New Zealand Economics Competition

Tuesday 1 July 2014

Instructions:

1. **Do not open this question booklet until instructed to do so.**
2. You have **fifty (50) minutes** to answer all **forty (40) questions**. No additional time is allowed for reading.
3. **Pencils and erasers only** are permitted at your desk.
4. Read all instructions on the Response Sheet provided.
5. Please make sure you complete your name and **fill in the circles for each letter CORRECTLY** on the Response Sheet. Any mistakes you make will appear on your certificate. (If you have a hyphen (-) or an apostrophe (’) in your name please leave blank the corresponding column of circles, below where it appears.)
6. **One (1) mark** will be awarded for each correct response.
7. Avoid guessing, as **one quarter (1⁄4) of a mark** will be deducted for each incorrect answer, to discourage random guessing.
8. Choose the most correct answer option to the question and **completely fill the corresponding box on the Response Sheet**. Use **PENCIL only**.
1. If a production possibilities frontier (PPF) is a straight line, then
(A) opportunity cost changes between goods as we move down the frontier.
(B) all resources can produce the alternative goods equally well.
(C) increasing the production of one good will not mean less of the other good is produced.
(D) available resources are unable to produce alternative products equally well.

2. If a country is producing at a point below the production possibilities frontier (PPF) then
(A) at least some resources are underemployed.
(B) the economy is at less than maximum efficiency.
(C) it would be possible to increase production of one good without sacrificing production in another good.
(D) all of the above are true.

3. If the demand for Product A does not change as the price of Product B increases then
(A) the two goods are unrelated.
(B) the two goods are substitutes.
(C) the two goods are complements.
(D) the consumers of Product B have enjoyed an increase in real income.

4. An improvement in technology affecting the manufacture of a particular good will
(A) shift the supply curve to the left.
(B) shift the supply curve to the right.
(C) shift both the demand curve and the supply curve to the right.
(D) shift both the demand curve and the supply curve to the left.
5. To determine consumer equilibrium where the consumer is maximising her utility we need to know
(A) the prices of goods being consumed and marginal utility.
(B) total utility and income.
(C) marginal utility and income.
(D) total utility and marginal utility.

6. Arabella consumes two goods and her marginal utility of each is equal to one divided by the amount consumed of that good. It follows that if the prices of the two goods are the same
(A) the amount consumed of each good depends only on its price.
(B) the goods will be consumed in the same amounts.
(C) the marginal utility of each good will be equal to one divided by the price of that good.
(D) all of the above.

7. If the price of a good is $10 and the market for the good is in equilibrium, then an increase in the number of buyers each with a willingness to pay of $8 or less will
(A) cause a shift in the demand curve and increase the equilibrium price.
(B) cause a shift in the demand curve and reduce the equilibrium price.
(C) cause a shift in the demand curve with no change in the equilibrium price.
(D) cause a shift in the supply curve with an uncertain effect on price.

8. A binding price ceiling will make it necessary to
(A) supply more of the market.
(B) develop a way of rationing the product, because there will be a shortage.
(C) develop a better sales strategy because there will be a surplus.
(D) increase demand for the product, because there will be a surplus.
Questions 9, 10 and 11 are based on the following information and Table 1.

Consider a market consisting of five buyers and five sellers. The table below gives the maximum price each buyer is willing to pay for one unit and the minimum price each seller is willing to accept for one unit. Assume each buyer and seller can buy and sell only one unit at a time.

**Table 1**

<table>
<thead>
<tr>
<th>Maximum price buyer willing to pay</th>
<th>Buyer 1</th>
<th>Buyer 2</th>
<th>Buyer 3</th>
<th>Buyer 4</th>
<th>Buyer 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1</td>
<td>Seller 1</td>
<td>Seller 2</td>
<td>Seller 3</td>
<td>Seller 4</td>
<td>Seller 5</td>
</tr>
<tr>
<td>$2</td>
<td>$2</td>
<td>$2</td>
<td>$3</td>
<td>$4</td>
<td>$5</td>
</tr>
</tbody>
</table>

9. Suppose buyers and sellers are allowed to trade with one another in an attempt to find the most profitable trade. You could expect that in equilibrium, the market price will be _____ and _____ units will be traded.

(A) $4, 8.
(B) $4, 4.
(C) $8, 4.
(D) $2, 2.

