

INSTITUTE AND FACULTY OF ACTUARIES



EXAMINATION

28 September 2018 (am)

Subject CT7 – Business Economics Core Technical

Time allowed: Three hours

INSTRUCTIONS TO THE CANDIDATE

1. *Enter all the candidate and examination details as requested on the front of your answer booklet.*
2. *You must not start writing your answers in the booklet until instructed to do so by the supervisor.*
3. *You have 15 minutes of planning and reading time before the start of this examination. You may make separate notes or write on the exam paper but not in your answer booklet. Calculators are not to be used during the reading time. You will then have three hours to complete the paper.*
4. *Mark allocations are shown in brackets.*
5. *Attempt all 37 questions. Answers to questions 1–26 should be indicated on the Multiple Choice Answer Sheet included in your booklet. From question 27 onwards begin your answer to each question on a new page.*
6. *Candidates should show calculations where this is appropriate.*

Graph paper is NOT required for this paper.

AT THE END OF THE EXAMINATION

Hand in BOTH your answer booklet, with any additional sheets firmly attached, and this question paper.

In addition to this paper you should have available the 2002 edition of the Formulae and Tables and your own electronic calculator from the approved list.

- 1** Opportunity cost is always:
- A equal to total revenue minus total variable cost.
 - B constant.
 - C the cost in terms of the best foregone alternative.
 - D equal to a firm's supernormal profits.
- [1½]
- 2** If public transport is an inferior good, which of the following will cause its demand curve to shift to the left?
- A An increase in consumers' incomes.
 - B A rise in the price of cars.
 - C An increase in the price of petrol.
 - D An increase in the price charged to use public transport.
- [1½]
- 3** If ice cream is a substitute for fruit sorbet and strawberries are a complement to ice-cream but not fruit sorbet then a fall in the price of ice cream will:
- A increase the demand for fruit sorbet and strawberries.
 - B decrease the demand for fruit sorbet and increase the demand for strawberries.
 - C decrease the demand for fruit sorbet and strawberries.
 - D increase the demand for fruit sorbet and decrease the demand for strawberries.
- [1½]
- 4** Diminishing marginal utility of income implies that individuals are:
- A risk lovers.
 - B risk averse.
 - C risk seekers.
 - D risk neutral.
- [1½]
- 5** Which of the following statements defines moral hazard in relation to insurance?
- A Moral hazard describes the fact that people who know that they are a particularly bad risk are more inclined to take out insurance.
 - B Moral hazard describes the fact that a policyholder may act in a way which makes the insured event more likely to occur.
 - C Moral hazard describes the fact that people who know that they are a particularly bad risk are less inclined to take out insurance.
 - D Moral hazard describes the risk that an insurance company will face false insurance claims.
- [1½]

- 6** Vertical product differentiation refers to differences between products which reflect:
- A different consumers' tastes but not different quality products.
 - B same quality products.
 - C different quality products with different production costs.
 - D different varieties of the same product offered at the same price.
- [1½]
- 7** Diseconomies of scale means:
- A short run average total cost falls as output rises.
 - B long run average total cost falls as output rises.
 - C long run average total cost rises as output rises.
 - D short run average total cost rises as output rises.
- [1½]
- 8** The range of output over which average variable cost falls will be the same as the range over which:
- A average physical product falls.
 - B average physical product rises.
 - C marginal physical product falls.
 - D marginal physical product rises.
- [1½]
- 9** A perfectly competitive firm has fixed and variable costs of production. It produces at the long run profit maximising level. Which of the following statements is correct?
- A Marginal cost exceeds average variable cost.
 - B Marginal cost equals average variable cost.
 - C Marginal cost is less than average variable cost.
 - D Marginal cost exceeds average total cost.
- [1½]
- 10** When a monopolist maximises profits, price exceeds marginal revenue. The difference between price and marginal revenue occurs because:
- A the firm has to charge a price higher than the marginal cost of producing the last unit.
 - B any decision by the monopolist to sell an additional unit of output does not affect price.
 - C the firm has to reduce the price on all previous units sold in order to sell the additional unit.
 - D the law of diminishing returns directly affects the price of an imperfectly competitive firm's product.
- [1½]

11 Which of the following is NOT an example of the market drivers of globalisation?

- A Establishment of world brands.
- B Increasing travel, creating global consumers.
- C Per capita income converging among industrialised nations.
- D Reduction of tariff barriers.

[1½]

12 Firms can benefit through specialisation and international trade due to:

- A comparative advantage.
- B absolute advantage.
- C different factor endowments.
- D all of the above.

[1½]

13 Structural unemployment is unemployment that:

- A increases in a recession and falls in a boom.
- B arises when the unemployed lack the skills needed by newly created jobs.
- C arises when those seeking work give up hope of finding a job.
- D occurs as the result of a transition from one job to another.

[1½]

14 A country with a population of 38 million has 32 million in employment and 2 million unemployed. What is the unemployment rate rounded up to one decimal point?

- A 5.9%
- B 5.3%
- C 5.0%
- D 6.3%

[1½]

15 The aggregate demand curve slopes downwards because at higher price levels the real money supply:

- A decreases and national income is lower.
- B decreases and national income is higher.
- C increases and national income is lower.
- D increases and national income is higher.

