## MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) Changes in global weather patterns can lead to
A) more Canadians drinking coffee.
B) the destruction of the Canadian coffee harvest.
C) wage increases for coffee shop employees.
D) Canadians having to pay more for coffee.
E) Canadians demanding more coffee.

Answer: D
2) The study of economics arises due to
A) unlimited resources.
B) money.
C) scarcity.
D) greed.
E) unemployment.

Answer: C
3) Scarcity refers to the situation in which
A) a country's population is larger than its resource base.
B) our needs and wants are finite.
C) unlimited resources exceed limited wants.
D) a nation's poverty level increases faster than its population.
E) unlimited wants exceed limited resources.

Answer: E
4) The basic economic problem of $\qquad$ has always existed and will continue to exist.
A) recession
B) scarcity
C) efficiency
D) unemployment
E) inflation

Answer: B
5) Economics is the study of the $\qquad$ people make to attain their goals, given their $\qquad$ resources.
A) income; available
B) decisions; household
C) output; time
D) purchases; unlimited
E) choices; scarce

Answer: E
6) An economic $\qquad$ is a simplified version of some aspect of economic life used to analyze an economic issue.
A) variable
B) trade- off
C) model
D) market
E) opportunity cost

Answer: C
7) The term "market" in economics refers to
A) a group of buyers and sellers and the arrangement by which they come together to trade.
B) an organization which sells goods and services to a group of buyers who make decisions at the margin.
C) a place where stocks are traded between a group of international buyers and sellers.
D) a legal institution where exchange can take place between a group of buyers and sellers.
E) a place where money changes hands between institutions and the arrangements they make.

Answer: A
8) The term $\qquad$ in economics refers to a group of buyers and sellers of a product and the arrangement by which they come together to trade.
A) monopoly
B) market
C) collective
D) cooperative
E) trade- off

Answer: B
9) Economists assume that
A) optimal decisions are made at the margin.
B) individuals behave in unpredictable ways.
C) people put other people's interests ahead of their own.
D) consumer behaviour is explained by the existence of unlimited resources.
E) society's output should be equally distributed.

Answer: A
10) Economists assume that rational behaviour is useful in explaining choices people make
A) because individuals act rationally all the time in all circumstances.
B) even though people may not behave rationally all the time.
C) even though people rarely, if ever, behave in a rational manner.
D) because irrational people do not make economic choices.
E) because economic choices are not needed by rational people.

Answer: B
11) Economists assume that rational people do all of the following except
A) weigh the benefits and costs of all possible alternative actions.
B) respond to economic incentives.
C) use all available information as they act to achieve their goals.
D) do things to make themselves better off.
E) undertake activities that benefit others and hurt themselves.

Answer: E
12) Economics does not study correct or incorrect behaviours but rather it assumes that economic agents behave , meaning they make the best decisions given their knowledge of the costs and benefits.
A) selfishly
B) erratically
C) rationally
D) equitably
E) emotionall
y
Answer: C
13) Consider the following statements:
a. Car owners purchase more gasoline from a gas station that sells gasoline at a lower price than other rival gas stations in the area.
b. Banks do not take steps to increase security since they believe it is less costly to allow some bank robberies than to install expensive security monitoring equipment.
c. Firms produce more of a particular DVD when its selling price rises.

Which of the above statements demonstrates that economic agents respond to incentives?
A) a only.
B) b only.
C) c only.
D) $a$ and $b$.
E) a, b, and c.

Answer: E
14) As professors and teachers get closer to retirement age they typically spend more time reading and thinking about the financial planning as well as the stock market. By gathering and using all available information as they act to achieve their goals, these teachers are exemplifying the economic idea that
A) equity is more important than efficiency.
B) optimal decisions are made at the margin.
C) people are rational.
D) people respond to economic incentives.
E) people make identical choices.

Answer: C
15) Suppose your provincial government encouraged new medical school graduates to take over rural and small town practices from doctors wishing to retire by paying both the new and retiring doctors $\$ 100,000$. These doctors would be exemplifying the economic idea that
A) equity is more important than efficiency.
B) people are rational.
C) people respond to economic incentives.
D) people make identical choices.
E) optimal decisions are made at the margin.

Answer: C
16) Obesity is one of the biggest health challenges facing Canadians, with few Canadians getting the recommended amount of daily physical activity. Economists would expect
A) people who agree to pay a fine for skipping exercise sessions will be less healthy.
B) people will exercise more when the cost of skipping exercise increases.
C) the cost of gym memberships will decrease as people join gyms and demand increases.
D) people who value physical appearance to exercise less than others.
E) there is no correlation between fines for skipping exercise and how often people will go to the gym.

Answer: B
17) By charging users that skip workouts, the designers of a gym are
A) increasing both the marginal cost and the marginal benefit of exercise.
B) increasing the marginal benefit of exercise.
C) assuming gym members are rational.
D) decreasing the marginal cost and the marginal benefit of exercise.
E) increasing the marginal cost of exercise.

Answer: B
18) In economics, the term $\qquad$ means "additional" or "extra."
A) optimal
B) marginal
C) equity
D) absolute
E) allocative

Answer: B
19) A grocery store sells a bag of potatoes at a fixed price of $\$ 5.50$. Which of the following is a term used by economists to describe the money received from the sale of an additional bag of potatoes?
A) marginal costs
B) pure profit
C) net benefit
D) marginal revenue
E) gross earnings

Answer: D
20) Economists reason that the optimal decision is to continue any activity up to the point where the
A) marginal benefit starts declining.
B) marginal benefit is greater than the marginal cost.
C) marginal cost is zero.
D) marginal benefit is zero.
E) marginal benefit equals the marginal cost.

