) an increase in the equilibrium interest rate but no change in the equilibrium quantity of money balances held
- 11. In terms of the demand for money, the interest rate represents
  - (a) the price of borrowing money.
  - (b) the return on money that is saved for the future.
  - (c) the rate at which current consumption can be exchanged for future consumption.
  - (d) the opportunity cost of holding money.
- 12. If the quantity of money demanded exceeds the quantity of money supplied, then the interest rate will
  - (a) change in an uncertain direction.
  - (b) rise.
  - (c) fall.
  - (d) remain constant.
- 13. Goldsmiths could loan a part of the gold deposited in their vaults because
  - (a) in those days people were less sophisticated in their financial transactions
  - (b) not all depositors would claim their gold simultaneously
  - (c) gold was much in demand
  - (d) cheques had not yet been invented

- 14. The quantity theory of money implies that a given percentage change in the money supply will cause
  - (a) an equal percentage change in nominal GDP.
  - (b) a smaller percentage change in nominal GDP.
  - (c) a larger percentage change in nominal GDP.
  - (d) an equal percentage change in real GDP.
- 15. An example of an expansionary monetary policy is
  - (a) an increase in the required reserve ratio.
  - (b) an increase in the discount rate.
  - (c) a reduction in the taxes banks pay on their profits.
  - (d) the Central bank buying government securities in the open market.
- 16. By 'Controlling the monetary base' economists mean
  - (a) controlling the money multiplier
  - (b) making banks keep a certain % of their assets as M0
  - (c) not allowing commercial banks to issue notes and coins
  - (d) restricting the amount of cash in circulation
- 17. A very competitive banking sector makes the role of the Bank of England \_\_\_\_\_\_ because
  - (a) easier, competition means more money is lent at sensible interest rates
  - (b) easier, competition means banks have large reserves and are stable
  - (c) harder, competition means banks have smaller reserves and are easier to control
  - (d) harder, competition means banks have smaller reserves and are less stable
- 18. Under New Classical macroeconomics monetary policy
  - (a) affects the level of equilibrium output
  - (b) affects the composition of equilibrium output
  - (c) affects both the level and composition of equilibrium output
  - (d) none of the above
- 19. By 'financial crowding out' economists mean
  - (a) Bank of England controls on commercial bank lending
  - (b) credit rationing
  - (c) government borrowing drives up interest rates
  - (d) what the government borrows cannot be used for private investment
- 20. If a commercial bank meets its 15 per cent requirement by depositing £100,000 with the Central Bank,
  - (a) total deposit liabilities of the bank are £15,000
  - (b) total deposit liabilities are £666,666
  - (c) there is no way to tell what deposit liabilities are
  - (d) deposit liabilities are £150,000
- 21. Suppose that the required reserve ratio is 15% and a cheque for £10,000 is drawn and cleared against the Bank of Stapleton. The immediate effect of the transaction is to reduce:
  - (a) demand deposits by £10,000 and reserves by £10,000
  - (b) demand deposits by £1,500 and reserves by £1,500
  - (c) demand deposits by £10,000 and reserves by £1,500

- (d) demand deposits by £10,000 and no effect on reserves
- 22. The idea that the money supply should change to accommodate changes in aggregate demand is associated with the ideas of
  - (a) Milton Friedman
  - (b) John Maynard Keynes
  - (c) Ronald Reagan
  - (d) Margaret Thatcher
- 23. If the Central bank tries to keep the interest rate constant when the economy is operating on the steep part of the AS curve, \_\_\_\_\_ will occur.
  - (a) a recession
  - (b) a depression
  - (c) a hyperinflation
  - (d) stagflation
- 24. Suppose that the Bank of England enters the open market and purchases £15 million of government bonds from the general public. This purchase will
  - (a) eventually increase the banking system's reserves, the monetary base, and the system's lending capacity
  - (b) eventually cause a decrease in the price of bonds on the market
  - (c) cause bank reserves to decline, the monetary base to fall, and the banking system's lending capacity to decline
  - (d) eventually limit the size of the money multiplier
- 25. The quantity theory of money implies that a given percentage change in the money supply will cause
  - (a) an equal percentage change in nominal GDP.
  - (b) a smaller percentage change in nominal GDP.
  - (c) a larger percentage change in nominal GDP.
  - (d) an equal percentage change in real GDP.
- 26. Which of the following events will lead to an increase in the demand for money?
  - (a) An increase in the level of aggregate output
  - (b) A decrease in the price level
  - (c) An increase in the interest rate
  - (d) An increase in the supply of money
- 27. Which one of the following statements about the demand for money is incorrect?
  - (a) the amount of money that people hold is negatively related with the interest rate
  - (b) as the level of national income rises, the amount of money balances that individuals hold decreases
  - (c) both the level of national income and the interest rate affect the demand for money balances
  - (d) other things constant, an increase in the real interest rate reduces the demand for real money balances

