

ENGINEERING TRIPOS PART IIA

Tuesday 1 May 2:30 to 4:00

Module 3E1

BUSINESS ECONOMICS

Answer not more than two questions.

All questions carry the same number of marks.

*The **approximate** number of marks allocated to each part of a question is indicated in the right margin.*

There are no attachments.

STATIONERY REQUIREMENTS

Single-sided script paper

SPECIAL REQUIREMENTS

CUED approved calculator allowed

You may not start to read the questions printed on the subsequent pages of this question paper until instructed that you may do so by the Invigilator

1 (a) What do economists mean by Nash Equilibrium? [10%]

(b) Two people simultaneously board a bus. Two adjacent cramped seats are free. Each person must decide whether to sit or stand. Suppose that each person only cares about her own comfort and that sitting alone is more comfortable than sitting next to the other person, which is more comfortable than standing.

(i) Show the normal form representation of this situation and find its Nash equilibrium or equilibria. [25%]

(ii) Is this situation the same as the Prisoner's Dilemma? [15%]

(c) Explain how a depreciation of the exchange rate may change a country's trade performance. [30%]

(d) In a world of flexible exchange rates, explain the mechanisms a Government may use to influence the value of its exchange rate. [20%]

2 (a) What do economists mean by the term *marginal rate of substitution* in relation to consumers? [10%]

(b) Explain the source of the condition that the marginal rate of substitution between two goods for a consumer equals the ratio of their prices. [25%]

(c) Sketch the indifference curves associated with the following utility function.

$$U(x, y) = \min\{x+2y, 2x + y\} \quad [25\%]$$

(d) Do you believe that it would be beneficial to the national economy if the UK joins the Euro in the near future? Explain your answer. [40%]

- 3 (a) Explain the meaning of each of the following properties in relation to goods and services:
- (i) Non-rival; [10%]
 - (ii) Non-excludable. [10%]
- (b) Why is public good provision usually determined by governments rather than markets? [30%]
- (c) Explain the case for using fiscal policy for short-term demand management. [20%]
- (d) Outline the difficulties of using fiscal policy for short-term demand management. [15%]
- (e) Explain the concept of the balanced budget multiplier. [15%]
- 4 (a) What do economists mean by the term *monopoly*? [10%]
- (b) What is the economic case against monopolies? [30%]
- (c) How do Monetarists explain the primary causes of inflation and unemployment? [30%]
- (d) Outline the key features of the neoclassical endogenous model of economic growth. [30%]

END OF PAPER