Answer: E
21) Marginal analysis involves undertaking an activity
A) until its marginal costs start declining.
B) until its marginal cost is zero.
C) until its marginal benefits equal marginal costs.
D) only if its marginal costs are greater than its marginal benefits.
E) only when its marginal benefits are positive.

Answer: C
22) The revenue received from the sale of $\qquad$ of a product is a marginal benefit to the firm.
A) the total number of units
B) all the units
C) an additional unit
D) only profitable units
E) no units

Answer: C
23) Making optimal decisions "at the margin" requires
A) advanced knowledge of economics.
B) weighing the costs and benefits of a decision.
C) making borderline decisions.
D) making decisions according to one's whims and fancies.
E) making consistently irrational decisions.

Answer: B
24) Making "how much" decisions involves
A) calculating the total benefits of the activity and determining if you are satisfied with that amount.
B) determining the additional benefits and the additional costs of that activity.
C) calculating the total costs of the activity and determining if you can afford to incur that expenditure.
D) advanced knowledge of economics and product markets.
E) calculating the average benefit and the average cost of an activity to determine if it is worthwhile undertaking that activity.

Answer: B
25) The extra cost associated with undertaking an activity is called
A) foregone cost.
B) marginal cost.
C) opportunity cost.
D) net loss.
E) activity cost.

Answer: B
26) DeShawn's Detailing is a service that details cars at the customers' homes or places of work. DeShawn's cost for a basic detailing package is $\$ 40$, and he charges $\$ 75$ for this service. For a total price of $\$ 90$, DeShawn will also detail the car's engine, a service that adds an additional $\$ 20$ to the total cost of the package. What is DeShawn's marginal benefit if he sells a basic detailing package?
A) $\$ 35$
B) $\$ 75$
C) zero dollars
D) He makes a marginal loss of $\$ 15$.
E) The marginal benefit cannot be determined.

Answer: B
27) DeShawn's Detailing is a service that details cars at the customers' homes or places of work. DeShawn's cost for a basic detailing package is $\$ 40$, and he charges $\$ 75$ for this service. For a total price of $\$ 90$, DeShawn will also detail the car's engine, a service that adds an additional $\$ 20$ to the total cost of the package. What is the marginal cost of adding the engine detailing to the basic detailing package?
A) $\$ 20$
B) $\$ 30$
C) $\$ 60$
D) $\$ 60$ plus the value of his time
E) $\$ 0$

Answer: A
28) DeShawn's Detailing is a service that details cars at the customers' homes or places of work. DeShawn's cost for a basic detailing package is $\$ 40$, and he charges $\$ 75$ for this service. For a total price of $\$ 90$, DeShawn will also detail the car's engine, a service that adds an additional \$20 to the total cost of the package. Should DeShawn continue to offer the engine detailing service?
A) Yes, but only if he raises the price of the basic detailing package.
B) No, his marginal benefit is less than his marginal cost.
C) Yes, he still makes a profit by selling the engine detailing service with the basic detailing package.
D) Yes, because he will increase sales of the basic detailing package.
E) More information is needed for DeShawn to make this decision.

Answer: B

## Scenario 1.1

Suppose a cell phone manufacturer currently sells 20,000 cell phones per week and makes a profit of $\$ 5,000$ per week. A manager at the plant observes, "Although the last 3,000 cell phones we produced and sold increased our revenue by $\$ 6,000$ and our costs by $\$ 6,700$, we are still making an overall profit of $\$ 5,000$ per week so I think we're on the right track. We are producing the optimal number of cell phones."
29) Refer to Scenario 1.1. Using marginal analysis terminology, what is another economic term for the incremental revenue received from the sale of the last 3,000 cell phones?
A) gross earnings
B) net benefit
C) marginal revenue
D) explicit revenue
E) sales revenue

Answer: C
30) Refer to Scenario 1.1. Using marginal analysis terminology, what is another economic term for the incremental cost of producing the last 3,000 cell phones?
A) a foregone cost
B) a loss
C) a marginal cost.
D) an explicit cost
E) an opportunity cost

Answer: C
31) Refer to Scenario 1.1. Had the firm not produced and sold the last 3,000 cell phones, would its profit be higher or lower, and if so by how much?
A) Its profit will be $\$ 6,000$ lower.
B) Its profit will be unchanged.
C) Its profit will be $\$ 6,700$ higher.
D) Its profit will be $\$ 700$ higher.
E) Its profit will be $\$ 700$ lower.

Answer: D

Table 1.1

| Hours <br> Open | Total Revenue <br> (dollars) |
| :---: | :---: |
| 1 | $\$ 50$ |
| 2 | 75 |
| 3 | 95 |
| 4 | 110 |
| 5 | 120 |
| 6 | 125 |

Lydia runs a small nail salon in the town of New Hope. She is debating whether she should extend her hours of operation. Lys figures that her sales revenue will depend on the number of hours the nail salon is open as shown in the table above. She wou to hire a worker for those hours at a wage rate of $\$ 10$ per hour.
32) Refer to Table 1.1. Using marginal analysis, determine how many hours should Lydia extend her nail salon's hours of operations?
A) 2 hours
B) 3 hours
C) 4 hours
D) 5 hours
E) 6 hours

Answer: D
33) Refer to Table 1.1. What is Lydia's marginal benefit if she decides to stay open for two hours instead of one hour?
A) $\$ 25$
B) $\$ 50$
C) $\$ 75$
D) $\$ 125$
E) $\$ 150$

Answer: A
34) Refer to Table 1.1. What is Lydia's marginal cost if she decides to stay open for two hours instead of one hour?
A) $\$ 10$
B) $\$ 20$
C) $\$ 25$
D) $\$ 40$
E) $\$ 50$

Answer: A
35) Soo Jin shares a one- bedroom apartment with her classmate. Her share of the rent is $\$ 700$ per month. She is considering moving to a studio apartment which she will not have to share with anyone. The studio apartment rents for $\$ 950$ per month. Recently, you ran into Soo Jin on campus and she tells you that she has moved into the studio apartment. Soo Jin is as rational as any other person. As an economics major, you rightly conclude that
A) Soo Jin did not have a choice; her roommate was a slob.
B) the cost of having one's own space outweighs the benefits.
C) you made an error in assuming that Soo Jin is rational.
D) Soo Jin figures that the benefit of having her own place (as opposed to sharing) is at least $\$ 950$.
E) Soo Jin figures that the additional benefit of having her own place (as opposed to sharing) is at least $\$ 250$.