# **Business and Finance**

### **Incomes**

### Multiple choice

- 1. The determinants of labour demand include:
  - a. Income and wealth.
  - b. Tastes.
  - c. Marginal physical productivity.
  - d. Personal income taxes
- 2. A firm should continue hiring workers until:
  - a. MRP = demand.
  - b. MTP = the market wage rate.
  - c. MRP = the market wage rate.
  - d. The quantity of labour supplied = the quantity of labour demanded
- 3. In terms of its effect on the competitive firm's demand for labour, an increase in the equilibrium price in the product market results in a(n):
  - a. Decrease in labour.
  - b. Rightward shift in the MRP curve.
  - c. Rightward shift in the NW curve.
  - d. Reduction in wages.
- 4. In economic terms, a minimum wage:
  - a. Creates unemployment.
  - b. Creates additional jobs.
  - c. Is the only effective means for rewarding workers' efforts.
  - d. Must be sufficient to support a family
- 5. The federal government's role in social security programs is justified by considerations of:
  - a. Equity.
  - b. Public goods and externalities.
  - c. Market power.
  - d. Macro failure.
- 6. An upward-sloping supply curve of labour reflects:
  - a. The increasing opportunity cost of labour.
  - b. The increasing marginal utility of income as a person works more hours.
  - c. The increase in quantity supplied as prices fall.
  - d. All of the above
- 7. MRP for a perfectly competitive firm is equal to:
  - a. MPP times the wage rate.
  - b. MPP divided by the wage rate.
  - c. MPP divided by marginal revenue.
  - d. MPP times the price of the product
- 8. The eventual decline in the MPP of labour can be attributed to:
  - a. A decline in each worker's ability to work.
  - b. A reduction in morale among workers as production expands.

- c. The law of diminishing returns.
- d. A decline in product price as more units of output are offered for
- 9. The change in total output divided by the change in quantity of labour measures labour's:
  - a. MPP.
  - b. MRP.
  - c. MR.
  - d. MC.
- 10. A higher wage rate causes:
  - a. A shift in an individual's labour supply curve.
  - b. A shift in the derived demand for labour.
  - c. A movement down the MRP curve.
  - d. The opportunity cost of leisure to increase.
- 11. Use the following table when answering this question.

Number of Workers	Marginal Physical Product	Product Price
1	55	\$5
2	49	\$5
3	43	\$5
4	37	\$5
5	31	\$5
6	25	\$5

If the market wage rate is \$170 per worker, how many workers should be employed if the firm wants to maximize profit?

- a. 3
- b. 4
- c. 5
- d. 6
- 12. It is possible for wages and employment to increase at the same time if:
  - a. The MPP of labour increases.
  - b. The MRP of labour increases.
  - c. The price of the product being produced by labour increases.
  - d. All of the above are correct.
- 13. When people are standing in line for jobs and there are more applicants than jobs, then the

job market is characterized by:

- a. A shortage of jobs from the point of view of the buyer in the labour market.
- b. A surplus of jobs from the point of view of the seller in the labour market.
- c. A shortage of labour.
- d. A surplus of labour.
- 14. Internalizing external pollution costs can result in an:
  - a. Upward shift in the polluting firm's MC curve.

- b. Upward shift in the polluting firm's ATC curve.
- c. Upward shift in the polluting firm's TC curve.
- d. All of the above
- 15. As labour productivity increases, which of the following shifts in the labour market should result, ceteris paribus?
  - a. Supply of labour should shift to the left.
  - b. Supply of labour should shift to the right.
  - c. Demand for labour should shift to the left.
  - d. Demand for labour should shift to the right.
- 16. The market equilibrium wage occurs where:
  - a. MPP = MRP.
  - b. Demand for labour intersects the supply of labour.
  - c. MC = MR.
  - d. All of the above.
- 17. An individual's labour-supply curve reflects his or her:
  - a. Decision of how to allocate scarce time between labour and leisure.
  - b. Market wage rate.
  - c. MRP.
  - d. Equilibrium wage
- 18. MRP for a perfectly competitive firm is equal to:
  - a. MPP times the wage rate.
  - b. MPP divided by the wage rate.
  - c. MPP divided by marginal revenue.
  - d. MPP times the price of the product.
- 19. A firm should continue hiring workers until:
  - a. MRP = demand.
  - b. MPP = the market wage rate.
  - c. MRP = the market wage rate.
  - d. The quantity of labour supplied = the quantity of labour demanded
- 20. An increase in the derived demand for labour is best illustrated by:
  - a. A rightward shift in the MRP curve.
  - b. A leftward shift in the MPP curve.
  - c. An upward shift in the labour-supply curve.
  - d. A leftward shift in the labour-supply curve

#### TRUE-FALSE

- 1. T F. If a union achieves above-equilibrium for its membership, the wages of non-union workers will suffer
- 2. T F The marginal revenue product (MRP) sets a lower limit to the wage rate an employer will pay.
- 3. T F The highest wage that a firm is willing to pay its workers is determined by the marginal revenue product.

4.

# PROBLEMS (SHOW ALL WORK)

- 1. (5 points) The following table shows how many dental appointments a dentist can schedule per week based on the number of available dental chairs. In the spaces provided, compute the marginal physical product (MPP) of dental chairs, total revenue, and marginal revenue product of dental chairs, assuming that the dentist charges \$20 per appointment. The dental chairs could be leased for \$90 per week.
- a. Complete the table:

Dental Appointments and Revenues	Dental .	Appointmen	ts and F	Revenues
----------------------------------	----------	------------	----------	----------

Dental Chairs	Dental Appointments (per week)	Marginal Physical Product (appointments per dental chair)	Marginal Revenue Product(\$/dental chair)
0	0		
1	30		
2	40		
3	45		
4	45		

b. How many dental chairs should a profit-maximizing dentist use?

### **ESSAY**

- 2. A person's choice of occupation may be influenced by non-wage factors. Explain, using two examples, the meaning of non-wage factors. [3]
- (b) Why are there differences in earnings between different occupations?

# The income and expenditure of Government

# Multiple choice

- 1. Food stamps, public housing, and subsidized public education are examples of:
  - a. Free goods.
  - b. Tax expenditures.
  - c. "In-kind" benefits.
  - d. Money incomes.
- 2. Suppose that if your income is \$10,000, your tax is \$1,000, but if your income is \$50,000, your tax is \$4,000. Such a tax is:
  - a. Regressive.
  - b. Progressive.
  - c. Proportional.
  - d. Not enough information is provided to determine the nature of the tax.

