

Version AM/3

EGT2: IIA
ENGINEERING TRIPOS PART IIA

Monday 20 April 2015 9.30 to 11

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.*

*Write your candidate number **not** your name on the cover sheet.*

STATIONERY REQUIREMENTS

Single-sided script paper

SPECIAL REQUIREMENTS TO BE SUPPLIED FOR THIS EXAM

CUED approved calculator allowed

10 minutes reading time is allowed for this paper.

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

- 1 (a) Explain and illustrate what is meant by the terms perfect substitutes and perfect complements in consumption. [20%]
- (b) Using an appropriate diagram, explain why the long-run supply curve of a perfectly competitive firm is its long-run marginal cost curve. [25%]
- (c) “Pollution is harmful, and hence the Pareto-efficient level of pollution is zero.” Discuss this statement and illustrate your arguments with an appropriate diagram. [25%]
- (d) Explain the probable current consumption and saving behaviour of a student aged 21 if the student was behaving according to:
- (i) The life cycle hypothesis; [15%]
 - (ii) The permanent income hypothesis. [15%]
- 2 (a) Define the marginal rate of technical substitution of labour for capital and explain why it is equal to the factor price ratio when a firm is in equilibrium. [25%]
- (b) Outline the Prisoners’ Dilemma game and briefly discuss an economic problem that can be represented by this game. [25%]
- (c) Why is the provision of public goods usually carried out by governments rather than markets? Provide and discuss two suitable examples. [25%]
- (d) What is the economic rationale for the single European market? What are its advantages and disadvantages? [25%]

- 3 (a) Define the effects of the introduction of a price ceiling and a price floor in a competitive market. [25%]
- (b) The second fundamental theorem of welfare economics demonstrates that equity is compatible with efficiency. Illustrate the theorem by using an Edgeworth Box diagram. [25%]
- (c) Using the concept of the multiplier, explain how a reduction in the rate of income tax could increase national income. [25%]
- (d) Critically evaluate two economic arguments for protectionism. [25%]

END OF PAPER

THIS PAGE IS BLANK