10. You would expect that in this market, _____ and ______ will not be able to trade.

(A) Buyer 1, Seller 5
(B) Buyer 5, Seller 1
(C) Buyer 5, Seller 5
(D) Buyer 4, Seller 4
11. Given the market price you found in Question (9), the total consumer surplus obtained by Buyer 2 is
   (A) $10.
   (B) $8.
   (C) $4.
   (D) $0.

End of Questions based on Table 1

12. Ms W’s disposable income rises from $50,000 to $55,000. Her consumption of mangoes increases from 10 to 11. We can say that for Ms W
   (A) mangoes are luxury goods.
   (B) the price elasticity of demand for mangoes is elastic.
   (C) mangoes are normal goods.
   (D) the price elasticity of demand for mangoes is inelastic.

13. Suppose that the quantity of beer demanded falls from 103,000 litres per week to 97,000 litres per week as a consequence of a 10% increase in its price. The price elasticity of demand (in absolute value) is approximately
   (A) 0.6.
   (B) 1.97.
   (C) unable to be computed unless we know the before and after prices.
   (D) elastic.

14. Demand is more price elastic if there are
   (A) close substitutes and a short time frame.
   (B) close substitutes and a longer time frame.
   (C) no close substitutes.
   (D) none of the above.
15. A firm in a perfectly competitive market faces
   (A) a downward sloping marginal revenue curve.
   (B) a downward sloping demand curve.
   (C) a demand curve that is perfectly elastic.
   (D) a downward sloping supply curve.

16. A firm in perfect competition should shut down if price in the short run is
   (A) above minimum average variable cost.
   (B) below minimum average variable cost.
   (C) above minimum total cost.
   (D) below minimum total cost.

17. At the current level of output, a perfectly competitive firm is setting marginal
    cost equal to price. Marginal cost is increasing and average cost is falling.
    The firm
    (A) should reduce output.
    (B) should increase output.
    (C) is making a loss.
    (D) is making a profit.

18. A monopolist produces a good at zero marginal cost. It finds that by reducing
    output slightly from its current level that profits increase. It follows that it must
    be operating
    (A) on the elastic portion of its demand curve.
    (B) in a region where average total costs are falling.
    (C) in a region where average total costs are increasing.
    (D) on an inelastic portion of its demand curve.
19. Over the relevant output range, an industry is a natural monopoly if
   (A) fixed costs are constant.
   (B) marginal cost never increases.
   (C) average cost is declining.
   (D) all of the above.

20. In the long run, a monopolistically competitive firm will produce a level of output at which price equals
   (A) marginal cost.
   (B) average variable cost.
   (C) marginal revenue.
   (D) average total cost.

21. Governments produce pure public goods like national defence because
   (A) governments are more efficient than private firms at producing goods.
   (B) private firms will make excess profits in the defence industry.
   (C) because of the free rider problem, which results in under production if left to private enterprise.
   (D) people place no value on national defence.

22. An externality is
   (A) the effect of government regulation on market price and output.
   (B) the amount by which price exceeds marginal cost.
   (C) a cost or benefit arising from a decision not borne/enjoyed by the decision maker.
   (D) someone who consumes a good without paying for it.
23. The deadweight loss from a price increase resulting from a tax will be zero if
(A) the supply curve is perfectly inelastic.
(B) the supply curve is perfectly elastic.
(C) the demand curve is relatively more elastic than the supply curve.
(D) the demand curve is relatively less elastic than the supply curve.

24. If the number of buyers in a market increases, this is likely to result in
(A) a small increase in price if the increase in the number of buyers is small relative to the number of buyers already in the market.
(B) a large increase in price if the new buyers have a high willingness to pay relative to buyers already in the market.
(C) a fall in the price because the willingness to pay of the new buyers is lower.
(D) none of the above.

25. Tim’s father started working at a salary of $50,000 per year in 1983. In 2013, Tim received a starting salary of $150,000 per year. Using 1983 as the base year, what must the value of the consumer price index (CPI) be in 2013 to make Tim better off in terms of purchasing power than his father at the start of their respective careers?
(A) 100.
(B) 300.
(C) Greater than 300.
(D) Less than 300.
26. Marie has just bought a house as an investment property for $400,000 and paid cash. Last year she bought an identical house for $500,000. Assuming her wealth consists of her two properties and some interest bearing deposits in her bank, and she spends all her income, it follows that over the last year her wealth has probably

(A) increased by about $100,000 in nominal terms, but by less in real terms.
(B) decreased by about $100,000 in nominal terms, but by less in real terms.
(C) has stayed about the same in real terms.
(D) has stayed about the same in nominal terms.