### TRUE-FALSE

- 1. T F The federal income tax system is regressive
- 2. T F Real GDP is computed by adjusting GDP in current prices for inflation

### Essay

### International Trade

### Multiple choice

- 1. If one country's goods all cost less to produce (use fewer resources, including labour) than those of another country, then in the long run
  - a) no trade takes place between them.
  - b) The low-cost country will sell to the high-cost country, but the high cost country will not sell to the low-cost country.
  - c) Two-way trade can take place as each country concentrates on its most efficient production of goods.
  - d) Trade will take place because all the costs of production will become equal between the two countries.
- 2. If the country of Zebina has a comparative advantage in the production of wheat over the country of Blund, then
  - a. in Zebina, the opportunity cost of producing wheat is higher than in Blund
  - (b) in Zebina, the opportunity cost of producing wheat is lower than it is in Blund
  - (c) neither Blund nor Zebina should specialize only in the production of wheat
  - (d) Zebina will export all of its wheat
- 3. Economists suggest that trade's main advantage is allowing the world to achieve
  - (a) economic growth for all countries
  - (b) greater equality between countries
  - (c) more self-sufficiency
  - (d) specialisation and the resulting economies of scale

- 5. The original aims of the European Community were to
  - (a) achieve monetary union
    - (b) form a political and economic union
    - (c) set up a free trade area
    - (d) none of the above
- 6. The theory of international exchange that holds that exchange rates are set so that the price of similar goods in different countries is the same is the
  - (a) price feedback theory.
    - (b) purchasing-power-parity theory.
    - (c) trade feedback theory.
    - (d) J-curve theory.
- 7. The term tariff, as used in international trade, refers to
  - (a) a limit on the quantity of a good that can be imported into a country.

- (b) the price of goods when they leave the producing country
- (c) a government payment to encourage exports.
- (d) a tax on imports.
- 8. Non-tariff barriers are
  - (a) artificial differences in prices caused by import duties
    - (b) differences in national regulations which present free trade
    - (c) import duties
    - (d) none of the above
- 9. A tariff is
  - (a) a payment to domestic producers to help them compete in international markets
    - (b) a mechanism for setting an absolute level on the number of units of a good that can be imported
    - (c) a tax on a product being exported
    - (d) a tax on a product being imported
- 10. The main advantage of quotas as compared to tariffs in the view of policymakers is
  - (a) quotas are easier to get passed in Parliament
    - (b) quotas remove the uncertainty about the quantity of imports
    - (c) quotas have the strong support of economists
    - (d) quotas are less expensive to administer
- 11. If a group of countries abolish trade barriers between them and set the same tariffs on goods coming in from other countries they are a
  - (a) common market
    - (b) customs union
    - (c) federation
    - (d) free trade area

10	Decreased and a second code and 1007		and the second s
17.	Dumping occurs when UK	annas are sola for	overseas than

- (a) more, their UK cost of production
  - (b) less, their UK cost of production
  - (c) more. their UK price
  - (d) less, their UK price

### Essay

1. This question looks at the theory of comparative advantage. Imagine a world in which there are just two countries, F and G, and just two goods, X and Y.

Consider the following six situations. Each one shows alternative amounts of goods X and Y that the two countries can produce for a given amount of resources. Assume constant costs. In each case give the (pre-trade) opportunity cost of X in terms of Y.

(a) Country F: 10 units of X or 20 units of Y.

1X = .

<u> </u>			
	Y	Country G: 10 units of X or 10 units of Y.	1X = .
	(b)	Country F: 12 units of X or 12 units of Y.	1X =
	Y Y	Country G: 6 units of X or 8 units of Y.	1X =
	(c)	Country F: 8 units of X or 8 units of Y.	1X =
	Y Y	Country G: 10 units of X or 10 units of Y.	1X =
	(d)	Country F: 20 units of X or 5 units of Y.	1X =
	Y Y	Country G: 18 units of X or 2 units of Y.	1X =
	(e)	Country F: 10 units of X or 8 units of Y.	1X =
	Y Y	Country G: 6 units of X or 6 units of Y.	1X =
	(f)	Country F: 2 units of X or 4 units of Y.	1X =
	Y Y	Country G: 3 units of X or 6 units of Y.	1X =
	1		

- **2.** Referring to the six different situations given in Q1, and assuming no transport costs:
  - (a) In which situations will country F export good X and import good Y?
  - (b) In which situations will country F export good Y and import good X?
  - (c) In which situations will country F export both goods?
  - d) In which situations will country F import both goods

- (e) In which situations will no trade take place?
- 3. In situation (a) in Q1, assume that before trade the price ratios of the two goods were equal to their opportunity cost ratios.
  - (a) What would the pre-trade price ratio  $(P_X/P_Y)$  be in country F?
  - (b) What would the pre-trade price ratio  $(P_X/P_Y)$  be in country G?
  - (c) Now assume that trade is opened up and that 1 unit of X exchanges for 1.5 of Y. Demonstrate how both countries have gained.

- **4.** The following is a list of other factors that can make trade beneficial.
  - (i) Decreasing costs.
  - (ii) Differences in demand.
  - (iii) Increased competition.
  - (iv) Trade is an engine of growth.
  - (v) Non-economic factors.

Into which one of these five categories do the following examples fit?

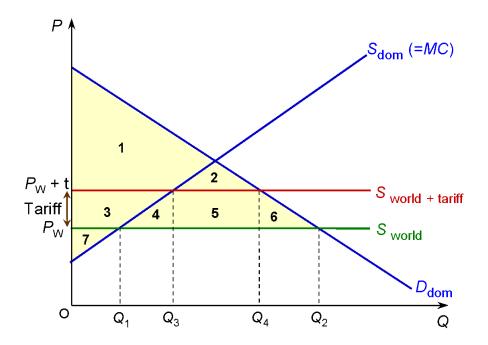
- (a) When the rest-of-the-world economy expands, this will increase the demand for a country's exports and also raise its export prices relative to import prices.
- (b) By specialising in certain exports the country may become increasingly skilled in their production.
- (c) Free trade between countries may encourage closer political co-operation
- (d) Allowing imports freely into a country may stimulate domestic producers

to be more efficient.

