New Zealand Schools' Economics Competition

Instructions:

You have fifty (50) minutes to answer all fifty (50) questions. No additional time is allowed.

One (1) mark will be awarded for each correct response.

Unanswered or wrongly answered questions score zero (0) marks.

There is no penalty for getting questions wrong.

1.

Georgie gave up a tutoring job paying $80 to go to movie with her friend Mehar. The movie ticket costs $20. Suppose coming out of the movie, Georgie says that the "movie was absolutely worth it" in terms of the foregone opportunity cost. This implies that the imputed value of the happiness that Georgie received from watching the movie must be _____.

(A) At least $80.

(B) At least $20.

(C) At least $60.

(D) At least $100.

2.

In a market characterized by a downward sloping demand curve and upward sloping supply curve, any tax imposed on the sellers in the first place will be passed on, at least in part, to the buyers. Which of the following statements is CORRECT?

(A) Holding the slope of the supply curve constant, buyers will pay a larger share of the tax if the demand curve is relatively inelastic, implying that the demand curve is relatively steep.

(B) Holding the slope of the supply curve constant, buyers will pay a larger share of the tax if the demand curve is relatively elastic, implying that the demand curve is relatively steep.

(C) Holding the slope of the supply curve constant, buyers will pay a larger share of the tax if the demand curve is relatively elastic, implying that the demand curve is relatively flat.

(D) Holding the slope of the supply curve constant, buyers will pay a smaller share of the tax if the demand curve is relatively inelastic, implying that the demand curve is relatively flat.

3.

Suppose Georgie has $1000 and is considering three options. (i) Buy a new iPhone for $1000; (ii) put the money into an interest-bearing bank account earning 5%; (iii) lend the money to Arya who promises to pay Georgie $1100 ($1000 plus $100 in interest) after one year. Suppose Georgie decides to buy the iPhone. What is her opportunity cost?

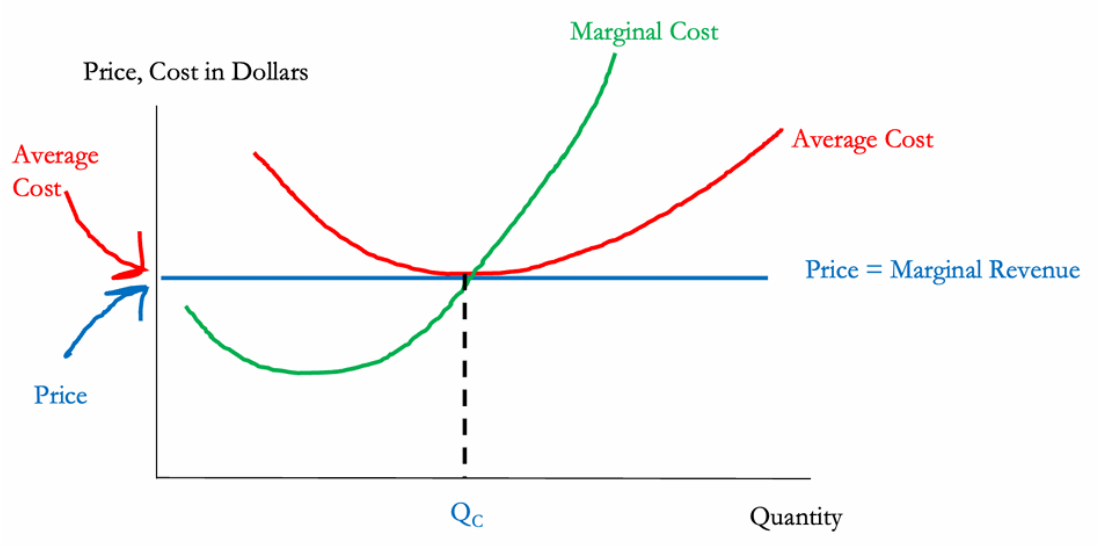
(A) The opportunity cost is $100 of interest that Arya would have paid in interest.

(B) The opportunity cost is $50; the money Georgie would have earned by putting the money in a bank account.

(C) We cannot calculate an opportunity cost since it can be done only when there are two alternatives, not more than two.

(D) The opportunity cost is $150; the interest Arya would have paid plus the interest earned by putting the money into a bank account.

4.



Consider the attached diagram. Which of the following statements is CORRECT?

(A) The diagram shows the short-run equilibrium for a firm in a monopolistically competitive market where the firm is earning positive economic profit.