Answer: E
36) McCain Foods Ltd. is one of the largest producer s of frozen french fries in the world. If the marginal cost of producing an extra million kilograms of french fries is $\$ 1$ million, then McCain Foods Ltd. should produce the extra french fries
A) as long as the marginal benefit the firm receives is just equal to or greater than $\$ 1$ million.
B) only if the marginal benefit is greater than $\$ 1$ million plus an acceptable profit margin.
C) until the marginal benefit the firm receives reaches zero.
D) as long as the marginal cost does not rise.
E) More information is needed for McCain Foods to make this decision.

Answer: A
37) The approximately 12 seconds between episodes on Netflix means that binge watching is
A) something Netflix forces viewers to do.
B) the result of a series of marginal decisions.
C) a rational decision.
D) something every one plans to when they first login to Netflix.
E) an indication of how quickly Netflix users can make decisions.

Answer: B

## TRUE/FALSE. Write ' $T$ ' if the statement is true and ' $F$ ' if the statement is false.

38) Scarcity refers to a situation in which unlimited wants exceed the limited resources available to fulfill those wants.

Answer: © True False
39) Scarcity is a problem that will eventually disappear as technology advances.

Answer: True $\bigcirc$ False
40) An economic model is a simplified version of reality used to analyze real- world economic situations.

Answer: True False
41) The sales revenue a seller receives from the sale of an additional unit of goods is called the marginal benefit.

Answer: © True False
42) Optimal decisions are made at the point where marginal cost equals zero.

Answer: True $\odot$ False
43) If it costs Sinclair $\$ 300$ to produce 3 suede jackets and $\$ 420$ to produce 4 suede jackets, then the difference of $\$ 120$ is the marginal cost of producing the 4th suede jacket.
Answer: © True False
44) Suppose the extra cost of producing an extra million kilograms of french fries is $\$ 1$ million. Then, McCain Foods Ltd. should make the extra french fries if they generate additional revenue of $\$ 1$ million.
Answer: © True False

## ESSAY. Write your answer in the space provided or on a separate sheet of paper.

45) Explain the economic assumption that "people are rational."

Answer: "People are rational" means that economists assume consumers and firms will use all available information as they act to achieve their goals. Rational individuals weigh the benefits and costs of each action, and they choose an action only if the benefits exceed the costs.
46) Explain the economic idea that "people respond to incentives."

Answer: Human beings act from a variety of motives, including religious belief, envy, and compassion. "People respond to incentives" means that people will act if they feel it is in their best economic interest to do so.
47) What is meant by the statement that "optimal decisions are made at the margin"?

Answer: In economics, the word "marginal" means "extra" or "additional." Economists reason that the optimal decision is to continue any activity up to the point where the marginal benefit equals the marginal cost, so optimal decisions are made at the point where the extra benefit received from an activity is equal to the extra cost associated with that activity.
48) Suppose that watching one more episode of your favourite NetFlix show is worth $\$ 200$ to you. Suppose that studying for that same amount of time will boost your mark enough to get you a bursary. What is the smallest size of the bursary that would cause you to study instead of watching another episode (assuming you are rational)?
Answer: The bursary would have to be at least $\$ 200$ for a rational person to choose to study instead of watching the next episode - assuming there are no other benefits to studying.

## MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

49) The three fundamental questions that any economy must address are
A) Who gets jobs; what wages do workers earn; and who owns what property?
B) What will be the prices of goods and services; how will these goods and services be produced; and who will receive them?
C) How much will be saved; what will be produced; and how can these goods and services be fairly distributed?
D) How can the economy's output be equally shared; who are the decision makers; and what is the optimum output?
E) What goods and services to produce; how will these goods and services be produced; and who receives them?

Answer: E
50) The idea that because of scarcity, producing more of one good or service means producing less of another good or service refers to the economic concept of
A) efficiency.
B) consumption.
C) optimization.
D) equity.
E) trade-off.

Answer: E
51) Society faces a trade- off in all of the following situations except
A) when deciding how goods and services will be produced.
B) when some previously unemployed workers find jobs.
C) when making a trade- off because of scarcity.
D) when deciding who will receive the goods and services produced.
E) when deciding what goods and services will be produced.

Answer: B
52) Which of the following statements is true?
A) Every individual, no matter how rich or poor, is faced with making trade- offs.
B) Producing more of one good means more of another good can be produced.
C) Anytime you have to decide which action to take you are experiencing economic equity.
D) Economics is a social science that studies the trade- offs we are forced to make because resources are unlimited.
E) Trade- offs do not apply when the consumers purchase a product for which there is excess supply, such as a stock clearance sale.

Answer: A
53) Which of the following is not an example of an economic trade- off that a firm has to make?
A) whether it is to outsource the production of a good or service
B) whether it should produce more of its product
C) whether it is cheaper to produce with more machines or with more workers
D) whether or not consumers will buy its products
E) whether it should produce less of its product

Answer: D
54) The highest valued alternative that must be given up to engage in an activity is the definition of
A) economic equity.
B) marginal benefit.
C) economic stability.
D) marginal cost.
E) opportunity cost.

