

THE BRITISH COMPUTER SOCIETY

THE BCS PROFESSIONAL EXAMINATIONS
BCS Level 5 Diploma in IT

PROFESSIONAL ISSUES IN INFORMATION SYSTEMS PRACTICE

17th October 2006, 10.00 a.m.-12.00 p.m.
Answer FOUR questions out of SIX. All questions carry equal marks.
Time: TWO hours.

*The marks given in brackets are **indicative** of the weight given to each part of the question.*

Calculators are NOT allowed in this examination.
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1. a) The BCS Code of Conduct (2004) has four sections:
- i) The Public Interest
 - ii) Duty to the Relevant Authority
 - iii) Duty to the Profession
 - iv) Professional Competence and Integrity.

Summarise the purpose of, and issues addressed by, each section. (Do not try to write out the code in full.)
(12 marks)

- b) 'Whistle-blowing' by employees who want to bring the perceived errant behaviour of their employer to the public's attention is a topic of some debate. Discuss when it might be appropriate for an employee to 'blow the whistle'. What direction can you draw from the Code of Conduct, employment law, or other appropriate legal and ethical sources?
(13 marks)

2. a) For a limited company to be registered, it must have a constitution. Part of the constitution includes the memorandum of association. Briefly describe FOUR important elements you would expect to find in a memorandum of association. **(8 marks)**
- b) You are about to set up a software development company with yourself as the sole employee. In the first year of trading you expect a modest income not exceeding £20,000. Explain why you might think it best to operate your business as a sole trader rather than a limited company. **(8 marks)**
- c) Briefly describe the THREE principles that are fundamental to the concept of a limited company. **(9 marks)**

Turn over]

3. ABC is a company that produces specialist learning technology for primary schools. The technology comprises stand-alone units with integrated software to support the development of writing and reading skills. ABC's current balance sheet is as follows:

ABC Balance Sheet at 31 December 2005			
	(£000's)		
Fixed Assets			65
Current Assets			
Stock	50		
Debtors	150		
Cash	5		
Total Current Assets		205	
Current Liabilities			
Trade Creditors	(10)		
Tax	(25)		
Total Current Liabilities		(35)	
Net Current Assets			170
Total Assets less Current Liabilities			235
Capital and Reserves			
Share Capital – 25p ordinary shares		90	
Loan stock		30	
Profit and Loss Account		115	
Total Capital and Reserves			235

- a) With reference to the example above, explain the following terms and how they are evaluated:
- fixed assets
 - working capital
 - gearing

(12 marks)

- b) Using the following information produce a cash flow forecast for the first six months of the following year.

The company has been selling 50 machines a month. Each unit is sold at £1,000. As a result of a recent Government initiative in schools the company is expecting to increase sales by 5 machines a month for the coming year. Additional office space will be rented at a cost of £50,000 payable in June. The tax is due to be paid in March. Debtors are currently running at 3 months' sales and are expected to continue at this level. Part suppliers allow one month credit; the cost of these parts is approximately 20% of the unit price. ABC expects to hold back enough stock at the end of each month to fulfill the expected demand from customers in the following month. Operating costs, including £3,000 depreciation, will rise to cope with this extra business as follows:

Jan	Feb	Mar	Apr	May	Jun
31,000	33,000	33,000	35,000	35,000	37,000

(13 marks)

4. a) Explain the law relating to the sending of 'spam' to individuals within the European Union. **(8 marks)**
- b) How does this law differ from the corresponding law in the USA? **(5 marks)**
- c) Discuss how far the UK Computer Misuse Act 1990 enables action to be taken against those who create or spread viruses and other harmful software, or who launch denial of service attacks. **(12 marks)**
5. a) Explain what is meant by the term *outsourcing*. **(4 marks)**
- b) What reasons might an organization have for outsourcing its IT provision? **(5 marks)**
- c) What protection does European law offer to employees who are transferred to a different employer as a result of outsourcing? **(4 marks)**
- d) Explain the difference between *direct discrimination* and *indirect discrimination*, illustrating your answer by suitable examples from at least two areas of discrimination. **(12 marks)**
6. a) In relation to a computer game, explain the activities that are unlawful under the law of copyright. **(8 marks)**
- b) The UK Copyright, Designs and Patents Act 1988 allows certain specific exceptions to the prohibited activities. What are they? **(8 marks)**
- c) Explain what is meant by the 'database right' and how it differs from copyright, illustrating your explanation with a suitable example. **(9 marks)**