(B) The diagram shows the long-run equilibrium for a firm in a perfectly competitive market where the firm is earning zero economic profit.

(C) The diagram shows the long-run equilibrium for a firm in a perfectly competitive market where the firm is earning positive economic profit.

(D) The diagram shows the long-run equilibrium for a firm in a monopolistically competitive market where the firm is earning zero economic profit.

5.

Suppose in the market for a particular good, starting from an initial equilibrium, there is a simultaneous decrease in supply and an increase in demand. What can you conclude about the price and quantity at the new equilibrium?

(A) Price is higher but the effect on quantity is ambiguous.

(B) Price is lower but the effect on quantity is ambiguous.

(C) Quantity is higher but the effect on price is ambiguous.

(D) Quantity is lower but the effect on price is ambiguous.

6.

An increase in the price of good A leads to a decrease in demand for good B. This will cause a _____ the demand curve for a good B because A and B are _____?

(A) Rightward shift in; complements.

(B) Leftward shift in; complements.

(C) Rightward shift in; substitutes.

(D) Movement along; substitutes.

7.

Suppose that university fees are higher this year than last year but more students are enrolled at university this year than last year. Based on this information, we can best conclude that:

(A) Despite the increase in price, quantity demanded has increased due to an increase in demand and a rightward shift in the demand curve.

(B) The law of demand has been invalidated in this instance since quantity demanded is higher when price is higher.

(C) Despite the increase in price, quantity demanded has increased due to an increase in supply and a rightward shift in the supply curve.

(D) The demand curve for a university education is positively sloped so that when price rises so does quantity demanded.

8.

Consider a market with an upward sloping supply curve. The government imposes a tax on the sellers in the first instance. Which of the following statements is CORRECT?

(A) The sellers will be able to pass on the entire tax to the buyers as long as the demand curve in this market is downward sloping.

(B) The sellers will not be able to pass on any part of the tax to the buyers as long as the demand curve in this market is vertical.

(C) The sellers will be able to pass on the entire tax to the buyers as long as the demand curve in this market is vertical.

(D) The sellers will not be able to pass on any part of the tax to the buyers as long as the demand curve in this market is vertical.

9.

John, Paul, George and Ringo are all fans of the novels of Lee Child. They are all eagerly awaiting the release of his new novel. John is willing to pay $35 to read the novel, Paul is willing to pay $30, George $28 and Ringo $25. When the novel is released, the publisher decides to price it at $24.99 and everyone gets to buy it at that price. How much consumer surplus does George get if he buys the novel for $24.99?

(A) $5.01.

(B) $10.01.

(C) $3.01.

(D) $0.01.

10.

Assume a market characterized by a downward sloping demand and an upward sloping supply. Also assume that the forces of supply and demand operate freely. Which of the following statements is INCORRECT?

(A) Shortages put downward pressure on the market price while surpluses exert upward pressure on the market price.

(B) When the price of a good rises, producers react by producing more of the good and consumers by purchasing less of the good.

(C) Prices provide incentives to use scarce resources efficiently.

(D) Shortages put upward pressure on the market price while surpluses exert downward pressure on the market price.

11.

Suppose in the market for fresh salmon, you find that compared to a month ago, the equilibrium price has increased, and the equilibrium quantity has fallen. Which of the following would be a good explanation behind this finding?

(A) The demand for salmon has increased, and the demand curve has shifted to the right.

(B) The supply of salmon has decreased, and the supply curve has shifted to the left.

(C) The demand for salmon has decreased, and the demand curve has shifted to the left.

(D) The supply of salmon has increased, and the supply curve has shifted to the right.

12.

Consider a market consisting of five buyers and five sellers. The following table illustrates the willingness to pay (maximum price buyers are willing to pay for one unit) and willingness to accept (minimum price sellers are willing to accept for each unit) schedules for the buyers and sellers respectively. *Assume that each buyer and seller can buy and sell only one unit at a time.*

Maximum price buyer willing to pay	Buyer 1	Buyer 2	Buyer 3	Buyer 4	Buyer 5
	$14	$12	$10	$8	$6
Minimum price seller willing to accept	Seller 1	Seller 2	Seller 3	Seller 4	Seller 5
	$2	$4	$6	$8	$10

Suppose you set this market up as a market where buyers are sellers are allowed to trade with one another in an attempt to find the most profitable trade. Over time you would expect that on average the market price will be around _____ and _____ units will be traded. You would expect that in this market, by and large ____ and ____ will not be able to trade.