Answer: E
55) The Coffee Nook, a small cafe near campus, sells cappuccinos for $\$ 2.50$ and Russian tea cakes for $\$ 1.00$ each. What is the opportunity cost of buying a cappuccino?
A) $\$ 1.00$
B) $21 / 2$ Russian tea cakes
C) $\$ 2.50$
D) $\$ 0.40$
E) $2 / 5$ of a Russian tea cake

Answer: B
56) Arlene quits her $\$ 125,000-\mathrm{a}$ - year job to take care of her ailing parents. What is the opportunity cost of her decision?
A) the value she attributes to the satisfaction she receives from taking care of her parents
B) the total value of all alternatives that must be given up to engage in taking care of her parents
C) It depends on the "going rate" for home- care providers.
D) zero, since she will no longer be earning a salary
E) at least $\$ 125,000$

Answer: E
57) The distribution of income primarily determines which of the fundamental economic questions?
A) How the goods and services are to be produced?
B) What goods and services are to be produced?
C) How to redistribute the goods and services?
D) How to plan the economy?
E) Who will receive the goods and services produced?

Answer: E
58) Automobile manufacturers produce a range of automobiles such as sports utility vehicles, luxury sedans, pickup trucks and compact cars. What fundamental economic question are they addressing by making this range of products?
A) How to produce goods that consumers want?
B) What price to charge for each range of products?
C) Who to produce automobiles for?
D) What to produce?
E) Why produce a variety of automobiles?

Answer: D
59) Consider the following economic agents:
a. the government
b. consumers
c. producers

Who, in a centrally planned economy, decides what goods and services will be produced with the scarce resourc available in that economy?
A) producers
B) the government
C) consumers
D) consumers and producers
E) the government, consumers and producers

Answer: B
60) The decision about what goods and services will be produced made in a market economy is made by
A) consumers dictating to firms what they need most.
B) lawmakers in the government voting on what will be produced.
C) consumers and firms choosing which goods and services to buy or produce.
D) producers deciding what society wants most.
E) workers deciding to produce only what the boss says must be produced.

## Answer: C

61) Central planning relies on $\qquad$ to determine what types of products to make
A) government employees
B) consumers' choices
C) collective decisions
D) individual businesses
E) consumers' wants

## Answer: A

62) Which of the following statements about the economic decisions consumers, firms, and the government have to make is false?
A) Only individuals face scarcity; firms and the government do not.
B) Each faces the problem of scarcity which necessitates trade- offs in making economic decisions.
C) Governments face the problem of scarcity in making economic decisions.
D) Both firms and individuals face scarcity.
E) Both firms and individuals have to make choices.

Answer: A
63) Why is it necessary for all economic systems to not only provide people with goods and services, but also restrict them from getting as much of these goods and services as they wish?
A) Failure to do this could reduce efficiency and lead to an inequitable allocation of output.
B) Failure to do this could lead to drastic shortages of good and services.
C) Failure to do this could lead to an equal allocation of goods and services produced.
D) Failure to do this could reduce the efficiency of the system by producing some goods and services that are not as highly valued as others.
E) Failure to do this could lead to an inequitable allocation of goods and services produced.

Answer: D
64) Who receives the most of what is produced in a market economy?
A) everyone receives an equal amount
B) those who are willing and able to buy them
C) those who need them the most
D) lawmakers and other politically favoured groups
E) people who earn the highest incomes

Answer: B
65) How are the fundamental economic decisions determined in North Korea?
A) The government decides because North Korea is a centrally planned economy.
B) North Korean firms decide as they determine production.
C) These decisions are made by the country's elders who have had much experience in answering these questions.
D) Individuals, firms, and the government interact in a market to make these economic decisions.
E) The United Nations decides because North Korea is a developing economy.

Answer: A
66) How are the fundamental economic questions answered in a market economy?
A) Wealthy individuals alone decide the answers.
B) The government alone decides the answers.
C) Individuals, firms, and the government interact in markets to decide the answers to these questions.
D) Households and firms interact in markets to decide the answers to these questions.
E) Large corporations alone decide the answers.

Answer: D
67) Which of the following is a problem inherent in centrally planned economies?
A) Exports tend to exceed imports.
B) Those who are willing and able to buy what is produced determine what is produced.
C) Households and firms make poor decisions in choosing how resources are allocated.
D) Production managers are more concerned with satisfying consumer wants than with satisfying government's orders.
E) There is too little production of low- cost, high- quality goods and services.

Answer: E
68) All of the following contributed to the downfall of the Soviet Union in 1991 except
A) lack of a strong dictator who can coordinate economic activities.
B) an inability to produce low- cost consumer goods that households wanted.
C) lack of high- quality goods and services.
D) public dissatisfaction with low living standards and political repression.
E) an overabundance of high- quality goods and services.

Answer: A
69) $\qquad$ is a situation in which a good or service is produced at the lowest possible cost.
A) Equality
B) Allocative efficiency
C) Productive efficiency
D) Optimal marginalism
E) Equity

Answer: C
70) Productive efficiency is achieved when
A) firms produce goods and services at the lowest cost.
B) firms add a low profit margin to the goods and services they produce.
C) there are no shortages in the market.
D) there are no surpluses in the market.
E) firms produce the goods and services that consumers value most.

Answer: A
71) When production reflects consumer preferences, $\qquad$ occurs.
A) allocative efficiency
B) productive efficiency
C) efficient central planning
D) scarcity
E) equity

Answer: A
72) Allocative efficiency is achieved when firms produce goods and services
A) at the lowest possible cost.
B) that consumers value most.
C) at a marginal cost of zero.
D) at the highest possible price.
E) at the lowest opportunity cost.

Answer: B
73) Markets promote
A) equity and equality.
B) competition and equality.
C) voluntary exchange and equality.
D) competition and voluntary exchange.
E) equity and competition.

