# UNIVERSITY OF LONDON IMPERIAL COLLEGE OF SCIENCE, TECHNOLOGY AND MEDICINE

#### Examinations 2000

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 C442

# MANAGEMENT - ECONOMICS AND LAW

Friday 12 May 2000, 10:00 Duration: 120 minutes

 $Answer\ THREE\ questions$ 

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

- 1a A recent (February 2000) report stated that UK manufacturing "suffered an unexpectedly sharp slowdown last month (January 2000) as companies unwound stockpiles that had been built up as a precaution against possible millennium-bug related disruptions".
  - 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.
- b Explain what are meant by *self-realising expectations*. Discuss the role they play in:
  - i) determining the progress of a recovery and a recession
  - ii) influencing the rate of inflation experienced by an economy.
- c Economists expect UK GDP to grow by 3.2% in 2000 and are concerned by the lack of spare capacity in the UK economy.

Discuss the likely effect of this rate of growth in these circumstances on:

- i) the rate of inflation in the UK
- ii) the level of UK interest rates
- iii) the UK visible balance of trade.

The three parts carry, respectively, 25%, 35% and 40% of the marks

- 2a Discuss the items that typically appear in the *current* and *financial* accounts of the balance of payments.
  - b Distinguish between *fixed* and *floating* exchange rates and discuss the major reasons why fluctuations occur in the value of the country's currency.
  - c A country operating a system of floating exchange rates wishes to introduce policies aimed at reducing aggregate demand.

Compare the relative effectiveness of

- i) Monetary policy
- ii) Fiscal policy

as a means of achieving this objective.

The three parts carry, respectively, 25%,30% and 45% of the marks.

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

Poorsales Ltd is a company which sells retail products. You are a manager with Poorsales. They have experienced the following problems and ask you to comment on any legal matters which may arise from these problems.

The first problem involves Quentin. He is employed by Poorsales to examine all the various computer programs used in the conduct of their business. He searches the programs for viruses and is required to eliminate any he finds. Quentin has discovered a Poorsales program which is used to track inventory. He downloads it onto one of his floppy disks. He shows the program to Razeretail, a Poorsales competitor.

The second problem involves Sarah. She is a secretary employed by Poorsales. She is concerned that her husband, Thomas, has been purchasing too many products from Poorsales and that they cannot afford these purchases. Accordingly, she asks Ulrich, the Poorsales accounts officer, to print out a copy of Thomas' account. Ulrich's duties entitle him to provide customer accounts to Sarah.

The third problem involves Vernon. He delivers tea to the employees at Poorsales' office. Last week he entered the computer room and tripped over several computer cables. The effect of this action was to cause part of the system to crash. When the computers were functioning again, it was discovered that his actions had caused serious modifications to some of the programs and certain data had been deleted altogether.

Advise Poorsales as to the aspects of law involved in these problems. You need not discuss the application of the Data Protection Act 1998.

The three parts carry respectively, 65%, 25%, and 10% of the marks.

Insipid Software Ltd produces a new word processing program, Whordwhizz. They advertise it extensively in the following terms:

Whordwhizz - the latest in word processing! Our program is simply the fastest available and the simplest to operate. So confident are we at Insipid Software of its ease of use that we have opened a 24 hour hotline for the next year staffed with our experienced computer experts who can solve any problems you may encounter in the operation of Whordwhizz. Buy today and whizz your words tomorrow!

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Insipid Software sells copies of Whordwhizz to Jackal Sales, a computer software retailer. Jackal Sales in turn sells a copy to Karl. Karl finds the program very difficult to install on his desktop computer. He also finds Whordwhizz very difficult to use and calls Insipid Software's 24 hour hotline. He discovers that the hotline was discontinued by Insipid Software after one day, due to 'persistent use by thousands of frustrated Whordwhizz users'. In an attempt to seek help with the many problems of Whordwhizz, Karl makes a dozen copies of the program and sends them to his colleagues.

Insipid Software wonder if they can prevent Karl from making the copies by reason of the agreement on the package. Karl wonders if he has any recourse against Insipid Software with respect to the promise of the hotline.

Advise them on these issues. Do not consider any possible copyright issues in your answer.