

THE BRITISH COMPUTER SOCIETY

THE BCS PROFESSIONAL EXAMINATION

Diploma

PROFESSIONAL ISSUES IN INFORMATION SYSTEMS PRACTICE

15th October 2003, 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.*

1.
 - a) Briefly identify FIVE roles that the Engineering Council plays within the engineering profession. **(5 marks)**
 - b) Identify FOUR key roles and/or responsibilities of the BCS and, using examples, explain how these are fulfilled. **(12 marks)**
 - c) One of the responsibilities of being a member of the BCS is to maintain your own knowledge and professional competence. Identify TWO examples of how being a member of the Society would help to achieve this goal. Discuss each example in detail. **(8 marks)**

2.
 - a) Employees of Syniad Software plc work a five day week. They are entitled to 20 days holiday a year in addition to public holidays. On average, each employee loses ten working days per year through sickness. Syniad aims to allow each employee 15 days per year for training. Experience shows that employees spend an average of five days a year unproductively, as a result of scheduling problems. In accordance with government regulations, employers must pay social security contributions equal to 6% of salary.

Calculate the average direct cost of one day's work from an employee earning £20,000 per year. State explicitly any assumptions you make. **(10 marks)**
 - b) XYZ plc is a large import/export organisation. It owns computer and communications equipment that cost some £45,000 in total when it was bought. The equipment was bought from ABC plc; some of it was held in stock at ABC and some of it was specially ordered by ABC.

Compare and contrast the way that the equipment would be treated in the accounts of the two companies. **(15 marks)**

3.
 - a) Discuss the differences between the project management of systems development and systems maintenance activities. **(9 marks)**
 - b) An important aspect of managing IT projects is the ability to estimate the time and effort required for a given project. Discuss THREE different ways in which you could estimate the time and effort required. **(9 marks)**
 - c) Discuss the differences in purpose and use of Gantt and PERT charts for managing IT projects. **(7 marks)**

Turn over]

4. a) You have set up your own small e-commerce business and hold the personal details of all the customers who have used your website on a database. You use this data to e-mail your customers regarding forthcoming special offers. Someone manages to gain access to your website and alters the prices displayed and some of the customers' details.
- Discuss how the UK Data Protection Act 1998 and the UK Computer Misuse Act 1990 relate to this scenario. **(13 marks)**
- b) Explain why it is necessary to display terms and conditions of purchase on an e-commerce website. **(4 marks)**
- c) Explain why it is necessary to have a disclaimer on a website to inform users of the website when cookies are being used. **(4 marks)**
- d) Discuss how the UK Disability Discrimination Act 1995 might apply to the design of an e-commerce system. **(4 marks)**
5. a) Describe the system of Management by Objectives. **(8 marks)**
- b) Describe the liability and responsibility of the board of directors of a company. **(7 marks)**
- c) Describe some of the strategies used by organisations to improve job satisfaction and employee motivation. **(10 marks)**
6. a) AMOS Ltd, a computer game developer, accessed ZULU Ltd's intranet to discover the design for a prototype game being developed by this competitor. Discuss how each of the following statutes relates to this situation.
- i) the UK Computer Misuse Act 1990
- ii) the UK Copyright, Designs and Patents Act 1988. **(10 marks)**
- b) Waltz, a car manufacturer, decided to introduce a new intelligent braking system into its Danube range. The contract to develop the braking system is awarded to March, a brake specialist. A year after the introduction of the new braking system, Waltz was approached by a customer, Mr Strauss, following an accident in which he was injured. It appeared to have been caused by the fact that pressing the brake pedal had failed to activate the brake. Waltz has persuaded Mr Strauss that the problem lies within the braking system and he has decided to pursue a claim for negligence. Discuss whether he has a case. **(15 marks)**