New Zealand Economics Competition

Tuesday, 19 June 2012

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 the corresponding column of circles blank.)

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

7. Avoid guessing, as **one quarter (¼) 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. New Zealand’s current Minister for Economic Development is:
   (A) Bill English.
   (B) John Key.
   (C) Steven Joyce.
   (D) David Cunliffe.

2. Consider the following table.

<table>
<thead>
<tr>
<th>Country</th>
<th>Opportunity cost of producing a car</th>
<th>Opportunity cost of producing a ton of food</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>2 tons of food</td>
<td>0.5 cars</td>
</tr>
<tr>
<td>Japan</td>
<td>1 ton of food</td>
<td>1 car</td>
</tr>
</tbody>
</table>

   If the U.S. and Japan are to trade based on their comparative advantage, then which of the following is consistent with the information in the table?

   (A) The US should allocate 100% of its production capacity to cars; Japan should allocate 100% of its production capacity to food.
   (B) The US should allocate 100% of its production capacity to food; Japan should allocate 100% of its production capacity to cars.
   (C) The US should allocate 100% of its production capacity to cars; Japan should allocate 50% of its production capacity to cars and 50% to food.
   (D) The US should allocate 20% of its production capacity to cars and 80% to food; Japan should allocate 50% of its production capacity to food and 50% to cars.

3. If the price elasticity of demand for labour of workers who are paid a binding minimum wage is 0.5 (in absolute value) and the government mandates that the minimum wage rises by 10%, then employment at the minimum wage will:

   (A) fall by 5%.
   (B) fall by 20%.
   (C) fall by 50%.
   (D) be unaffected.
4. Which of the following is **not always** true with respect to a per unit tax on suppliers of a commodity where the demand curve is downward sloping and the supply curve is upward sloping?

(A) It will result in an increase in the price the consumer pays for the commodity in the market.

(B) It will result in a dead-weight loss.

(C) It will result in a decrease in price the producer receives for the commodity in the market.

(D) It will result in a reduction of the quantity traded in the market.

5. Rangimarie consumes two goods, X and Y, and is currently consuming optimally – that is, in a utility maximising fashion. Her marginal utility (MU) from another unit of X is 5 and her MU from another unit of Y is 10. If X costs $1 per unit and Rangimarie’s income is $100, what can we conclude about the price of Y?

(A) It must be $0.50.

(B) It must be $1.

(C) It must be $2.

(D) There is not enough information to identify the price of Y exactly.
6. The following figure illustrates the situation facing a particular firm in a perfectly competitive industry.

Which of the following statements is correct?

(A) The firm will shut down in the short run.
(B) The firm will earn supernormal profit in the short run.
(C) The firm will produce X units of output in the short run.
(D) None of the above statements is correct.

7. If the substitution effect of a price change moves quantity demanded in the opposite direction to the income effect, then we can tell that:

(A) the good is a normal good.
(B) the price of the good must have risen.
(C) the price of the good must have fallen.
(D) the good is an inferior good.

8. Which of the following is not an example of a public good?

(A) Street lighting.
(B) A fireworks display from the Skytower.
(C) National defence.
(D) A public hospital.
9. If the supply of a good is perfectly inelastic and the government imposes a sales tax on suppliers, then which of the following is true about the economic incidence of this tax?

(A) The buyer will pay all of the tax, and the seller will pay none of the tax.
(B) The buyer will pay none of the tax, and the seller will pay all of the tax.
(C) Both will pay some of the tax with the buyer paying a larger fraction than the seller.
(D) Both will pay some of the tax with the buyer paying a smaller fraction than the seller.

10. Which of the following is not true about price discrimination:

(A) It enables the seller to increase his or her profit.
(B) It always reduces consumer surplus.
(C) The seller must have some degree of market power to be able to practise it.
(D) It cannot be successful if arbitrage is possible.

11. The marginal rate of technical substitution is:

(A) the amount of one good a consumer must be given to compensate them for a one unit reduction in the other good.
(B) the rate at which one input can be exchanged for another without altering the total level of output.
(C) the rate at which one output can be exchanged for another at a point along the production possibilities frontier.
(D) the number of units of future consumption a consumer would willingly exchange for one unit of consumption in the present.
12. Which of the following is not true of a perfectly competitive industry?

(A) Firms sell a homogeneous product.

(B) The short run supply curve of the industry is the horizontal summation of the short-run marginal cost curves of individual firms.