Answer: D
74) Which of the following statements is true about competition in a market?
A) Competition forces firms to add only low profit margins to their costs of production.
B) Competition forces firms to add only high profit margins to their costs of production.
C) Competition forces firms to undercut their selling price, thus benefiting consumers who will be able to purchase products at the lowest price possible.
D) Competition forces firms to produce and sell products as long as the marginal benefit to consumers exceeds the marginal cost of production.
E) Competition forces firms to outsource the production of their labour- intensive products.

Answer: D
75) $\qquad$ increases economic efficiency because it forces firms to produce and sell goods and services as long as the additional benefit to consumers is greater than the additional cost of production.
A) Equality
B) Equity
C) Competition
D) A centrally planned economy
E) Voluntary exchange

Answer: C
76) Which of the following generates productive efficiency?
A) government regulations
B) government inspectors
C) government production rules
D) competition among sellers
E) competition among buyers

Answer: D
77) Voluntary exchange between buyers and sellers generates $\qquad$ in a market economy.
A) allocative efficiency
B) scarcity
C) equality
D) productive efficiency
E) equity

Answer: A
78) Which of the following is a result of a market economy?
A) an equal income distribution
B) environmental protection
C) agreement on equity
D) voluntary exchange
E) scarcity

Answer: D
79) Political candidates often hold fund raisers by charging "per plate" for dinner. Wendy purchased four tickets to a $\$ 1,000$ per plate dinner for a local city council candidate. Is this transaction economically efficient?
A) No, political candidates should never be allowed to overcharge for a fund raising dinner.
B) Yes, it is efficient only from the perspective of the candidate but not from the perspective of Wendy.
C) No, Wendy paid too much for four dinners.
D) Yes, it was a voluntary exchange that benefited both parties.
E) Yes, it is efficient only from the perspective of Wendy but not from the perspective of the candidate.

Answer: D
80) In economics, the term "equity" means
A) economic benefits are distributed fairly.
B) the hardest working individuals consume all they want.
C) only elected officials have high standards of living.
D) everyone has an equal standard of living.
E) economic benefits are distributed freely.

Answer: A
81) Which of the following is motivated by an equity concern?
A) Some provinces and municipalities have transferred funds to food bank programs in order to increase benefits to lower-income families.
B) Following the implementation of subsidies for energy conservation, household demand for rooftop solar panels increased quite significantly in BC.
C) Canada offers patent protection to pharmaceutical manufacturers to prevent others from duplicating their products.
D) Some provinces allow automotive insurance companies to charge men and women different rates for insurance.
E) Following the removal of subsidies in urban water use, household demand for water decreased quite significantly in Bogor, Indonesia.
Answer: A
82) Which of the following is motivated by an efficiency concern?
A) The right to purchase tickets to the Grey Cup is decided by a lottery.
B) Some university scholarships have been cut back since these programs siphon money from need- based programs, thus harming lower- income students with greater financial need.
C) In 2013 the Alberta government handed out pre- paid credit and debit cards to flood victims.
D) Organ transplant waiting lists rationing scarce kidneys that would favour young patients over old in an effort to wring more life out of donated organs.
E) The federal government Equalization program which makes larger transfers to poor provinces than to wealthy ones.
Answer: D
83) Which of the following is an example of an efficiency- equity trade- off faced by economic agents?
A) Some Canadian universities are actively recruiting foreign students for their technology-based programs.
B) The growing demand for corn by ethanol producers has led to a surge in the price of tortillas, a staple in the Mexican diet. To quell public outcry over rising tortilla prices, the Mexican government released government corn stocks at prices well below the market, and pressured states to impose price ceilings on tortillas.
C) Provincial health programs are not cost effective. Instead of focusing on universal access to the health care system, money should be spent on programs that prevent disease first and treating disease second.
D) Concerned about the falling birth rate, the French government has pledged more money for families with three children, in an effort to encourage working women to have more babies.
E) Municipal sports programs must charge all participants the same price, even when participants don't live in the municipality.
Answer: C
84) Which of the following correctly describes the relationship between economic efficiency and economic equity?
A) There is no trade- off between the two.
B) They are both automatically achieved in a free market economy.
C) There is often a trade- off between the two.
D) They always call for opposite outcomes.
E) There is no conflict between the two goals.

## Answer: C

85) Allocative efficiency best explains $\qquad$ , and productive efficiency best explains $\qquad$ -
A) when something will be produced; why something will be produced
B) what will be produced; how something will be produced
C) what will be produced; when something will be produced
D) why something will be produced; what will be produced
E) how something will be produced; when something will be produced

## Answer: B

86) Assume an economics instructor want to promote equity in their classroom. To do this, announce that all students will receive a final grade equal to the class average. Based on the equity-efficiency tradeoff, what is a likely outcome?
A) Most students will spend their time on other courses, resulting in little learning and a low class average.
B) Students will put extra effort into this economics course solely to help other students do well.
C) Freed from competition, students will fully apply themselves to an economics course causing the class average to rise.
D) Students will demand the same grade allocation in all their other courses.
E) Student behaviour will not change, but everyone in the class will have the same mark.

Answer: A
TRUE/FALSE. Write ' $T$ ' if the statement is true and ' $F$ ' if the statement is false.
87) The government makes all economic decisions in a mixed economy.

Answer: True False
88) When voluntary exchange takes place, both parties gain from the exchange.

$$
\text { Answer: © True } \quad \text { False }
$$

89) A university must decide if it wants to offer more Internet- based classes. This decision involves answering the economic question of "what to produce."
Answer: © True False
90) One desirable outcome of a market economy is that it leads to a more equitable distribution of income.

Answer: True $\odot$ False

ESSAY. Write your answer in the space provided or on a separate sheet of paper.
91) What is equity, and how does it differ from efficiency?

