

UNIVERSITY OF LONDON  
IMPERIAL COLLEGE OF SCIENCE, TECHNOLOGY AND MEDICINE

EXAMINATIONS 1996

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 13th 1996, 10.00 - 12.00

*Answer THREE questions*

For admin. only: paper contains  
4 questions  
pages (excluding cover page)

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

- 1a Explain what are meant by *self-realising expectations*. Discuss the role they play in:
- i) determining the progress of a recovery or a recession;
  - ii) influencing the rate of inflation experienced by an economy.
- b Discuss how fluctuations that occur in the level of stocks held within an economy can help to explain the cyclical movements which tend to arise in an economy.

A recent (February 1996) survey showed that there was concern among UK industrialists for the weakening growth rates that were being experienced by the major European (non-UK) economies.

Analyse the possible effects of this slowdown on

- i) the level of employment in the UK;
  - ii) the prices of goods purchased within the UK;
  - iii) the UK visible balance of trade.
- 2a
- i) Distinguish between *Demand-Pull* and *Cost-Push* inflation.
  - ii) Describe in outline the measures that can be taken by government to reduce the rate of inflation in an economy.
  - iii) Discuss the long-term benefits for an economy of achieving a rate of inflation of 0%p.a.
- b
- i) Distinguish between the *current account* and the *capital account* of the balance-of-payments.
  - ii) Explain why the balance-of-payments accounts must always balance.
  - iii) Explain how a country that has a trade surplus in a particular year can still have a current account deficit for that year.
  - iv) Explain the circumstances under which it may make sense for a country to run sizeable current account deficits for a period of time.

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

- 3 Peter is employed by Acme Software Ltd as a computer programmer. For the past 12 months he has been employed on a project to develop a data base for lawyers which it is hoped will have great commercial potential. This work has given him invaluable experience in the techniques of writing such a program.

In his spare time Peter enjoys playing with computers and has just written a program for a data base which he believes could be successfully used in the hotel and catering business. There are a number of similarities between the structure and operation of this program and the one on which he is working at Acme.

Advise Peter on the legal difficulties he may have in marketing his own program.

- 4 Sarah is a computer science student who regularly buys computer magazines. With the latest issue of "Knightsbridge Computers Weekly" she obtained a floppy disk with a program to create amusing screen saver patterns. She bought this magazine in a newsagents along Cromwell Road. The program was written and is marketed by Cheapo Software Ltd and was sold by them to the magazine publishers to be used in this promotion.

Unfortunately due to a mischievous employee at Cheapo Ltd the program was corrupted by a computer virus and this causes the hard disk to be permanently destroyed.

As a result of this, Sarah will have to spend £2,000 to purchase a new computer and will also be unable to complete a program in sufficient time to meet a contract she has with a local hospital for which she would have been paid £2,500.

Advise Sarah.

*End of paper*