

ENGINEERING TRIPOS PART IIA

Monday 30 April 2007 2.30 to 4

Module 3E1

BUSINESS ECONOMICS

Answer not more than two questions.

All questions carry the same number of marks.

The approximate percentage 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
None

**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 is meant by *backwards induction* in game theory? [15%]

(b) Fig. 1 shows a two-person game in which two players (1 and 2) take turns to choose whether to move across or down. What does game theory predict will happen in this game? Explain your answer carefully [30%]

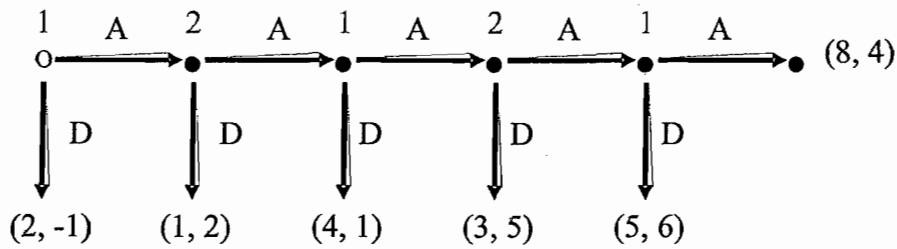


Fig. 1

(c) Using the concept of the multiplier, explain how a reduction in the rate of income tax could increase national income [25%]

(d) Explain, with the use of an appropriate diagram, the effect of a reduction in the rate of interest, when investment is relatively inelastic to the rate of interest. [15%]

(e) Describe the Accelerator model of capital investment and outline its weaknesses. [15%]

2 (a) What do economists mean by the term *market failure*? [15%]

(b) 'Allowing a monopolist to engage in first degree price discrimination may not be fair to consumers, but it will ensure that the efficient level of output is supplied in that industry.' Using an appropriate diagram, explain whether this statement is correct. [35%]

(c) Explain the difference between the *nominal* and the *real* exchange rate. [15%]

(cont.)

- (d) Describe the impact of a fall in the real exchange rate on exports and imports [35%]
- 3 (a) Explain, in detail, what is meant by the term *perfect substitutes in consumption*. [30%]
- (b) Suppose that a consumer considers two different brands of biscuit to be perfect substitutes. At their optimal choice, will the consumer's marginal rate of substitution between the two brands of biscuit equal their price ratio? Explain your answer [15%]
- (c) 'The difference between inferior goods and Giffen goods is in the sign rather than the size of the income effect.' Do you agree with this statement? Explain your answer. [25%]
- (d) Explain the concept of the Phillips Curve [15%]
- (e) Outline the explanations why the Phillips Curve broke down as a robust empirical relationship during the 1970s [15%]
- 4 (a) What kinds of economic and technological conditions are conducive to the formation of competitive industries? [20%]
- (b) Suppose that the market for widgets is perfectly competitive and that it is currently in long run equilibrium. What is the impact on the market of a permanent increase in demand for widgets? [30%]
- (c) Compare and contrast the neoclassical exogenous model of economic growth with the neoclassical endogenous model of economic growth [50%]

END OF PAPER