(C) The long run supply curve of the industry is the horizontal summation of the long-run marginal cost curves of individual firms.

(D) There must be perfect mobility of production factors in the long run.

13. Use the following graph to answer this question.

Which of the following is true?

(A) At point B, the demand curve is more elastic than at point A.

(B) At point A, the demand curve is more elastic than at point B.

(C) Demand is equally elastic at points A and B.

(D) One cannot say anything about the relative elasticities without more information.
14. A price ceiling is most likely to:
(A) lead to a reduction in the volume of transactions as we move down the supply curve, below the equilibrium price, to the price ceiling.
(B) lead to a reduction in the volume of transactions as we move up the demand curve, above the equilibrium price, to the price ceiling.
(C) lead to excess supply.
(D) be effective only if set at a level above the equilibrium price.

15. If a firm is a price-taker on its input markets and experiences diminishing marginal returns to each factor, then as output rises we can definitely conclude that:
(A) the firm experiences decreasing returns to scale.
(B) the firm’s marginal cost decreases.
(C) the firm’s total costs decrease.
(D) None of the above.

16. For oligopolists facing a kinked demand curve, which of the following statements is true?
(A) Raising the price above the “sticky” price would raise profits.
(B) Lowering the price below the “sticky” price would raise profits.
(C) Marginal cost can vary over a range that still gives rise to the same “sticky” price.
(D) The demand curve has the same slope all the way along the kinked demand curve.
17. Which of the following statements is not true of the demand curve faced by an individual firm operating in a perfectly competitive market?

(A) The price elasticity of demand for this demand curve is infinite.
(B) The demand curve is the same as the marginal revenue curve.
(C) The demand curve is the same as the average revenue curve.
(D) The slope of the demand curve is infinite.

18. Which of the following best illustrates the economic concept of moral hazard?

(A) An increase in crime associated with an increase in poverty.
(B) The profits earned from the sale of illicit drugs.
(C) A tradesperson offering to deduct the GST (Goods and Services Tax) from the price of a job if the customer agrees to pay cash.
(D) A financial adviser recommending a product they know to be highly risky because of an undeclared commission on sales of the product.

19. You and nine friends are dining at a local restaurant. You plan to split the bill equally at the end of the evening – each of you will pay one tenth of the total. There are two meal choices: the Fish and the Chicken. The following table gives the value of each meal to you (i.e., the maximum you would be willing to pay for such a meal) and the price of each meal.

<table>
<thead>
<tr>
<th>Meal</th>
<th>Fish</th>
<th>Chicken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>$15</td>
<td>$12</td>
</tr>
<tr>
<td>Price</td>
<td>$20</td>
<td>$10</td>
</tr>
</tbody>
</table>

In order to maximise your consumer surplus you should

(A) definitely choose the Fish.
(B) definitely choose the Chicken.
(C) choose the Chicken if everyone else chooses the Chicken.
(D) choose the Fish only if everyone else chooses the Chicken.
20. The owner-operator of a neighbourhood barber shop charges $25 for haircuts. All his costs are fixed (rent, insurance, etc.) and total $1000 per week. He notices that queues are building up and customers turned away, and wonders what to do. Working alone, he can give 70 haircuts per week. He has a second chair available and could hire another barber for $500 per week. The second barber could also give 70 haircuts per week. The following figure illustrates the demand curve he is facing.

Based on this information, which of the following strategies would be the most profitable?

(A) Keep his price at $25 and not employ another barber.
(B) Keep his price at $25 and hire another barber.
(C) Raise his price to $30 but not employ another barber.
(D) Lower his price to $20 and employ another barber.

21. Which of the following statements about GDP (Gross Domestic Product) is correct?

(A) GDP measures the total income of everyone in the economy.
(B) GDP measures the total expenditure on the economy’s output of goods and services.
(C) GDP is the most commonly used measure of a society’s economic well-being.
(D) All of the above are correct.
22. For an economy as a whole:
(A) wages must equal profit.
(B) consumption must equal saving.
(C) income must equal expenditure.
(D) household spending on goods must equal household spending on services.

23. A steel company sells some steel to a bicycle company for $100. The bicycle company uses the steel to produce a bicycle, which it sells for $200. Taken together, these two transactions contribute:
(A) $100 to GDP.
(B) $200 to GDP.
(C) Between $200 and $300 to GDP, depending on the profit earned by the bicycle company when it sold the bicycle.
(D) $300 to GDP.