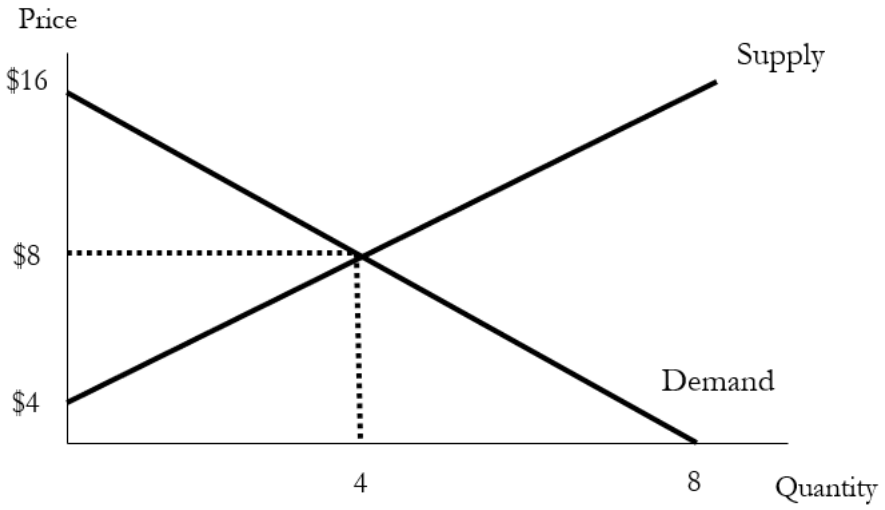
(A) $8; 4; Buyer 5; Seller 5.

(B) $4; 8; Buyer 1; Seller 5.

(C) $4; 4; Buyer 5; Seller 1.

(D) $8; 8; Buyer 4; Seller 4.

13.



In the above diagram, the magnitude of consumer surplus is ____ while the magnitude of producer surplus is _____.

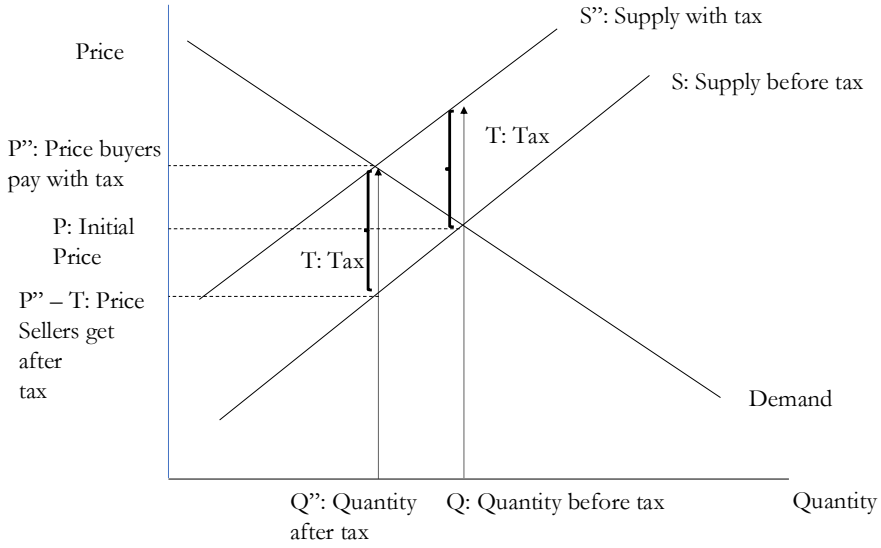
(A) $16; $16.

(B) $16; $8.

(C) $8, $16.

(D) $8; $8

14.



This diagram represents the market for widgets before and after a tax of $\$t$ per unit was imposed on the suppliers. The original supply curve is S. The supply curve after the tax is S". Suppose that the buyers did not reduce their consumption at all following the imposition of the tax. That is, suppose that the demand curve was a vertical straight line through the quantity Q. Then the price faced by consumers after the imposition of the tax would be:

(A) P + t.

(B) P.

(C) P′.

(D) P′ - t.

15.

Suppose a friend says that demand for a product is inelastic since the own price elasticity of demand is (-)2. The friend further states that given that demand is inelastic, a producer facing this demand should increase her price to increase her revenue. Is the friend correct about the elasticity? Is she correct about the appropriate pricing strategy?