(e) Consumer tastes for products differ between different countries.

5.	The following are various methods of intervening in trade:
(i)	) Tariffs
(ii)	) Quotas
(iii)	Exchange controls
(iv)	Import licensing
$(\mathbf{v})$	Export subsidies
(vi)	
(vii)	Administrative barriers
Mate	ch each of the above to the following:
(a)	A ban on the importation of illegal drugs.
(b)	A government imposed restriction on the number of cars that may be imported from Japan.
(c)	The dumping of surplus EU wheat at artificially low prices on the international market
(d)	The exclusion of imports that do not meet rigid safety standards
(e)	Customs duties on tobacco and alcoholic drinks
(f)	A tax imposed by the government on foreign currency deals.
(g)	The granting of import permits solely to officially recognised importers.

- **6.** What is fallacious about the following two arguments? Is there any truth in either?
  - (a) 'Imports should be reduced because money is going abroad which would be better spent at home.'
  - (b) 'We should protect our industries from being undercut by imports produced using cheap labour.'
  - 7. The following diagram shows a country's domestic demand and supply curves ( $D_{\text{dom}}$  and  $S_{\text{dom}}$ ) for a particular product. Part of demand is satisfied by imports. The country is a price taker and the world price of the product is given by  $P_{\text{world}}$  with the world supply given by  $S_{\text{world}}$ . A tariff is then imposed on the product whose amount is shown is shown by the vertical difference between  $S_{\text{world}}$  and  $S_{\text{world}}$  tariff.



- (a) How much is imported before the tariff is imposed?
- (b) How much is imported after the tariff is imposed?
- (c) Which area(s) represent the consumer surplus *before* the imposition of the tariff?

(e)	Which area(s) represent the <i>loss</i> in consumer surplus from the tariff?	
(f)	Which area(s) represent the producer surplus <i>before</i> the imposition of the	e tariff?
(g)	Which area(s) represent the producer surplus <i>after</i> the imposition of the	tariff?
(h)	Which area(s) represent the <i>gain</i> in producer surplus from the tariff?	
(i)	Which area(s) represent tariff revenue to the government (a gain) ftariff?	rom the
(j) Giv	Which area(s) represent the net cost to society from the tariff? e three economic advantages of the development of the single market in t	he EU.
1.		
2.		
3.		
hav	e there been or are there likely to be adverse regional multiplier effects	_
(a)	Population is concentrated towards the geographical centre of the EU	Yes/No
(b)	Firms gain substantial plant economies by centralising production.	Yes/No
(c)	Rents and land prices are flexible.	Yes/No
(d)	A large proportion of the EU budget is spent on regional policy.	Yes/No
(e) bety	· · · · · · · · · · · · · · · · · · ·	ge rates
	(f) (g) (h) (i) (i) 1. 2. 3. A c have devenue (a) (b) (c) (d) (e)	<ul> <li>(f) Which area(s) represent the producer surplus <i>after</i> the imposition of the</li> <li>(g) Which area(s) represent the producer surplus <i>after</i> the imposition of the</li> <li>(h) Which area(s) represent the <i>gain</i> in producer surplus from the tariff?</li> <li>(i) Which area(s) represent tariff revenue to the government (a gain) from tariff?</li> <li>(j) Which area(s) represent the net cost to society from the tariff? Give three economic advantages of the development of the single market in the surplement of the single market in the surplement of the single market in the surplement of the single market?</li> <li>(a) Population is concentrated towards the geographical centre of the EU</li> <li>(b) Firms gain substantial plant economies by centralising production.</li> <li>(c) Rents and land prices are flexible.</li> <li>(d) A large proportion of the EU budget is spent on regional policy.</li> </ul>

(d) Which area(s) represent the consumer surplus after the imposition of the tariff?

Yes/No

- (f) The development of information technology reduces communication costs. Yes/No
- (g) Infrastructure expenditure is financed locally.

Yes/No

- 10. Although the development of a single market in the EU has led to trade creation, it has also led or could lead to trade diversion. Which of the following cases has or will make trade diversion more likely?
  - (a) There were initially substantial internal barriers to trade which are now completely

abolished. Yes/No

(b) External barriers remain high.

Yes/No

- (c) European industries have a wide range of available technologies and skills. *Yes/No*
- (d) Many European industries experience decreasing (long-run) average costs at the level of individual national markets

