# ENTRANCE SCHOLARSHIP EXAMINATION JANUARY 2017 

# ECONOMICS 

Time Allowed - 1.5 hours

## Instructions for candidates

a) Attempt any two questions
b) Students wishing to use graph paper to answer relevant parts of Questions 1 and 2 are allowed to use graph paper, but it is not mandatory to use graph paper.
c) Standard non-programmable calculators are allowed.

1. Suppose that a hypothetical country can produce just two goods: food and clothing. Assume that over a given period it could produce any of the following combinations:

| Units of <br> food | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Units of <br> clothing | 80 | 79 | 77 | 74 | 70 | 65 | 58 | 48 | 35 | 19 | 0 |

(a) Plot this hypothetical country's production possibility curve (also called production possibility frontier)
(10 marks)
(b) Suppose that this country is currently producing 40 units of food and 70 units of clothing. What is the opportunity cost of producing another 10 units of food?
(10 marks)
(c) Explain how the production possibility curve illustrates the principle of increasing opportunity costs.
(10 marks)
(d) Suppose that technical progress leads to a 10 per cent increase in the output of food for any given amount of resources. Plot the new production possibility curve. How has the opportunity cost of producing extra units of clothing altered?
(20 marks)
2. Suppose that the weekly market demand and supply schedules for apples are as follows:

| Price (£ per kilo) | 5.00 | 4.50 | 4.00 | 3.50 | 3.00 | 2.50 | 2.00 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Quantity demanded <br> ('00 kilos) | 400 | 450 | 500 | 550 | 600 | 650 | 700 |
| Quantity supplied <br> ('00 kilos) | 800 | 680 | 620 | 550 | 500 | 450 | 380 |

(a) Plot the demand and supply curves for apples on the same graph.( 10 marks)
(b) Identify the equilibrium price and quantity.
(10 marks)
(c) If the government starts paying the apple producers a subsidy of $£ 1.50$ per kilo, then calculate and state the new supply schedule and plot it on the same graph as part (a) above.
(10 marks)
(d) After the introduction of the subsidy in part (c) above, what will be the new equilibrium price and how much will this cost the government? (10 marks)
(e) Instead of providing the subsidy, suppose the government guaranteed the apple producers a price of $£ 2.00$ per kilo. How many apples would it have to buy in order to ensure that all the apples produced were sold and how much would this cost the government?
(10 marks)
3. Answer all questions below:
(a) Using appropriate examples, distinguish between complements and substitutes.
(12 marks)
(b) Assume a market for bread that is in equilibrium. Now, using separate demand and supply diagrams, illustrate the effects of each of the following on the market for bread:
(7x2=14 marks)
(i) a rise in the price of wheat
(ii) a rise in the price of butter and margarine
(iii) a rise in the price of rice, pasta and potatoes
(iv) a rise in the price of fuel
(v) a rise in the price of photo frames
(vi) a rise in income of buyers of bread
(vii) an innovation leading to improvements in bread making process
(c) Explain what is meant by price elasticity of demand and income elasticity of demand. What influences such elasticities of demand?
( 12 marks)
(d) Which of the following will have positive signs and which will have negative signs:
( $6 \times 2=12$ marks)
(i) Price elasticity of demand
(ii) Income elasticity of demand for a normal good
(iii) Income elasticity of demand for an inferior good
(iv) Cross elasticity of demand with respect to changes in the price of a substitute
(v) Cross elasticity of demand with respect to changes in the price of a complement
(vi) Price elasticity of supply
4. Using economic arguments, critically assess the implications of the UK voting to leave the EU for the UK, EU and the rest of the world.
(50 marks)
5. Starting with a point of long-run equilibrium, outline the adjustment process that an economy will go through in response to an increase in Aggregate Demand by using the Aggregate Demand - Aggregate Supply (AD-AS) model. (50 marks)
6. Answer all questions below:
(a) What is GDP? Briefly describe individually the product, income and expenditure methods of measuring GDP.
(20 marks)
(b) Outline the various types of unemployment based on its sources. (15 marks)
(c) Discuss the relationship between cyclical unemployment, full employment and the natural unemployment rate.
( 15 marks)
7. Answer all questions below:
(a) Discuss, and distinguish between, the characteristic features of perfect competition and monopoly. Critically compare and contrast the long run equilibrium situation in these two market structures.
(30 marks)
(b) Identify the market conditions which lead to oligopolistic behaviour among firms in a market.
(20 marks)
8. Discuss critically the economic impact of the UK government's go-ahead of fracking in Lancashire in October 2016.
(50 marks)
9. Critically assess the effects of, and the governmental responses in the EU to, the ongoing EU migrant crisis by using economic arguments? Would you agree to use the term 'migrant' crisis to describe this crisis?
(50 marks)