(A) Yes and Yes; because if own price elasticity is less than 1 then demand is price inelastic. And since demand is price inelastic raising price will lead to higher revenue.

(B) No and No; because when it comes to own price elasticity of demand only the magnitude matters and not the sign. Hence an elasticity of (-)2 and (+)2 are the same and both indicate elastic demand. And since demand is elastic, increasing price will lead to lower revenue. The producer should lower her price to increase revenue.

(C) Yes and No; because if own price elasticity is less than 1 then demand is price inelastic. But when demand is inelastic increasing price will lead to lower revenue. The producer should lower her price to increase revenue.

(D) No and Yes; because when it comes to own price elasticity of demand only the magnitude matters and not the sign. Hence an elasticity of (-)2 and (+)2 are the same and both indicate elastic demand. But since demand is elastic, the classmate is correct that increasing price will lead to higher revenue.

16.

Suppose the government is considering raising the minimum wage by 10%. Also suppose that the price elasticity of demand for labour vis-à-vis wages is ¼ (0.25). Given this increase in minimum wage and the information on elasticity, you should expect a ___% loss in jobs.

(A) 2.5.

(B) 10.

(C) 5.

(D) 0.

17.

If the cross-price elasticity of demand between two goods X and Y is (-)1.25, then the two goods must be:

(A) Complements.

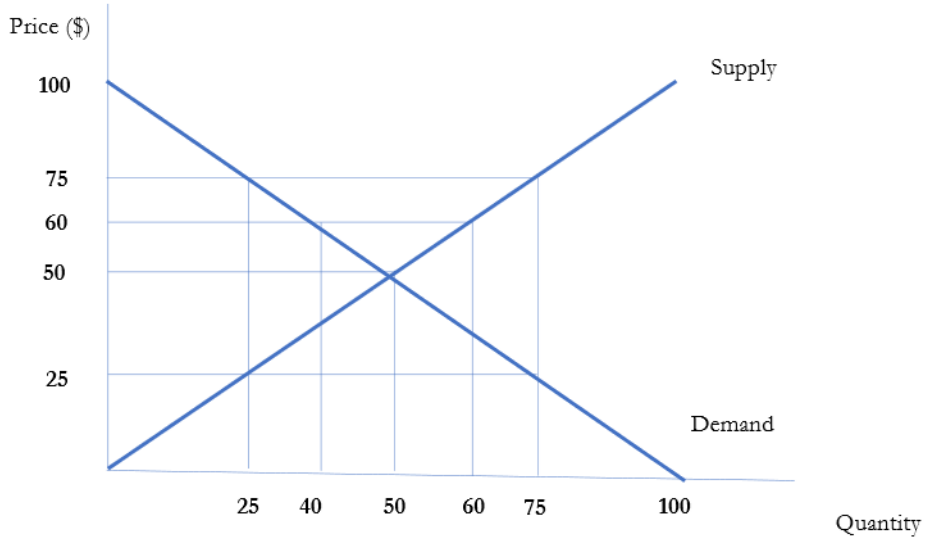
(B) Luxuries.

(C) Normal goods.

(D) Substitutes.

18.

Consider the following figure. Suppose the government imposed a price ceiling (maximum price) of $35. You can conclude that as a result of the price ceiling:



(A) There will be a shortage (excess demand) and the magnitude of this shortage will be less than 50 units.

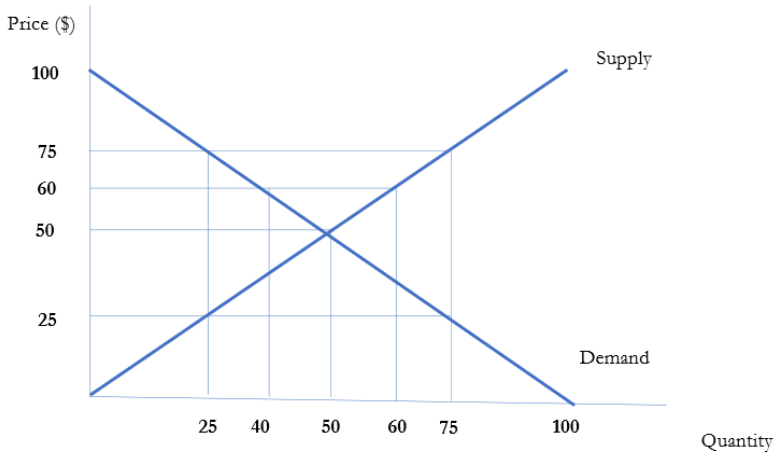
(B) There will be a surplus (excess supply) and the magnitude of this surplus will be equal to 50 units.