  Yes/No

### The Balance of Payments and the Rate of exchange

### Multiple choice

- 1. Net exports are:
  - a. What you get when you add exports to imports.
  - b. Equivalent to exports minus imports.
  - c. Positive if the U.S. economy imports more than it exports.
  - d. Positive if foreigners consume less of U.S. output than U.S. residents consume of foreign output.
- 2. Suppose that a Brazilian firm imports Japanese microchips. The transaction will appear
  - (a) on neither country's balance of payment accounts
    - (b) as a debit on the Brazilian balance of payments
    - (c) as a debit on the Japanese balance of payments
    - (d) as a credit on the Brazilian balance of payments
- 3. The record of a country's transactions in goods, services, and assets with the rest of the world is its
  - (a) current account.
    - (b) balance of trade.
    - (c) capital account.
    - (d) balance of payments.
- 4. If there is a short-term capital outflow out of the U.S. and into Japan, the outflow will appear as
  - (a) a debit on the U.S. current account
    - (b) a debit on the U.S. capital account
    - (c) a credit on the U.S. capital account
    - (d) a credit on the U.S. current account
- 5. A current account deficit implies that
  - (a) spending exceeds income
    - (b) income exceeds spending
    - (c) exports exceeds imports
    - (d) none of the above
- 6. If a country is on the gold standard, then
  - (a) only gold coins and notes can be used as money
    - (b) its currency must be easily convertible into gold
    - (c) gold, in some form, must be used as money
    - (d) banks are unable to lend money
- 7. Under a system of floating exchange rates, if the price of French francs falls from 12.5 cents to 10 cents, then
  - (a) the dollar has appreciated against the franc
    - (b) the dollar has depreciated against the franc
    - (c) the dollar has been devalued
    - (d) French goods become more expensive
- 8. Devaluation
  - (a) refers to an official act to alter an exchange rate
    - (b) is not required under a system of completely flexible exchange rates

- (c) is an alternative to internal adjustment of an economy under fixed exchange rates
- (d) all the above
- 9. An economist will define the exchange rate between two currencies as the
  - (a) amount of one currency that must be paid in order to obtain one unit of another currency
    - (b) difference between total exports and total imports within a country
    - (c) price at which the sales and purchases of foreign goods takes place
    - (d) ratio of import prices to export prices for a particular country
- 10. A fiscal expansion in the UK
  - (a) tends to depreciate the pound sterling.
    - (b) tends to appreciate the pound sterling.
    - (c) does not affect the price of the pound sterling.
    - (d) has no predictable effect on the price of the pound sterling
- 11. In 1971, most countries
  - (a) returned to the gold standard.
    - (b) adopted a new system of fixed exchange rates.
    - (c) gave up trying to fix exchange rates formally and began allowing them to be determined essentially by supply and demand.
    - (d) adopted a single, internationally-accepted currency whose use is limited to international transactions.
- 12. The agreements that were reached at the Bretton Woods conference in 1944 established a system
  - (a) in which the values of currencies were fixed in terms of a specific number of ounces of gold, which in turn determined their values in international trading.
    - (b) of floating exchange rates determined by the supply and demand of one nation's currency relative to the currency of other nations.
    - (c) that prohibited governments from intervening in the foreign exchange markets.
    - (d) of essentially fixed exchange rates under which each country agreed to intervene in the foreign exchange market when necessary to maintain the agreed-upon value of its currency.
- 13. If a nation's interest rates are relatively low compared to those of other countries, then the exchange value of its currency will tend to
  - (a) depreciate under a system of floating exchange rates.
    - (b) depreciate under a system of fixed exchange rates.
    - (c) appreciate under a system of fixed exchange rates.
    - (d) appreciate under a system of floating exchange rates
- 14. If the U.K. experiences inflationary prices, then the presence of rising prices will
  - (a) decrease imports into the country
    - (b) increase the exports from the country
    - (c) shift the country's currency supply curve in the foreign exchange market to the right
    - (d) shift the demand curve for the country's foreign exchange to the right
- 15. If the exchange rate between the UK and Japan changes from £1 being equivalent to 100 yen to £1being equivalent to 150 yen, then, ceteris paribus, the price of UK goods in Japan
  - (a) will increase.
    - (b) will decrease.
    - (c) will remain the same.

(d) could either increase or decrease.

### **Problem Solving**

2. The following shows how the UK's balance of payments account is set out.

CREDITS	DEBITS	
(1) Exports of goods	(2) Imports of goods	
1-2 = Balance	on trade in goods	
(3) Exports of services	(4) Imports of services	
3-4 = Balance on trade in services		
(1-2) + (3-4) = Balance on trade in goods and services		
(5) Incomes and current transfers from abroad	(6) Incomes and current transfers going abroad	
5-6 = Other income flows		
(1-2) + (3-4) + (5-6) = Current account balance		
(7) Transfers of capital to UK from abroad	(8) Transfers of capital abroad from UK	
7 – 8 Capital account balance		
(9) Net investment in the UK from abroad	(10) UK net investment abroad	
(11) Short-term financial inflows to UK	(12) Short-term financial outflows from UK	
either (13) Drawing on reserves	or (14) Adding to reserves	
(9-10) + (11-12) + (either 13  or  14) = <b>Financial account balance</b>		
Current account balance + Capital account balance + Financial account balance		
= Overall balance of payments		
Overall balance of payments plus net errors and omissions $=0$		

The following are the items in the UK's 2000 balance of payments (£ billions)

Exports of services	67.2
Exports of goods	187.1
UK net investment abroad (direct and portfolio)	250.6
Reserves (adding to $=$ $-$ ve)	-3.9
Short-term financial inflows to UK	281.8
Short-term financial outflows from UK	270.9
Capital transfers to UK from abroad	2.8
Capital transfers abroad from the UK	0.8
Net incomes and current transfers from/to abroad	+1.7
Imports of goods	215.9
Imports of services	56.3
Net investment in the UK from abroad (direct and portfolio)	260.8

Using the table above, work out the figures for the UK for the following:

(a) The balance on trade in goods and services

- (b) The current account balance
- (c) The capital account balance
- (d) The financial account balance
- (e) Net errors and omissions

### Essay

- 1. The following are the various elements of the UK balance of payments account:
  - (a) Imports of goods (-)
  - (b) Exports of goods (+)
  - (c) Imports of services (-)
  - (d) Exports of services (+)
  - (e) Other income and current outflows (–)
  - (f) Other income and current inflows (+)
  - (g) Transfers of capital from the UK (–)
  - (h) Transfers of capital to the UK (+)
  - (i) Direct and portfolio UK investment overseas (–)
  - (j) Direct and portfolio investment in UK (+)
  - (k) Other (mainly short-term) financial outflows (-)
  - (l) Other (mainly short-term) financial inflows (+)
  - (m) Adding to reserves (-)
  - (n) Drawing on reserves (+)

Into which of the above categories would you put the following?

