

ENGINEERING TRIPOS PART IIA

Monday 22 April 9.30 to 11.00

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

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) Under what condition in a perfectly competitive industry will firms necessarily operate at their minimum efficient scale? [25%]
- (b) What are the axioms of choice and what is their significance in the rational agent model of the consumer? [25%]
- (c) Outline the Prisoners' Dilemma game. [20%]
- (d) Define the concept of externality. [10%]
- (e) What is the Phillips Curve and how does it differ from the Augmented Phillips Curve? [20%]
- 2 (a) Define:
- (i) Increasing returns to scale to the firm. [10%]
- (ii) Minimum efficient scale of the firm. [10%]
- (b) Define the 'shut down' condition for a profit maximising firm in the short run. Explain the rationale behind this 'shut down' condition. [25%]
- (c) Outline the theory of comparative advantage. Under what conditions might a country find it beneficial to introduce trade protection? [30%]
- (d) Define the terms nominal and real exchange rate. [10%]
- (e) What are the implications of the neoclassical endogenous model of economic growth for government policy? [15%]

- 3 (a) What is first degree price discrimination? If a monopolist exercises first degree price discrimination, what is the impact on the efficient level of industry output? Use an appropriate diagram to explain. [35%]
- (b) Explain what is meant in game theory by the term 'backward induction' and provide an example. [25%]
- (c) Explain the impact of the following on the level of consumption:
- (i) A temporary decrease in the rate of income tax. [20%]
- (ii) A fall in import prices. [20%]
- 4 (a) Consider the concept of public goods.
- (i) What are their defining characteristics? [15%]
- (ii) How do they result in market failure? [25%]
- (b) What is a Nash equilibrium? [15%]
- (c) Why is monetary policy unlikely to be effective with fixed exchange rates? [10%]
- (d) Explain the difference between neoclassical exogenous and endogenous growth theory. [35%]

END OF PAPER