(C) There will be a shortage (excess demand) and the magnitude of this shortage will be more than 50 units.

(D) There will be a surplus (excess supply) and the magnitude of this surplus will be less than 50 units.

19.

Consider the following figure. Suppose the government imposed a price ceiling of $60. You can conclude that:



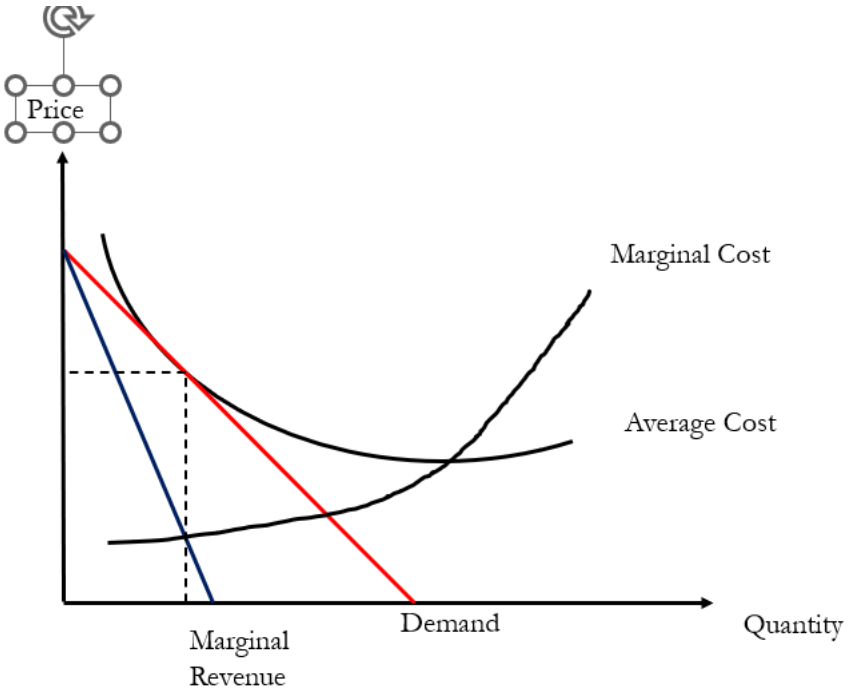
(A) The price ceiling will not be binding since it is imposed below the equilibrium price of $50.

(B) There will be a shortage (excess demand) of 50 units.

(C) There will be a surplus (excess supply) of 20 units.

(D) The price ceiling will not be binding since it is imposed above the equilibrium price of $50.

20.



Consider the attached diagram. Which of the following statements is CORRECT?

(A) This diagram shows the long-run equilibrium for a firm in a perfectly competitive market.

(B) This diagram shows the long-run equilibrium for a firm in a monopolistically competitive market.

(C) This diagram shows the short-run equilibrium for a firm in a monopolistically competitive market.

(D) This diagram shows the short-run equilibrium for a firm in a perfectly competitive market.

21.

A factory located along a river has been responsible for chromium tainted effluents getting into the river. The factory employs many people from the area, but the pollution is causing health problems among many of them. The city council estimates that it is possible to install filters that will prevent these effluents from entering the river. This abatement cost amounts to approx. $c per unit of output produced by the factory. What would an economic consultant typically suggest that the city does?

(A) The city should consider imposing a tax of $c per unit of output in order to get the factory to take the negative externality into action, which will push the supply curve out and to the right.

(B) The city should consider imposing a tax of $c per unit of output in order to get the factory to take the negative externality into action, which will push the supply curve back and the left.

(C) The city should consider providing a subsidy of $c per unit of output in order to get the factory to take the negative externality into action, which will push the supply curve back and the left.

(D) The city should completely ban the production of this good.

22.

An externality arises when:

(A) The government intervenes in a market via a price ceiling or price floor that prevents the market from reaching equilibrium.

(B) There is a surplus or shortage in a market requiring government intervention to resolve this.

(C) A firm sells its product in a foreign market and must deal with the impact of external events affecting currency values.

(D) A person or a firm engages in an activity that positively or negatively influences the well-being of another disinterested party, that neither pays nor receives compensation for that effect.