Answer: Equity refers to the fair distribution of economic benefits. In economics, efficiency refers to least cost production (productive efficiency) and producing according to human preferences (allocative efficiency).
92) What is opportunity cost?

Answer: Opportunity cost refers to the highest-valued alternative that must be given up to engage in an activity. For example, the opportunity cost of taking this economics class is what you are giving up to take the class, which may be taking another class such as accounting or psychology, working extra hours at your job, or extra sleep (whichever is your highest- valued alternative).
93) Define productive efficiency. Does productive efficiency imply allocative efficiency? Explain.

Answer: Productive efficiency is an efficiency criterion that describes a situation in which goods and services are produced at the lowest possible cost. It does not imply allocative efficiency which is a criterion associated with producing goods and services that consumers value most. For example, a manufacturer may be able to produce typewriters at the lowest possible cost of say, $\$ 200$, but this does not necessarily mean that consumers are willing to pay $\$ 200$ for a typewriter.
94) What is a centrally planned economy?

Answer: A centrally planned economy is an economy in which the government decides how economic resources will be allocated.

## MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

95) Economic models do all of the following except
A) make economic ideas explicit and concrete for use by decision makers.
B) portray reality in all its minute details.
C) simplify some aspect of economic life.
D) answer economic questions.
E) simplify versions of reality.

Answer: B
96) All of the following are part of an economic model except
A) theory.
B) data.
C) opinions.
D) assumptions.
E) hypotheses.

Answer: C
97) Which of the following statements about positive economic analysis is false?
A) Positive analysis uses an economic model to estimate the costs and benefits of different course of actions.
B) Unlike normative economic analysis, positive economic analysis can be tested.
C) Positive analysis is concerned with what is and can potentially be disproven.
D) There is much more disagreement among economists over normative economic analysis than over positive economic analysis.
E) There is much more disagreement among economists over positive economic analysis than over normative economic analysis.
Answer: E
98) Which of the following is a positive economic statement?
A) The government should restructure the health care system.
B) The government should close income tax loopholes.
C) If the price of iPhones falls, a larger quantity of iPhones will be purchased.
D) The standard of living in Canada should be higher.
E) The Ontario government should not have bailed out Canadian auto manufacturers.

Answer: C
99) Which of the following is a positive economic statement?
A) Foreign workers should not be allowed to work for lower wages than the citizens of a country.
B) The government should mandate electric automobiles.
C) People should not buy imported fruits and vegetables.
D) Scarcity necessitates that people make trade- offs.
E) People should not buy SUVs.

## Answer: D

100) Which of the following is a normative economic statement?
A) Pharmaceutical manufacturers should not be allowed to patent their products so prescription drugs would be more affordable.
B) Toronto is considering increasing funds for light- rail development to promote the use of public transportation.
C) Rising global demand for coal has led to increases in the price of coal.
D) The minimum wage law causes unemployment.
E) With rising mortgage rates and rising unemployment rates, the number of unsold homes has increased.

## Answer: A

101) Which of the following is a normative economic statement?
A) When the price of gasoline rises, the quantity of gasoline purchased falls.
B) The current high price of gasoline is the result of strong worldwide demand.
C) When the price of gasoline falls, oil companies cut production.
D) The price of gasoline is too high.
E) When the price of gasoline rises, transportation costs rise.

Answer: D
102) Which of the following questions or statements regarding minimum wage is normative?
A) People working in the retail sector deserve higher pay.
B) Higher minimum wages will cause firms to employ fewer people.
C) The minimum wage law causes unemployment.
D) How do changes in minimum wages affect the employment opportunities of teens?
E) Wages play a role in causing someone to apply for a job.

Answer: A
103) The economic analysis of minimum wage involves both normative and positive analysis. Consider the following consequences of a minimum wage:
a. The minimum wage law causes unemployment.
b. A minimum wage law benefits some groups and hurts others.
c. In some cities such as San Francisco and New York, minimum wage laws are necessary for low- skilled worl stay in the city.
d. The gains to winners of a minimum wage law should be valued more highly than the losses to losers becaus latter primarily comprises businesses.

Which of the consequences above are positive statements and which are normative statements?
A) $a, b$, and c are positive statements and d is a normative statement.
B) $a$ and $b$ are positive statements, $c$ and $d$ are normative statement.
C) Only a is a positive statement, b, c and d are normative statements.
D) a and c are positive statements, b and d are normative statements.
E) a and d are positive statements, b and c are normative statements.

Answer: B

## TRUE/FALSE. Write ' $T$ ' if the statement is true and ' $F$ ' if the statement is false.

104) "An increase in the price of gasoline will increase the demand for hybrid vehicles." This statement is an example of a positive economic statement.
Answer: © True False
105) "The distribution of income should be left to the market" is an example of a positive economic statement.

Answer: True $\odot$ False
106) Positive analysis is concerned with "what ought to be," while normative analysis is concerned with "what is."

Answer: True © False

## ESSAY. Write your answer in the space provided or on a separate sheet of paper.

107) What is the difference between positive economic analysis and normative economic analysis? Give one example each of a positive and normative economic issue or question or statement.
Answer: Positive economic analysis is concerned with what is. Positive economic analysis reaches conclusions based on verifiable statements. Normative economic analysis, on the other hand, is concerned with what ought to be. Normative analysis reaches conclusions based on opinions. (Students will give many different examples.)
108) Explain why economics is considered a social science.

Answer: Economics is a social science because it studies the actions of individuals. As a social science, economics considers human behaviour, particularly decision- making behaviour, in every context.

## MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

109) Which of the following is a microeconomics question?
A) What determines the average price level and inflation?
B) What factors determine the price of carrots?
C) What will the level of economic growth be in the entire economy?
D) How much will be saved and how much will be produced in the entire economy?
E) Why do economies experience periods of recession?

