

UNIVERSITY OF LONDON
IMPERIAL COLLEGE OF SCIENCE, TECHNOLOGY AND MEDICINE

EXAMINATIONS 1999

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

Monday, May 10th 1999, 10.00 – 12.00

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

- i) the marginal propensity to consume
- ii) the multiplier effect
- iii) the accelerator coefficient

Describe how the multiplier and accelerator effects may interact to cause fluctuations in the level of economic activity in a country.

b A government has been urged to institute a programme of public works (e.g. the construction of new roads etc.) in its economy. Discuss the likely effect of this policy on the level of employment in this economy in both the short term and the long term.

Contrast this policy with the option of reducing the levels of personal taxation (income tax) in the economy.

The two parts carry, respectively, 45% and 55% of the marks.

2a Distinguish between *fixed* and *floating* exchange rates and discuss the advantages and disadvantages of each of these exchange rate regimes.

Briefly discuss the *economic* advantages of adopting a common European currency.

b Explain the connection between changes in the level of domestic interest rates and

- i) movements in the price of government bonds ('gilts')
- ii) movements in the country's exchange rates.

c What are the possible consequences of a fall in the value of a country's currency (when measured against the currencies of its major trading partners) for

- i) the balance of payments of that country
- ii) the rate of growth of Gross Domestic Product experienced by that country
- iii) the country's domestic price level.

The three parts carry, respectively, 40%, 20% and 40% of the marks

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

- 3 Sam spots a sign on the student noticeboard, which reads as follows:

"Let Macro Computers solve your Exam Blues! With our new computer, we will include free of charge our revision package guaranteed to get you through your exams. Buy now and secure your future!"

Sam purchases a computer for £1,000 and relies on the revision package whilst studying for his 1999 end-of-year exams. Unfortunately, Karen, an employee of Macro Computers, had installed the 1996 revision package with the result that Sam failed his exams and lost the job he had been promised at a top city bank.

Two weeks later, whilst typing his C.V. on the computer, it explodes due to a latent defect, injuring Sam and destroying the antique table on which it rested.

Advise Sam as to what claims, if any, he may have against Macro Computers.

- 4 Natalie works part-time at Knightsbridge College as a lecturer. In the rest of her time, she works, as required, for Megalith Computers as a computer programmer, receiving a regular salary. She has been fully occupied recently setting up a new database capable of dealing with the new civil justice reforms for lawyers. Desperate to set her students an unassessed mid-term assignment, she asks them to comment on her program and identify any errors in it.

A month later, she secures a full-time post at Monolith Computers, Megalith's leading rival, having indicated at interview her ability to develop a similar type of database to that developed at Megalith. Her contract with Megalith stipulated that she would not work for a rival company for two years after terminating her contract with Megalith. She hands in her notice immediately and on her last day at work she adds a virus to Megalith's computer network by which the message "Goodbye Natalie!" flashes on the screen every time an employee logs on to the system.

Advise Megalith on what steps they may take against Natalie.

End of paper