23.

Consider the following demand and supply equations. $P_D = 12 - 0.2Q_D$ $P_S = 0.1Q_S$

Suppose the market price is $2. You would expect to see:

(A) A shortage of 30 units.

(B) A surplus of 20 units.

(C) A shortage of 50 units.

(D) A surplus of 10 units.

24.

Which of the following statements regarding the average and marginal cost is CORRECT?

(A) When marginal cost is increasing, marginal cost drags average cost up; when marginal cost is falling, marginal cost drags average cost down; the marginal cost curve intersects the average cost curve at the minimum of the average cost curve.

(B) When marginal cost is decreasing, marginal cost drags average cost up; when marginal cost is increasing, marginal cost drags average cost down; the marginal cost curve intersects the average cost curve at the maximum of the average cost curve.

(C) When marginal cost is increasing, marginal cost drags average cost up; when marginal cost is falling, marginal cost drags average cost down; the marginal cost curve intersects the average cost curve at the maximum of the marginal cost curve.

(A) When average cost is increasing, average cost drags marginal cost up; when average cost is falling, average cost drags marginal cost down; the average cost curve intersects the marginal cost curve at the minimum of the marginal cost curve.

25.

Suppose a firm finds that at the current level of output, marginal revenue (MR) is $20 while marginal cost (MC) is $15. We can conclude that:

(A) Since MR > MC, the firm should cut back on production to maximize profit.

(B) Since MR > MC, the firm should increase production to maximize profit.

(C) The firm should continue producing this amount of output since the firm always wants to operate at an output level such that MR > MC.

(D) Since MR > MC, the firm is making losses and should stop producing.

26.

The following question is based on the information given below regarding output produced and prices in the country of Erehwon:

	Output			Price per unit of output		
	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
Good X	80	100	120	$1.00	$1.00	$1.20
Good Y	100	120	150	$0.50	$1.00	$1.50

Using Year 1 as the base year, the real GDP in Year 2 is:

(A) $100.

(B) $160.

(C) $220.

(D) $300.

27.

The following question is based on the information given below regarding output produced and prices in the country of Erehwon:

	Output			Price per unit of output		
	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
Good X	80	100	120	$1.00	$1.00	$1.20
Good Y	100	120	150	$0.50	$1.00	$1.50

Using Year 1 as the base year, (and using a multiplicative factor of 1000 in your calculations) the value of the GDP deflator for Year 2 is:

(A) 1000.

(B) 1500.

(C) 2000.

(D) 1375.

28.

Suppose that in an open economy GDP is $10,000, consumption is $6,500 and investment is $3,000. Exports are worth $500 while imports are $1500. What must be the value of government expenditure?

(A) $2,500.

(B) $3,000.

(C) $1,500.

(D) $1,000.

29.

George usually gets his haircut at the Shearing Shed. But with the cost of living high these days George decides to save some money by cutting his own hair at home. He already has hair-clippers at home that he was gifted a while back. As a result of George's decision:

(A) GDP stays the same, because the same service was performed by George as would have been performed by the barber.

(B) GDP is reduced, because George does not cut hair as well as the barber cuts hair.

(C) GDP is reduced, because George's haircut is no longer a market transaction.

(D) GDP may increase, decrease or remain the same, based on how well George cuts his own hair.

30.

Indira takes a university teaching job as an assistant professor in 2002 at a salary of $70,000. By 2022, she has been promoted to full professor, with a salary of $140,000. The price index in 2002 is 50, and the price index in 2022 is 125. Which of the following statement is CORRECT?

(A) In purchasing power terms, Indira is better off in 2022 compared to 2002 since she needs $100,000 in 2022 to buy what she could buy for $70,000 in 2002.

(B) In purchasing power terms, Indira is worse off in 2022 compared to 2002 since she needs $175,000 in 2022 to buy what she could buy for $70,000 in 2002.

(C) In purchasing power terms, Indira is better off in 2022 compared to 2002 since she needs $175,000 in 2022 to buy what she could buy for $70,000 in 2002.

(D) In purchasing power terms, Indira is neither worse off nor better off in 2022 compared to 2002 since $70,000 in 2002 and $140,000 in 2022 can buy her the exact same bundle of goods.

31.

If the consumer price index is 100 in the base year and 105 the following year, the inflation rate is:

(A) 105 percent.

(B) 100 percent.

(C) 10.5 percent.