- (i) Video recorders imported from Japan.
- (ii) Insurance cover purchased at Lloyds in London by overseas residents.
- (iii) UK gives aid to finance capital project in a developing country
- (iv) Japanese car company purchases factory in UK.
- (v) UK residents taking holidays in Florida.
- (vi) Interest earned by UK residents on assets abroad.
- (vii) Running down the stock of foreign exchange in the Bank of England

- (viii) New deposits made in banks in the UK by overseas residents.
  - (ix) Scotch whisky sold in France
  - (x) UK insurance company sets up branch in Canada.
- **3.** The following diagram shows a demand curve and supply curve of sterling against the euro.

#### EMBED PowerPoint.Show.7

- (a) Who is demanding sterling in the diagram and for what purpose?
- (b) Who is supplying sterling in the diagram and for what purpose?
- (c) Mark the equilibrium exchange rate.
- (d) Now illustrate the effect of an increased demand for sterling and a decreased supply.
- (e) Has the exchange rate appreciated or depreciated? Appreciated / Depreciated
- **4.** Assume that there is a free-floating exchange rate. Will the following cause the exchange rate to appreciate or depreciate? In each case you should consider whether there is a shift in the demand or supply curves of sterling (or both) and which way the curve(s) shift(s).
  - (a) Imports increase.

Demand curve shift left / right / no shift Supply curve shift left / right / no shift Exchange rate appreciates / depreciates (b) UK interest rates rise relative to those abroad. Demand curve shift *left / right / no shift* 

Supply curve shift *left / right / no shift* Exchange rate *appreciates / depreciates* 

(c) The UK experiences a lower rate of inflation than other countries (assuming no change in interest rates). Demand curve shift *left / right / no shift* 

Supply curve shift *left / right / no shift* Exchange rate *appreciates / depreciates* 

(d) Speculators believe that the rate of exchange will fall.

Demand curve shift *left / right / no shift*Supply curve shift *left / right / no shift*Exchange rate *appreciates / depreciates* 

- **5.** Assume that the government wishes to pursue a deflationary policy.
  - (a) What will happen to the exchange rate if it uses deflationary monetary policy?

    \*Appreciate / Depreciate\*
  - (b) What effect will this exchange rate movement have on aggregate demand?

    \*\*Increase it / Decrease it\*\*
  - (c) What will happen to the exchange rate if it uses deflationary fiscal policy?

    \*Appreciate / Depreciate\*
  - (d) What effect will this exchange rate movement have on aggregate demand?

    \*\*Increase it / Decrease it\*\*
- **6.** The use of interest rates as the main instrument for stabilising the exchange rate can often led to conflicts with internal policy objectives. In which of the following cases is there a clear *conflict* between internal and external policy objectives, if interest rate changes are the only policy instrument available to the government or central bank for achieving both sets of objectives?
  - (a) The government (or central bank) wants to prevent an appreciation of the exchange rate and to reduce demand-deficient unemployment. Yes/No
  - (b) The government (or central bank) wants to help domestic exporters and to reduce the rate of inflation. *Yes/No*
  - (c) The government (or central bank) wants to reduce the price of imports and to curb the rate of growth in the money supply. Yes/No
  - (d) The government (or central bank) wants to prevent a depreciation of the exchange rate and to stimulate investment. Yes/No
  - (e) The government (or central bank) wants to halt a rise in the exchange rate and to reduce the rate of growth of the money supply. Yes/No
  - (f) The government (or central bank) wants to reverse a recent fall in the exchange rate and to reduce its unpopularity with home owners. Yes/No

- 7. Which of the following are likely to contribute to the volatility of exchange rates between the major currencies?
  - (a) A growth in the size of short-term capital flows relative to current account flows. Yes/No
  - (b) The abolition of exchange controls. *Yes/No*
  - (c) A harmonisation of international macroeconomic policies. Yes/No
  - (d) The adoption of money supply targets by individual countries. Yes/No
  - (e) The adoption of exchange rate targets by individual countries. Yes/No
  - (f) The adoption of inflation targets by individual countries. Yes/No
  - (g) A growing belief that speculation against exchange rate movements is likely to be stabilising. *Yes/No*
  - (h) A growing belief that speculation against exchange rate movements is likely to be destabilising. *Yes/No*
  - (i) A growing ease of international transfers of funds. Yes/No
  - (j) Countries' business cycles become more synchronised with each other. *Yes/No*

### The Government and the national Economy

### Multiple choice

- 1. Which of the following is an example of the economic concept of investment?
  - a. The purchase of a delivery van by IBM.
  - b. The purchase of IBM stock by a mutual fund manager.
  - c. The purchase of land by a real estate investor.
  - d. The purchase of a U.S. government savings bond by a commercial bank.

U.S. National-Income Data		
Consumption expenditures for goods and services	\$4,800	
U.S. Exports	\$600	
Government purchases of goods and services	\$1,400	
U.S. Imports	\$800	
Gross investment	\$1,200	

- 2. Use the hypothetical national-income data shown in the above table. (Data are expressed in billions of dollars.) GDP is:
  - a. \$8,000.
  - b. \$7,200.
  - c. \$10,000.
  - d. \$8,800.