[1½]

16 Which of the following is NOT a cost of inflation?

- A Menu costs.
- B Cost of employing extra resources.
- C Arbitrary redistribution of wealth from lenders to borrowers.
- D Arbitrary redistribution of wealth from borrowers to lenders.

[1½]

17 In the circular flow of income model which of the following is TRUE?

- A Savings, taxes and investment are withdrawals.
- B Exports, imports and government expenditure are withdrawals.
- C Investment, government expenditure and exports are injections.
- D Investment, exports and consumption are injections.

[1½]

18. Under a fixed exchange rate system the following approaches might be considered by governments to correct a balance of payments deficit.

- I Discouragement of imports.
- II Support for exporters.
- III Increase the level of aggregate demand.

Which of the following is most likely to achieve this objective?

- A I only.
- B II only.
- C I and II only.
- D I, II and III.

[1½]

19 The US has been running a large current account deficit, and China has a large current account surplus. If their exchange rates were both flexible, how could such imbalances be eliminated?

- A The US dollar could appreciate and the Chinese renminbi depreciate.
- B The US dollar could depreciate and the Chinese renminbi depreciate.
- C The US dollar could appreciate and the Chinese renminbi appreciate.
- D The US dollar could depreciate and the Chinese renminbi appreciate.

[1½]

- 20** Money that is held because of possible unforeseen events is held because of the:
- A speculative motive for holding money.
 - B transactions motive for holding money.
 - C precautionary motive for holding money.
 - D asset motive for holding money.
- [1½]
- 21** Which of the following policies undertaken by the central bank will have an expansionary effect on the broad money supply measure other things being equal?
- A The sale of Treasury Bills in the financial markets.
 - B A demand for special deposits from the commercial banks to be placed with the central bank.
 - C A rise in the central bank lending rate.
 - D A lowering of the reserve requirements on commercial banks.
- [1½]
- 22** The short run Phillips curve shows:
- A the influence of fiscal policy on the level of inflation and unemployment.
 - B the influence of monetary policy on the level of inflation and unemployment.
 - C a negative relationship between inflation and unemployment.
 - D a positive relationship between inflation and unemployment.
- [1½]
- 23** If the government imposes a minimum wage that is above the market equilibrium wage we would expect:
- A an increase in the quantity of labour demanded.
 - B the labour supply curve to shift to the left.
 - C an increase in the quantity of labour supplied.
 - D the demand for the labour curve to shift to the left.
- [1½]
- 24** Which of the following is NOT a problem associated with the active management of fiscal policy?
- A Time lags.
 - B Uncertainty.
 - C Crowding out.
 - D The accelerator.
- [1½]

- 25** The adoption of an expansionary fiscal policy will result in:
- A an increase in aggregate demand and a reduction in real output and unemployment.
 - B an increase in aggregate demand, real output and unemployment.
 - C an increase in aggregate demand and real output and a reduction in unemployment.
 - D a reduction in aggregate demand and real output and an increase in unemployment.
- [1½]
-
- 26** The “crowding out” effect associated with an increase in government borrowing could be reduced or eliminated by an accommodating increase in:
- A government expenditure.
 - B taxation.
 - C money supply.
 - D transfer payments.
- [1½]
-
- 27** (i) State the difference between microeconomics and macroeconomics. [2]
- (ii) Define what is meant by a “market” with the use of an example. [2]
- [Total 4]
-
- 28** Explain the reasons why the demand curve is downward sloping using a food item as an example. [4]
-
- 29** (i) Explain why, following an increase in price, producers may NOT immediately distribute all of their output onto the market. [2]
- (ii) Show on a diagram, the impact on price over time given producers’ behaviour as described in part (i). [2]
- [Total 4]
-
- 30** Describe how diminishing marginal returns may arise within a restaurant. [4]
-
- 31** (i) Describe a collusive oligopoly. [2]
- Two airlines are considering working together.
- (ii) Discuss THREE factors which would create a more favourable environment for a successful collusion. [6]
- [Total 8]

- 32** (i) Outline an example of a negative externality that may be experienced by an individual in relation to the consumption of food by another party. [1]
- (ii) Describe a non-price associated intervention that could be used to address this market failure. [3]
- [Total 4]
- 33** Describe TWO gains that countries may experience as a result of engaging in international trade. [4]
- 34** (i) State the THREE methods that can be used to calculate Gross Domestic Product (GDP). [1]
- (ii) Explain with the use of the circular flow of income diagram why the three methods all result in the same value of GDP. [3]
- [Total 4]
- 35** (i) Describe TWO methods that can be used to control the money supply. [3]
- (ii) Show using a money market equilibrium diagram, the effect of an increase in the money supply. [2]
- [Total 5]
- 36** Consider a firm which is producing a small number of items of confectionary (sweets/chocolate) in a local market.
- (i) Explain which component/s of the growth vector matrix the firm's management may consider when planning the future of their firm. [5]
- (ii) Propose a suitable marketing strategy which would enable the firm to grow. Ensure you identify each of the elements of the marketing mix within your answer. [5]
- [Total 10]
- 37** (i) Describe how the government might seek to increase the potential growth of the economy. [5]
- (ii) Discuss the problems the government faces in its attempt to achieve its macroeconomic objectives of high economic growth, full employment and low inflation. [5]
- [Total 10]

END OF PAPER