(D) 5 percent.

32.

If the nominal rate of interest is 3% and the rate of inflation is 5%, the real interest rate is:

(A) 8%.

(B) 2%.

(C) -2%.

(D) 3%.

33.

Suppose that in a closed economy GDP is 12,000, consumption is 6,500 and investment is 2,500. What must be the value of government expenditure? Further suppose that the government collects $2,500 in taxes. Then you would conclude that the government is running a _____ of _____.

(A) $1000; surplus, $1,000.

(B) $3000; surplus, $500.

(C) $4000; deficit, $1,000.

(D) $3000; deficit, $500.

34.

In a close economy, national saving is defined by all the following identities EXCEPT:

(A) private saving + public saving.

(B) (Y – T – C) + (T – G).

(C) C + I + G.

(D) Y – C – G.

35.

An increase in the real interest rate:

(A) decreases the price of borrowing funds and hence tends to increase the quantity of loanable funds demanded.

(B) increases the price of borrowing funds and hence tends to lower the quantity of loanable funds demanded.

(C) decreases the price of borrowing funds and hence tends to shift the demand curve for loanable funds to the right.

(D) increases the price of borrowing funds and hence tends to shift the demand curve for loanable funds to the left.

36.

What would happen in the market for loanable funds if the government were to increase the tax on interest income?

(A) the supply of loanable funds would shift right, and the real interest rate will fall.

(B) the supply of loanable funds would shift left, and the real interest rate will rise.

(C) the supply of loanable funds would shift right, and the real interest rate will rise.

(D) the demand for loanable funds would shift left, and the real interest rate will fall.

37.

Suppose a cappuccino costs NZ $5 in New Zealand and Rs. 200 in India. The nominal exchange rate is Rs. 50 for NZ $1. Then the real exchange rate of 1 cappuccino in New Zealand can be expressed as:

(A) 2 cappuccinos in India.

(B) 1.25 cappuccinos in India.

(C) 4 cappuccinos in India.

(D) Approx. Rs. 250 per cappuccino in India.

38.

If the exchange rate changes from NZ $2 per UK pound to NZ $1 per UK pound then in terms of trade between New Zealand and England:

(A) New Zealand exporters are worse off and New Zealand importers are better off.

(B) British exporters are worse off and British importers are better off.

(C) New Zealand exporters are better off and New Zealand importers are worse off.

(D) The New Zealand dollar depreciates.

39.

Suppose the equilibrium exchange rate between the Chinese Yuan and the Japanese Yen should be 20 Yens per Yuan. But, in an effort to boost exports, the Chinese government decides to keep the Yuan undervalued vis-à-vis the Japanese Yen. Which of the following would be commensurate with this act of undervaluing the currency?

(A) Holding the value of the Chinese Yuan to 15 Yens per Yuan.

(B) Holding the value of the Chinese Yuan to 25 Yens per Yuan.

(C) Holding the value of the Japanese Yen to 0.04 Yen per Chinese Yuan.

(D) Allowing the Chinese Yuan to float freely against the Japanese Yen.

40.

Consider a two-country world with New Zealand and Australia. Suppose investors expect that in the near future, real interest rates will be much higher in New Zealand compared to that in Australia. This would lead to:

(A) a shift to the right in the demand for New Zealand dollars and an appreciation of the New Zealand currency.

(B) a shift to the left in the demand for New Zealand dollars and an appreciation of the New Zealand currency.

(C) a shift to the right in the demand for New Zealand dollars and a depreciation of the New Zealand currency.

(D) a shift to the left in the demand for New Zealand dollars and a depreciation of the New Zealand currency.

41.

Suppose an iPad costs $800 in New Zealand and 22000 Indian Rupees in India. The current exchange rate is 50 Indian rupees per NZ dollar. For the sake of convenience, we will assume that taxes and transportation costs come to NZ $50 per iPad. Given the information above, there is clearly an *arbitrage* opportunity here where:

(A) You buy iPads in New Zealand and sell them in India and make a profit of $250 per iPad.

(B) You buy iPads in New Zealand and sell them in India and make a profit of $310 per iPad.

(C) You buy iPads in India and sell them in New Zealand and make a profit of $360 per iPad.

(D) You buy iPads in India and sell them in New Zealand and make a profit of $310 per iPad.

42.

If a country's government significantly increased the taxes imposed on interest earnings from financial assets held in that country, we would expect to see:

(A) An increase in the demand for loanable funds and higher real interest rates. This in turn will lead to a depreciation of the country's currency and a worsening trade balance.