U.S. National Income Aggregates	
Personal consumption expenditures	4,000
Gross private domestic investment	1,000
Exports	800
Imports	600
Federal government purchases	400
State and local government purchases	700

3. Use the hypothetical national-income data shown in the table above. (Data are expressed in billions of dollars.) GDP is:

- a. \$6,100.
- b. \$6,300.
- c. \$5,000.
- d. \$6,400.
- 4. Alternating periods of economic growth and contraction in real GDP define:
  - a. The business cycle.
  - b. Unemployment.
  - c. Inflation.
  - d. Micro policy.
- 5. Which of the following should increase during the expansion phase of the business cycle?
  - a. Unemployment.
  - b. Full employment.
  - c. Real GDP.
  - d. All of the above.
- 6. If the multiplier is 5 and a change in government spending leads to a \$500 million decrease in output, we can conclude:
  - a. Government spending decreased by \$500 million.
  - b. Taxes increased by \$500 million.
  - c. Taxes decreased by \$100 million.
  - d. Government spending decreased by \$100 million.
- 7. Which of the following changes in the aggregate demand curve would best characterize a cutback in exports?
  - a. A rightward shift.
  - b. A leftward shift.
  - c. An upward movement along the curve.
  - d. A downward movement along the curve.
- 8. If the government cuts expenditures by \$16 billion and the MPC = 0.9, then how much should equilibrium income fall?
  - a. \$16 billion.
  - b. \$17.8 billion.
  - c. \$160 billion.
  - d. \$14.4 billion.
- 9. Which of the following provides fiscal stimulus to the economy?
  - a. Higher interest rates.
  - b. Increased imports.
  - c. Reducing inefficient employment of resources.
  - d. Increased government purchases.
- 10. On the basis of aggregate demand and supply shifts, monetary theories suggest an increase in the money supply is most likely to cause:
  - a. Higher inflation rates and higher unemployment rates.
  - b. Higher inflation rates and lower unemployment rates.
  - c. Lower inflation rates and higher unemployment rates.
  - d. Lower inflation rates and lower unemployment rates.

- 11. Which of the following is not a reason for downward slope of the aggregate demand curve?
  - a. The real balances effect.
  - b. The foreign trade effect.
  - c. The income effect.
  - d. The interest rate effect.
- 12. Policy levers include:
  - a. Population growth, spending behaviour, invention.
  - b. Wars, natural disasters, trade disruptions.
  - c. Tax policy, government spending, and availability of money.
  - d. External shocks, internal market forces.
- 13. Which of the following results if the aggregate quantity supplied exceeds the aggregate quantity demanded?
  - a. Aggregate demand shifts to the right.
  - b. Aggregate supply shifts downward.
  - c. A surplus pushes the average prices down to macro equilibrium.
  - d. A shortage pushes the average prices up to macro equilibrium.
- 14. An aggregate demand curve most likely shifts to the left when:
  - a. Taxes fall.
  - b. Savings fall.
  - c. Government spending falls.
  - d. All of the above occur.
- 15. Crowding out occurs when the government:
  - a. Increases taxes, thus causing a decrease in consumption.
  - b. Issues debt, thus making it more difficult for the private sector to issue debt.
  - c. Prints money, which displaces currency.
  - d. Does all of the above.
- 16. Suppose that if your income is \$10,000, your tax is \$1,000, but if your income is \$50,000, your tax is \$4,000. Such a tax is:
  - a. Regressive.
  - b. Progressive.
  - c. Proportional.
  - d. Not enough information is provided to determine the nature of the tax.

Table U.S. National Income Aggregates	
Personal consumption expenditures	\$6,000
Gross private domestic investment	\$2,000
Exports	\$900
Imports	\$600
Federal government purchases	\$400
State and local government purchases	\$700

17. Use the hypothetical national-income data shown in the table above. (Data are expressed in billions of dollars.) GDP is:

- a. \$8,000.
- b. \$9,400.
- c. \$10,000.
- d. \$10,600.
- 18. The federal income tax is a:
  - a. Regressive tax.
  - b. Flat tax.
  - c. Progressive tax.
  - d. Both progressive and regressive tax
- 19. GDP can be found by:
  - a. Adding up the spending by business, government, households, and foreigners, and subtracting imports.
  - b. The total value of the sales of all goods which occurred during the year.
  - c. Taking the difference between exports and imports.
  - d. All of the above.
- 20. If the real U.S. GDP was \$4,024.4 billion in 1988 and \$4,142.6 billion in 1989, the percentage increase in real GDP would have been closest to:
  - a. 1.029%.
  - b. 0.029%.
  - c. 2.9%.
  - d. 102.9%.
- 21. Real GDP is better than nominal GDP in making comparisons of GDP over time because:
  - a. Nominal GDP can increase simply because of price increases over time.
  - b. Real GDP is not affected by output changes.
  - c. Nominal GDP is the hypothetical output that would be produced at full employment.
  - d. Real GDP is not affected by changes in productivity or the size of the labour force
- 22. Which of the following policy levers definitely enhances productivity?
  - a. Higher taxes.
  - b. More government regulation.
  - c. Education and training activities.
  - d. Limits on immigration.
- 23. If the MPC = 0.8, then how much should government expenditure be increased to increase income by \$200 billion?
  - a. \$8 billion.
  - b. \$32 billion.
  - c. \$40 billion.
  - d. \$200 billion.
- 24. Which of the following provides fiscal stimulus to the economy?
  - a. Higher interest rates.
  - b. Increased imports.
  - c. Reducing inefficient employment of resources.
  - d. Increased government purchases.

- 25. A cutback in investment by business can best be represented in a graph of the aggregate demand curve by:
  - a. A leftward shift.
  - b. A rightward shift.
  - c. A movement up the curve.
  - d. A movement down the curve
- 26. Which is not a form of government intervention in the microeconomics?
  - a. subsidies
  - b. anti-trust laws
  - c. trade tariffs
  - d. taxes

#### TRUE-FALSE

- 1. T F Real GDP is computed by adjusting GDP in current prices for inflation
- 2. T F When the government responds to a market failure, outcomes will always improve.
- 3. T F Investment, from an economic standpoint, occurs when an individual purchases corporate stock.
- 4. T F Fiscal policy is the use of tax and spending powers to shift the aggregate demand curve.
- 5. T F The marginal propensity to consume (MPC) is related to the marginal propensity to save (MPS) by the formula MPC= 1- MPS.

