

UNIVERSITY OF LONDON
IMPERIAL COLLEGE OF SCIENCE, TECHNOLOGY AND MEDICINE

EXAMINATIONS 1997

MEng Honours Degrees in Computing Part IV
for Internal Students of the Imperial College of Science, Technology and Medicine

*This paper is also taken for the relevant examinations for the
Associateship of the City and Guilds of London Institute*

PAPER 4.42

MANAGEMENT - ECONOMICS AND LAW

Friday, May 2nd 1997, 2.30 - 4.30

Answer THREE questions

For admin. only: paper contains 4
questions

Section A (Use a separate answer book for this Section)

- 1a Define what is meant by the *marginal propensity to consume* (mpc) and the multiplier effect. Discuss the conditions that must exist for the full multiplier effect to be felt.
- b The government plans to undertake a special £1,000m school refurbishment programme during 1998. Discuss the overall effect that this is likely to have on Gross Domestic Product if:
- i) no additional taxation is raised;
 - ii) additional taxation to the value of £500m is to be raised in 1998.
- (take the value of $mpc = 0.8$)
- c Explain what is meant by *discretionary fiscal policy* and briefly discuss the problems associated with using it to 'fine tune' the economy.
- 2a Explain what is meant by *cost-push* inflation. Discuss the circumstances under which a *wage-price spiral* may occur and suggest policies for halting such a spiral.
- Discuss the possible effect of an increase in domestic prices on that country's balance of payments and explain how an exchange rate - price spiral may then arise.
- b Distinguish between *fixed* and *floating* exchange rates and discuss the major reasons why fluctuations occur in the value of a country's currency.
- The currency of country X has appreciated over a period of several months against the currencies of its main trading partners.
- Discuss the possible effects, for country X, of this appreciation on:
- i) its rate of GDP growth
 - ii) the rate of inflation experienced by that country
 - iii) its 'invisible' earnings.

Section B (*Use a separate answer book for this Section*)

3. Elvira has recently bought a new computer from Frankenstein Electronic Stores for £1,200. The computer is an R2-D2 model manufactured by Poubelle Computers Ltd.

Wendy was attracted by this particular model because of the following advertisement which she saw in a computer magazine:

"The Poubelle R2-D2 - The Best Computer for Students !
Enjoy success with the R2-D2. So confident are we of the success that will be yours with the R2-D2 that we guarantee that you will graduate with at least a 2.1 degree if you regularly use this computer. We've put money where our mouth is and will pay disappointed students £1,000."

Elvira used the computer for a few weeks until a latent defect caused it to explode causing her facial burns. This prevented her from carrying on with the lucrative modelling work that she had been doing on a part-time basis for the past few years.

To add to her misfortune Elvira did not have a good term and failed her end of year exams.

Advise Elvira.

4. Scullion has recently graduated from Porterhouse College with a pass degree in Computer Science. He applied for a job with Obi-Wan Computers Ltd as a programmer. On his application form he lied about the class of his degree in stating that he had graduated with a first. His referee was Professor Scatterbrain, a member of the teaching staff at Porterhouse. Professor Scatterbrain had a very dim recollection of Scullion but wrote to Obi-Wan confirming that Scullion had indeed graduated with a first and would make an exceptionally good programmer.

If the professor had consulted with any of his colleagues or had read Scullion's college file he would have learned that Scullion had been convicted of theft of Union funds while Treasurer of the Students' Union. Scullion has now absconded with the funds for the employees' annual outing to Southend.

It is also discovered that he has been covering up for his lack of skill as a programmer by copying the work of his sister from the computer he shares with her. His sister is employed by Dark Vadar Programs who are aggressive competitors of Obi-Wan.

Obi-Wan is worried that it may be liable to Dark Vadar and is angry with Porterhouse College for being so careless in the reference they wrote on Scullion.

Advise Obi-Wan on the issues involved.

End of paper