

EGT2
ENGINEERING TRIPOS PART IIA

Tuesday 1 May 2018

14:00 to 15:40

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 at the start of the exam.

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 what is meant by the terms perfect substitutes and perfect complements in consumption. [25%]

(b) Describe the effects of the introduction of a price ceiling and a price floor in a competitive market. [25%]

(c) Show that firm profits are optimised at the level of production where marginal cost equals marginal revenue. [25%]

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

2 (a) Define the marginal rate of technical substitution of labour for capital. Explain why it is equal to the factors' price ratio when a firm chooses the cost-minimising combination of inputs. [25%]

(b) What are 'normal' and 'inferior' goods? [25%]

(c) Provide an example of a normal-form game that has more than one Nash Equilibrium. [25%]

(d) Define the concept of investment and explain the role of each component of the following investment function: $I = I_n [MPK - (P_K/P)(r + \delta)] + \delta K$. [25%]

- 3 (a) State and then comment on the Keynesian expenditure equation for GDP. [25%]
- (b) Define a 'Giffen good' and illustrate your definition by means of an appropriate diagram. [25%]
- (c) Compare the Cournot and the Stackelberg models of oligopoly. Discuss the implications of their market outcomes for producers and consumers. [25%]
- (d) Define first, second and third degree price discrimination. For each type: give an example of an industry where a firm might employ such discrimination and discuss how it is possible to enforce the differential prices. [25%]

END OF PAPER

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