Answer: B
110) Microeconomics is the study of
A) what determines the unemployment rate.
B) topics such as inflation and economic growth.
C) the global economy.
D) how households and firms make choices.
E) the economy as a whole.

Answer: D
111) Which of the following is a macroeconomics question?
A) What determines the wage of auto workers?
B) What factors determine the price of iPhones?
C) What determines the inflation rate?
D) How is the production quantity of digital cameras determined?
E) What determines the size of the film industry in Canada?

Answer: C
112) Macroeconomics is the study of
A) how firms make choices.
B) how households make choices.
C) how households and firms make choices.
D) the economy as a whole.
E) the impact of government interventions on market outcomes.

Answer: D

## TRUE/FALSE. Write ' $T$ ' if the statement is true and ' $F$ ' if the statement is false.

113) Examining the conditions that could lead to a recession in an economy is an example of macroeconomics topic.

Answer: True False
114) The decisions Apple makes in determining production levels for its iPhone is an example of a microeconomics topic.
Answer: True False

## ESSAY. Write your answer in the space provided or on a separate sheet of paper.

115) Which of the following are primarily macroeconomic topics and which are primarily microeconomic topics?
a. gasoline prices
b. unemployment
c. inflation
d. health care costs
e. air pollution
f. economic growth

Answer: b, c, and f are primarily macroeconomic topics.
$\mathrm{a}, \mathrm{d}$, and e are primarily microeconomic topics.

## MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

116) Which of the following statements is true about profit?
A) A firm's revenue will increase as its costs increase.
B) Profit is calculated by multiplying price and quantity sold.
C) Profit refers to the revenue received from the sale of a quantity of goods.
D) The terms "accounting profit" and "economic profit" can be used interchangeably.
E) Profit is the difference between revenue and cost.

Answer: E
117) In economics, the accumulated skills and training that workers have is known as
A) entrepreneurship.
B) human capital.
C) natural resources.
D) innovation.
E) physical capital.

Answer: B
118) Which of the following is an example of an activity undertaken by an entrepreneur?
A) designing your landscaping for your new home
B) running for Prime Minister of Canada
C) holding a position as the president of a small university
D) starting your own pet sitting business
E) choosing the color scheme for your renovated kitchen

Answer: D
119) The machines workers have to work with are considered
A) physical capital.
B) entrepreneurship.
C) natural resources.
D) human capital.
E) financial capital.

Answer: A
120) Technology is defined as
A) new innovations and creations.
B) the process of developing and revising models.
C) the processes used to produce goods and services.
D) the machines that workers have to work with.
E) the process of recycling products.

Answer: C
121) Which of the following statements about economic resources is true?
A) Economic resources are also called factors of production.
B) Economic resources are used only by businesses.
C) Economic resources include financial capital and money.
D) All economic resources are man-made.
E) All economic resources are found in nature.

Answer: A
122) As the minimum wage rises.
A) more coffee will be exported from Canada.
B) there will be a surplus of coffee.
C) the price of takeout coffee will fall.
D) the price of takeout coffee will rise.
E) there will be a shortage of coffee.

Answer: D
123) If climate change continues to reduce the amount of green coffee available to roasters,
A) more people will want to drink coffee than before.
B) the price of take out coffee will rise.
C) demand for green coffee will increase.
D) people working in coffee shops will receive higher wages.
E) more entrepreneurs will enter the roasting business.

Answer: B

## TRUE/FALSE. Write ' $T$ ' if the statement is true and ' $F$ ' if the statement is false.

124) In the market for factors of production, firms earn income by selling goods and services to households.

Answer: True $\odot$ False
125) One example of human capital is the amount of skills that you have.

Answer: © True False

## ESSAY. Write your answer in the space provided or on a separate sheet of paper.

126) List the five main factors of production.

Answer: The five main factors of production are labour, capital, human capital, natural resources, and entrepreneurial ability.
127) What is the difference between an invention and an innovation?

Answer: An invention is the development of a new good or a new process for making a good. An innovation is the practical application of an invention. Innovation could also refer to any significant improvement in a good or in the means of producing a good.
128) Explain the difference between a firm's revenue and its profit.

Answer: A firm's revenue is the total amount received for selling a good or service. It is calculated by multiplying the price per unit by the number of units sold. A firm's profit is the difference between its revenue and its costs.
129) What are some of the reasons given for the the increase in coffee prices?

Answer: The reasons include bad weather in Colombia, wages, and the actions of individual firms.

## MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

130) If a graph has a line that shows the amount of outsourcing in the last ten years, it is known as
A) a demand curve for outsourcing.
B) a pie chart.
C) a flow chart.
D) a time- series graph.
E) a supply curve of outsourcing.

Answer: D
131) $\qquad$ have a horizontal and a vertical axis and are used in economics to illustrate relationships between two economic variables.
A) Bar graphs
B) Pie charts
C) Two- dimensional graphs
D) Flow charts
E) One- dimensional graphs

Answer: C
132) If a straight line passes through the point $x=14$ and $y=3$ and also through the point $x=4$ and $y=10$, the slope of this line is
A) negative 11 divided by 6 .
B) 6 divided by 11 .
C) seven tenths.
D) one and seven tenths
E) negative seven tenths.

Answer: E
133) On a two- dimensional graph, $\qquad$ allows for the effects of additional variables.
A) moving along a curve
B) eliminating colour
C) shifting curves
D) eliminating a curve
E) adding an additional curve

Answer: C
134) Which of the following statements is false?
A) A direct relationship has a positive slope value.
B) A straight line has a slope of zero.
C) An inverse relationship has a negative slope value.
D) Few economic relationships are actually linear.
E) A curved line has slope values that change at every point.