24. An Italian company operates a Pasta restaurant in New Zealand. The profits from this Pasta restaurant are included in
(A) New Zealand’s GNP and Italy’s GNP.
(B) New Zealand’s GDP and Italy’s GDP.
(C) New Zealand’s GDP and Italy’s GNP.
(D) New Zealand’s GNP and Italy’s GDP.

25. Economists use the term inflation to describe a situation in which:
(A) some prices are rising faster than others.
(B) the economy’s overall price level is rising.
(C) the economy’s overall price level is high, but not necessarily rising.
(D) the economy’s overall output of goods and services is rising faster than the economy’s overall price level.
26. The current Policy Targets Agreement obliges the Reserve Bank Governor to:
   (A) keep inflation as low as possible.
   (B) maintain a stable exchange rate.
   (C) keep inflation between 1% and 3% on average over the medium term.
   (D) keep unemployment as low as possible subject to maintaining inflation below 5%.

27. If this year the CPI (Consumer Price Index) is 110 and last year it was 100, then:
   (A) the cost of the CPI basket of goods and services has increased this year by 110%.
   (B) the price level as measured by the CPI has increased by 10%.
   (C) the inflation rate for this year has increased by 10% over last year’s inflation rate.
   (D) All of the above are correct.

28. The “lost decade” is used to denote which of the following episodes in economic history?
   (A) The period of depression in Japan in the 1990’s.
   (B) The period following Roosevelt’s drastic cuts to public expenditure in the US.
   (C) The period of technology modernisation in China in the late 1950’s.
   (D) The present decade because growth is expected to stagnate.

29. A bond is a:
   (A) financial intermediary.
   (B) certificate of indebtedness.
   (C) certificate of partial ownership in an enterprise.
   (D) None of the above is correct.
30. A deposit in a cheque account is
   (A) a medium of exchange and a store of value.
   (B) a medium of exchange, but not a store of value.
   (C) a store of value, but not a medium of exchange.
   (D) neither a medium of exchange nor a store of value.

31. If the revenue of the New Zealand government exceeds its spending, then the government necessarily:
   (A) runs a budget deficit.
   (B) runs a budget surplus.
   (C) runs a national debt.
   (D) will increase taxes.

32. If the nominal interest rate is 5% and the rate of inflation is 2%, then the real interest rate is:
   (A) 7%.
   (B) 3%.
   (C) 2.5%.
   (D) 0.4%.

33. Cyclical unemployment is closely associated with:
   (A) long term economic growth.
   (B) short-run ups and downs in economic activity.
   (C) fluctuations in the natural rate of unemployment.
   (D) changes in the minimum wage.
34. The labour force of a country equals the:
(A) number of people who are employed.
(B) number of people who are unemployed.
(C) number of people employed plus the number of people unemployed.
(D) adult population.

35. Commodity money is
(A) backed by gold.
(B) the principal type of money in use today.
(C) money with intrinsic value.
(D) receipts created in international trade that are used as a medium of exchange.

36. During a recession the economy experiences:
(A) rising employment and income.
(B) rising employment and falling income.
(C) rising income and falling employment.
(D) falling employment and income.

37. Between April 2008 and April 2009, New Zealand’s Official Cash Rate (OCR):
(A) fell from 8.25% to 2.5%.
(B) fell from 4.25% to 2.5%.
(C) remained constant at 4.25%.
(D) increased from 2.5% to 4.25%.
38. A possible reason why purchasing power parity (PPP) may not hold at all times is because:

(A) some goods are not easily transported.
(B) demand differs across countries.
(C) costs differ across countries.
(D) exchange rates differ across countries.

39. If New Zealand imposed a binding import quota on garments manufactured in China, then in New Zealand:

(A) domestic garment manufacturing would rise and imports of Chinese garments would rise.
(B) domestic garment manufacturing would rise and imports of Chinese garments would fall.
(C) domestic prices for garments would fall.
(D) there would be a decrease in demand for domestically produced garments.

40. Critics of stabilisation policy argue that:

(A) there is a lag between the time when policy is initiated and the time when the policy has an impact on the economy.
(B) the impact of the policy may last longer than the problem it was designed to offset.
(C) the policy can be a source of, instead of a cure for, economic fluctuations.
(D) All of the above.

Thank you for participating in the 2011 New Zealand Economics Competition