27. New Zealand’s Minister of Finance is

(A) Bill English.
(B) Graeme Wheeler.
(C) John Key.
(D) Lazarus.

28. The New Zealand government has announced it expects to run a budget surplus for this (2014) financial year. This is potentially

(A) bad news for investment plans and good news for those who depend on interest earnings on savings deposits, since interest rates are likely to rise.
(B) good news for investment plans and bad news for those who depend on interest earnings on savings deposits, since interest rates are likely to fall.
(C) bad news for investment plans and bad news for those who depend on interest earnings on savings deposits, since interest rates are likely to fall.
(D) good news for investment plans and good news for those who depend on interest earnings on savings deposits, since interest rates are likely to rise.
29. The circular flow model is used to
(A) show how nominal GDP (Gross Domestic Product) is distinct from real GDP.
(B) explain how the prices of the factors of production are determined.
(C) show the real flows and money flows between the different sectors of the economy.
(D) none of the above.

30. Which of the following would NOT be included in New Zealand’s GDP (Gross Domestic Product) figures for the year ending 2013?
(A) A house built in 2013.
(B) The commission earned from selling a used car in 2013.
(C) The value of all haircuts performed in 2013.
(D) The output of an Australian factory owned by a New Zealand resident for the year 2013.

31. If a change in interest rates is induced by a change in the price level, then this would be shown as
(A) a movement along the aggregate demand curve.
(B) a shift of the aggregate demand curve.
(C) a movement along the aggregate supply curve.
(D) no change to equilibrium as interest rates are determined in the money market.

32. The long run aggregate supply curve is vertical because
(A) an increase in the price level does not change the economy’s resource base.
(B) it is impossible for the economy to ever exceed the maximum output rate implied by the long run aggregate supply curve, even on a temporary basis.
(C) structural unemployment is at a maximum at that level of output.
(D) there is a zero rate of joblessness at this level of output.
33. If the actual level of unemployment persists in being less than that implied by the level of unemployment at the natural rate then we could assume
   (A) wages are too high.
   (B) wages are too low.
   (C) the economy is in recession.
   (D) a substantial increase in available technology to firms has occurred.

34. An increase in real interest rates in New Zealand compared to the rest of the world
   (A) discourages both domestic and foreign residents from buying New Zealand financial assets.
   (B) encourages New Zealand residents to buy New Zealand financial assets but discourages foreign residents from buying New Zealand financial assets.
   (C) encourages both New Zealand and foreign residents to buy New Zealand financial assets.
   (D) encourages foreign residents to buy New Zealand financial assets but discourages New Zealand residents from buying New Zealand financial assets.

35. If the government of New Zealand implemented policy that reduced national saving, the real exchange rate of New Zealand’s currency would
   (A) depreciate due to net capital outflow and hence net exports would rise.
   (B) appreciate due to net capital inflow and hence net exports would fall.
   (C) appreciate due to net capital inflow and hence net exports would rise.
   (D) have no effect on exports as national savings policy does not affect the exchange rate.

36. Which of the following is a principal motive for holding money by households and firms?
   (A) Transactions motive.
   (B) Speculative motive.
   (C) Precautionary motive.
   (D) All of the above.
37. The Reserve Bank of New Zealand’s major policy instrument for controlling the rate of inflation is
   (A) the use of Open Market Operations.
   (B) the Official Cash Rate.
   (C) judicious manipulation of the exchange rate.
   (D) by regulating the reserve ratio requirements of the major trading banks.

38. Holding everything else constant, if the price level doubles
   (A) the quantity of real money demanded will double.
   (B) the quantity of nominal money demanded will double.
   (C) the quantity of real money supplied will double.
   (D) the quantity of nominal money supplied will double.

39. Fiscal policy refers to
   (A) changes in real GDP (Gross Domestic Product) due to changes in tax rates.
   (B) changes in government taxing and spending policy.
   (C) changes in the OCR (Official Cash Rate).
   (D) changes in investment decisions by firms.

40. Which of the following is NOT a transfer payment?
   (A) Unemployment Benefit (Job Seeker Support).
   (B) Old Age Pension (National Superannuation).
   (C) The Prime Minister’s salary.
   (D) Domestic Purposes Benefit (Sole Parent/Job Seeker Support).

Thank you for participating in the 2014 New Zealand Economics Competition