6.

### PROBLEMS (SHOW ALL WORK)

1. (4 points). Assume that the following facts about U.S. GDP and Price level

Year	Nominal GDP	Price Level
1970	\$2,000	1.0
1996	\$9,000	2.5

What is the 1970 GDP in terms of 1996 dollars?

### Inflation

### Multiple choice

- 1. Which of the following results from unexpected increases in the rate of inflation?
  - a. Decreased uncertainty.
  - b. Increased windfall profits to creditors who have lent large amounts of money.
  - c. Redistributions of income and wealth between different groups.
  - d. All of the above.
- 2. The CPI is designed specifically to allow measurement of:
  - a. The unemployment rate.
  - b. The inflation rate.
  - c. The growth rate of the economy.
  - d. The business cycle.

3.

#### TRUE-FALSE

1. T F Everyone is made worse off by inflation

### Unemployment

### Multiple choice

- 1) To be officially counted as "unemployed," one must be:
  - a. Fired from previous employment.
  - b. A participant in a state employment-compensation program.
  - c. Available for only full-time employment.
  - d. Actively seeking employment and currently not working
- 2) After Christmas retail sales fall and many clerks are laid off until the following Christmas. This is an example of which of the following types of unemployment?
  - a. Structural unemployment.
  - b. Frictional unemployment.
  - c. Cyclical unemployment.
  - d. Seasonal unemployment.
- 3) Structural unemployment occurs:
  - a. With a mismatch between skills and jobs.
  - b. When firms fail in a seasonal downturn.
  - c. When an industry experiences a cyclical downturn.
  - d. When there is inadequate demand for jobs
- 4) Suppose a supply disruption causes oil prices to rise, which leads to a recession in the United States, and many Americans lose their jobs. Which of the following types of unemployment would develop in the U.S. economy?
  - a. Structural unemployment.
  - b. Frictional unemployment.
  - c. Cyclical unemployment.
  - d. Seasonal unemployment.
- 5) Automobile workers in Detroit who are unemployed because of imports of foreign automobiles at the same time that job vacancies exist for coal miners in West Virginia would most likely be classified as:
  - a. Cyclically unemployed.
  - b. Structurally unemployed.
  - c. Frictionally unemployed.
  - d. Seasonally unemployed.
- 6) When people are standing in line for jobs and there are more applicants than jobs, then the
  - job market is characterized by:
  - a. A shortage of jobs from the point of view of the buyer in the labour market.
  - b. A surplus of jobs from the point of view of the seller in the labour market.
  - c. A shortage of labour.
  - d. A surplus of labour.
- 7) Which of the following types of unemployment would best characterize a snow ski instructor's unemployment during the summer months?
  - a. Structural unemployment.

- b. Frictional unemployment.
- c. Seasonal unemployment.
- d. Cyclical unemployment
- 8) Which of the following would be counted as a member of the labour force?
  - a. The president of General Motors.
  - b. A man serving ten years for armed robbery.
  - c. A retired commander of a U.S. Navy nuclear submarine.
  - d. A hard-working homemaker who is not looking for work outside the home.
- 9) The downswing in the business cycle is characterized by:
  - a. Lower real output.
  - b. Lower unemployment rates.
  - c. Higher prices.
  - d. Higher interest rates
- 10) Attempts to lower unemployment through a change in monetary policy will aggravate current inflation as can be illustrated by a:
  - a. Leftward shift of aggregate supply.
  - b. Rightward shift of aggregate supply.
  - c. Leftward shift of aggregate demand.
  - d. Rightward shift of aggregate demand.
- 11) The statement that "If the minimum wage is increased the number of persons employed will fall" is an example of:
  - a. post hoc, ergo porters hoc fallacy.
  - b. the fallacy of composition.
  - c. a positive economic statement.
  - d. a normative economic statement.
- 12) If the population of a county is 200,000 people, 80,000 people are employed, and 20,000 people are unemployed, the unemployment rate is:
  - a. 10%
  - b. 15%
  - c. 20%
  - d. 25%
- 13) After being fired from a job, some people find that it may take several months to find a new job. This is an example of which of the following types of unemployment?
  - a. Structural unemployment.
  - b. Frictional unemployment.
  - c. Cyclical unemployment.
  - d. Seasonal unemployment.

14)

#### TRUE-FALSE

1. T F People above the age of 16 who are employed or who are actively seeking work are counted as part of the labour force.

### PROBLEMS (SHOW ALL WORK)

TROBLEMO (OHOW ALL WORT)
1. (4 points) If the population of a county is 400,000 people, 190,000 people are employed, and 10,000 people are unemployed,
a. The size of labour force is:
b. The unemployment rate is:

## **Population**

## Multiple choice

Pollution is an example of:

- a. Inefficiency in the firm that is polluting.
- b. Market failure.
- c. The ability of central planning to provide the optimal quantities of goods.
- d. All of the above.

### **Economic Growth**

## Multiple choice

- 1. Productivity is best measured using:
  - a. Nominal GDP.
  - b. Real GDP.
  - c. Real GDP per capita.
  - d. Real GDP per worker.
- 2. Economic growth, in the long run:
  - a. Shifts the production-possibilities curve outward.
  - b. Moves the economy along the production-possibilities curve.
  - c. Shifts the aggregate demand curve to the left.
  - d. Moves the economy to the production-possibilities curve

# **Economic Development**