(B) An increase in the supply of loanable funds and higher real interest rates. This in turn will lead to a depreciation of the country's currency and a worsening trade balance.

(C) An increase in the demand for loanable funds and lower real interest rates. This in turn will lead to a depreciation of the country's currency and a worsening trade balance.

(D) A decrease in the demand for loanable funds and lower real interest rates. This in turn will lead to a depreciation of the country's currency and an improving trade balance.

43.

Which of the following statements about the relationship between domestic saving, domestic investment and net financial investment in equilibrium is INCORRECT?

(A) In the equilibrium of an open economy, domestic saving is equal to the sum of domestic investment and net exports.

(B) In the equilibrium of an open economy, if domestic savings fall short of domestic investment, then the shortfall will be made up by net inflow of financial investments from overseas.

(C) In the equilibrium of an open economy, if domestic savings exceed domestic investment, then there will be a net outflow of financial investments to overseas.

(D) In the equilibrium of an open economy, if domestic savings exceed domestic investment, then there will be a net inflow of financial investments.

44.

Because a government budget deficit represents

(A) positive public saving, it increases national savings and leads to higher real interest rates.

(B) positive public saving, it decreases national savings and leads to lower real interest rates.

(C) negative public saving, it increases national savings and leads to higher real interest rates.

(D) negative public saving, it decreases national savings and leads to higher real interest rates.

45.

Which of the following is NOT a reason for the negative slope of the aggregate demand curve?

(A) As the price level increases, real wages decline, resulting in a reduction in the costs of production.

(B) As the price level increases, real wealth declines, resulting in a fall in consumption expenditure.

(C) As the price level increases, the interest rate increases, resulting in a fall in investment expenditure.

(D) As the price level increases, the real exchange rate increases, resulting in a fall in exports and net exports.

46.

If we define the marginal propensity to consume as MPC, then as the MPC approaches one, the consumption multiplier approaches:

(A) zero.

(B) one.

(C) infinity.

(D) one-half.

47.

One of the causes of the downward slope of the aggregate demand curve when graphed against the price level is the "wealth effect". Here, the argument is that:

(A) Everything else held constant, if the price level increases then consumers experience a loss of purchasing power. This leads to a reduction in consumption spending and therefore, aggregate demand.

(B) Everything else held constant, when the price level goes down, people put more money in interest bearing assets thereby increasing the supply of loanable funds, resulting in a lower real interest rate that encourages greater investment and thereby stimulates aggregate demand.

(C) Everything else held constant, when a country's price level falls then the real exchange rate falls, exports increase and, as a result, so does aggregate demand.

(D) As the price level increases real wages decline, resulting in a reduction in the costs of production, which leads to a corresponding fall in aggregate demand.

48.

In recent years, New Zealand has consistently run a current account deficit alongside persistent government budget deficits. Based on your understanding of macroeconomic issues, what is the most likely explanation?

(A) The current account deficit implies New Zealand is lending extensively to the rest of the world

(B) Private savings must be unusually high to offset the twin deficits.

(C) A current account deficit implies that investment in New Zealand is lower than national saving.

(D) The government budget deficit contributes to the current account deficit when not offset by increases in private saving.

49.

Which of the following statements is CORRECT?

(A) National savings is the sum of private and public savings and as a result when a government runs budget deficits this leads to an increase in national savings.

(B) National savings is the sum of private and public savings and as a result when a government runs budget surpluses this leads to a reduction in national savings.

(C) National savings is the sum of private and public savings and as a result when a government runs budget surpluses this leads to an increase in the demand for loanable funds.

(D) National savings is the sum of private and public savings and as a result when a government runs budget deficits this leads to a reduction in national savings.

50.

Consider the following 3 currencies: New Zealand dollar (NZD), Australian dollar (AUD), and the British pound (GBP). Assume there are no transaction costs when trading/exchanging currencies. Currently NZ $1 can be exchanged for AU $ 0.9. AU $1 can be exchanged for £0.7. What should be the approximate nominal exchange rate between the NZ Dollar and the British Pound for there to be no arbitrage (no profit-making) opportunity when trading currencies?

(A) NZD 0.63 per British Pound.

(B) NZD 0.81 per British Pound.

(C) NZD 1.59 per British Pound.

(D) NZD 1.95 per British Pound.