Answer: B
135) The relationship between consumer spending and disposable personal income is
A) reverse causality.
B) an inverse relationship.
C) independent.
D) a negative relationship.
E) a direct relationship.

Answer: E
136) Suppose when the price of laptops fall, university students buy more laptops. This implies that
A) there is a one- to- one relationship between laptop prices and quantities purchased by college students.
B) there is a positive relationship between laptop prices and quantities purchased by college students.
C) there is a negative relationship between laptop prices and quantities purchased by college students.
D) there is no relationship between laptop prices and quantities purchased by college students.
E) there is a direct relationship between laptop prices and quantities purchased by college students.

Answer: C
137) If the price of milk was $\$ 2.50$ a litre and it is now $\$ 3.25$ a litre, what is the percentage change in price?
A) 13 percent
B) 30 percent
C) 75 percent
D) 77 percent
E) 130 percent

Answer: B
138) In 2019, Hooverville consumed 205,000 tonnes of sugar. In 2020, sugar consumption rose to 245,000 tonnes. Calculate the percentage change in sugar consumption.
A) $8.37 \%$
B) $11.95 \%$
C) $19.51 \%$
D) $26.33 \%$
E) $53 \%$

Answer: C
139) At a recent faculty meeting, Lorraine Waverly, president of Skywalker College, announced that enrollment is up by 12 percent over the previous semester. If enrollment the previous semester was 3,250 students, what is the student enrollment this semester?
A) 390
B) 2,860
C) 3,640
D) 4,030
E) 3,238

Answer: C

Figure 1.1

## Sales of Alcoholic Beverages


140) Refer to Figure 1-1. Using the information in the figure above, calculate the percentage change in revenue from alcoholic beverage sales between 2013 and 2015.
A) $23.8 \%$
B) $30 \%$
C) $40 \%$
D) $42.9 \%$
E) $73.3 \%$

Answer: A
141) Refer to Figure 1.1. Using the information in the figure above, calculate the percentage change in sales of alcoholic beverages between 2013 and 2015.
A) $23.1 \%$
B) $23.8 \%$
C) $30 \%$
D) $40 \%$
E) $42.9 \%$

Answer: E

Figure 1.2

142) Refer to Figure 1.2. Calculate the area of the triangle $A$.
A) $\$ 1.3$ million
B) $\$ 2.6$ million
C) $\$ 3.4$ million
Answer: B

Figure 1.3

143) Refer to Figure 1.3. Calculate the area of the trapezoid $X$.
A) $\$ 270$
B) $\$ 720$
C) $\$ 810$
D) $\$ 2,520$
E) $\$ 2,500$

Answer: C

## Figure 1.4


144) Refer to Figure 1-4. Which of the following statements is false?
A) The slope of the tangent at $E$ is positive.
B) The slope of the tangent at $E$ is positive and the slope of the tangent at $F$ is negative.
C) The slope of the tangent at $E$ and the slope of the tangent at $F$ are equal.
D) Neither the slope of the tangent at $E$ nor the slope of the tangent at $F$ are equal to zero.
E) The slope of the tangent at $F$ is negative.

Answer: C
145) What is the "omitted variable" problem in determining cause and effect?
A) It is a problem that arises when an insignificant economic variable that should have been omitted is included in an economic experiment leading to false conclusions about cause and effect.
B) It is a problem that arises when an economic variable that affects other variables is purposely omitted from an analysis and its omission leads to correct conclusions about cause and effect.
C) It is a problem that arises when a significant variable is not given enough weight in an economic experiment leading to skewed conclusions about cause and effect.
D) It is a problem that arises when an economic variable that affects other variables is omitted from an analysis and its omission leads to false conclusions about cause and effect.
E) It is a problem that arises when an insignificant variable is given too much weight in an economic analysis leading to skewed conclusions about cause and effect.
Answer: D
146) $\qquad$ is a problem that occurs when one concludes that a change in variable $X$ caused a change in variable $Y$ when in actual fact, it is a change in variable $Y$ that caused a change in variable $X$.
A) Nonlinear slope
B) Tangent line
C) The omitted variable
D) Reverse causality
E) The positive- to- negative relationship

Answer: D
147) The prevalence of Alzheimer's dementia is very high among residents living in nursing homes. A student concludes that it is likely that living in nursing home causes Alzheimer's dementia. What is the flaw in the student's reasoning?
A) The student is drawing a false conclusion; he is confusing cause and effect.
B) The student is using an inadequate sample size.
C) The student is drawing a false conclusion by making the mistake of omitting the age of the residents.
D) The student is drawing a false conclusion by making the mistake of omitting the gender of the residents.
E) The student has failed to take into account other causes of Alzheimer's disease.

Answer: A
148) You explain to your roommate Surya, who makes beaded headbands, about an economic theory which asserts that consumers will purchase more of a product at lower prices than they will at higher prices. She contends that the theory is incorrect because over the past two years she has lowered the price of her headbands and yet has seen a decrease in sales. How would you respond to Surya?
A) Surya is making the mistake of assuming that correlation implies causation.
B) I will explain to her that there are some omitted variables that have contributed to a decrease in her sales such as changes in income.
C) Surya is right; she has evidence to back her claim. The theory must be erroneous.
D) Surya is making the mistake of assuming that causation implies correlation.
E) I will explain to her that she is making the error of reverse causality: it is the decrease in demand that has caused her to lower her prices.

## Answer: B

## ESSAY. Write your answer in the space provided or on a separate sheet of paper.

Table 1.2

| Year | DVD Recorders <br> (millions) |
| :---: | :---: |
| 2007 | 12.5 |
| 2008 | 14.0 |
| 2009 | 17.2 |
| 2010 | 20.0 |
| 2011 | 21.7 |

149) Refer to Table 1.2. The table above shows the sales of DVD recorders in North America. Present the information using a bar graph.
Answer:

