

**BCS THE CHARTERED INSTITUTE FOR IT**  
**BCS HIGHER EDUCATION QUALIFICATIONS**  
**BCS Level 5 Diploma in IT**

**September 2018 Sitting**

**EXAMINERS' REPORT**

**Professional Issues in Information Systems Practice**

Whilst there are some very good answers to the questions in this paper, there is a concern that a number of candidates are not prepared for the exam. The course text book offers good material to complement the materials provided by the study centres.

There is a repeat of the same reasons for candidates who fail this module or obtain low marks. The main reasons are:

- Not addressing the actual question.
- Only addressing parts of the question;
- Not structuring the answer in relation to the question;
- Not providing appropriate detail/content in the answers.

Candidates should pay attention to the possible marks for parts of the question and structure the detail in the answers appropriately. There is some improvement in this, but it is still common to see brief answers for parts of a question that have a higher mark and, therefore, needs more explanation and discussion. Whilst this might be related to the issue of some students not having prepared sufficiently, there are some answers which show that there is an understanding of the issues, but only brief answers are provided.

Whilst there is some improvement in the structure of answers, there is still room for improvement. Therefore, we note that it is important that the answers are structured to match the different parts of the question. Some candidates write general content on the main theme of the question, but do not indicate which parts of their answer relates to the parts of the question. Candidates should focus their answers to the relevant parts of the question.

## Section A

A1. This question is about **BCS** and **Professional Bodies**.

- a) Describe TWO main ways in which BCS promotes education; include relevant examples for each one. **(10 marks)**
- b) Discuss THREE key responsibilities of BCS. Using relevant examples, explain how these responsibilities are carried out. **(15 marks)**

### Answer Pointers

#### Part a)

The answer would provide suitable descriptions of two items from the following list.

1. The BCS runs its own system of professional examinations and grants approval to suitable organisations that provide courses to prepare students for them.
2. The BCS accredits degree programmes offered by institutions of higher education.
3. The BCS sets the syllabus for a range of vocational qualifications and accredits training organisations to provide the associated short courses.

The discussion would include relevant examples for both issues discussed.

**Syllabus Coverage:** Professional Institutions, 1.1.

#### Part b)

The answer identifies three responsibilities from the list below.

1. Promoting the development of computing, and IT for the benefit of society.  
Examples: Through its journals and other publications, through the promotion of conferences and specialist groups.
2. Promotion of education in IT. Example: through its higher education accreditation activities.
3. Establishing standards of ethical behaviour for practitioners in the field of IT.  
Example: through its Code of Conduct and disciplinary procedures.

There are a number of other possible responsibilities that will be accepted with relevant examples.

There would be relevant explanation of these responsibilities and supporting examples for the discussion.

**Syllabus Coverage:** Professional Institutions, 1.1.

### Examiners' Comments

Most candidates were able to provide average answers to the questions and there were a small number good answers that demonstrated a detailed understanding of the issues. However, a number of candidates did not show sufficient detail in their answers or knowledge of the way that BCS supports education and its general responsibilities.

Marks were awarded for any reasonable answers and in some cases, candidates as in previous papers, did not always distinguish between giving 2 examples for question 1a or the three examples for question 1b, or give relevant numbering and in some cases did not identify the correct number of examples at all.

A2. This question is about **Organisations and their Structures** and **Finance for organisations**.

a) Consider the following statement:

It is an essential feature of the bureaucratic organisational model that every individual and every unit in the organisation is responsible to only one manager. This is not realistic in the context of project based, high technology companies.

With reference to a high technology company with team members working on many different projects, why is this essential feature not realistic? **(10 marks)**

b) Ardree Software Ltd is a small, successful software development company. It now wishes to set up a subsidiary in the UK, to develop a human resource administration package. The UK government provides grants to encourage the growth of such companies in areas of high unemployment.

As managing director, you are responsible for raising the capital required to get the new subsidiary up and running. The following sources of finance are available:

- UK government grant.
- Loan.
- Sale of equity in Ardree Software Ltd.

Discuss each of these possible sources of finance and outline the issues to be considered for each one. **(15 marks)**

### Answer pointers

#### Part a)

A specialist in a high technology company may find him/herself working on more than one project simultaneously, as well as having a responsibility to maintain expertise in their specialised area. This implies that the specialist may report to more than one manager and belong to more than one unit, requiring rules that help potential conflicts be resolved. The answer would explain what a matrix structure is and why it is suitable for the given scenario.

**Syllabus Coverage:** Organisations and Their Structure, 1.1.

#### Part b)

A grant is a sum of money given to the firm which does not have to be repaid. Such grants are normally made by government. They may be limited to a certain proportion of the investment made by the company itself or be dependent on creating a certain number of jobs. There will often be a restriction on the way the grant is spent.

The main point about a loan is that the repayment terms are independent of the company's performance. Loans may be for a fixed term or open ended. The rate of interest may be fixed or variable. The loan may be secured or unsecured. In the case of Ardree Software Ltd the directors may be required to use their own personal assets as security.

The sale of equity in Ardree Software Plc amounts to selling part of the company. The new shareholders will own part of the company and may well want a share in directing and running the company's policies. By selling equity, it dilutes the value of the shares owned by the existing shareholders.

**Syllabus Coverage:** Finance, 3.1.

**Examiners' Comments**

The answers were of a very low standard with the majority of students providing basic answers. In some cases, candidates did not provide answers to all the parts of Q2b.

A3. This question is about **Human Resources Management**.

a) The project team structure lends itself to job rotation, as project team members move between different projects and different tasks. What are the advantages of such a structure to project team members and to management?

**(10 marks)**

b) Discuss THREE possible advantages of job specialisation and TWO possible disadvantages.

**(15 marks)**

**Answer pointers**

**Part a)**

An answer would discuss issue such as those that follow. Other relevant issues with suitable discussion were awarded credit.

Project team members:

- Variety
- Updating skills and knowledge
- Exposure to many aspects of the business
- Increased motivation

Management:

- More flexible workforce
- Increased knowledge among team members, hence less dependency on key personnel
- Requires little restructuring of work
- Less need for formal and expensive training

**Syllabus Coverage:** Human Resources Management, 9.5.

**Part b)**

The answer would discuss three advantages. The following list includes typical advantages, but other relevant advantages would be given credit.

- Because work is divided into specialised jobs, it potentially increases work efficiency;
- Employees can master their tasks quickly because work cycles are short;
- Eliminates time wasted changing from one task to another;
- Training costs are reduced;
- Job specialisation makes it easier to match people with specific aptitudes or skills to the jobs for which they are best suited.

The answer would discuss two disadvantages. The following list includes typical advantages, but other relevant advantages would be given credit.

- loss of resilience, in that, if an employee is sick or leaves suddenly, it will be difficult to find someone to take over his or her job;

- loss of job satisfaction, because employees find the lack of variety boring;
- loss of flexibility, so that, if the need for one skill increases and the need for another skill declines, it is difficult to redeploy employees from one area to another.

**Syllabus Coverage:** Human Resources Management, 9.5.

### **Examiners' Comments**

Most students were able to provide average answers to question 3a. Marks were awarded for any reasonable answers and in some cases, candidates as in previous questions, did not always distinguish between giving 3 advantages for question 3b, or give relevant numbering and in some cases did not identify the correct number of examples at all. Some answers could be better structured to make it clearer which parts of the question were being addressed.

**Section B**

B4. This question is about **Finance**.

- a) Cowley Industries purchased a file server in March 2010. Information available regarding this purchase is as follows:

List Price of the Server	£45,000
Delivery Charges	£1,500
Installation Cost	£5,000
Testing	£3,000

Cowley Industries received 10% discount on the list price and 5% discount for making a one-off lump sum payment. The company paid 20% sales tax on the purchase price of the server. The company also signed a 5-year maintenance contract at a total cost of £7,000.

Calculate the total cost for the server. How will this transaction be accounted for in the financial statements? **(15 marks)**

- b) The server described in part a) had a useful life of 5 years. The company considered that the salvage value of the server will be £10,000. The server was sold for £12,000 at the end of 5th year. Calculate the depreciation using the straight-line method and the declining balance method at 20% per year. Also describe how the transaction will differ using both methods and how it will be recorded in the accounts.

**(10 marks)**

**Answer Pointers**

**Part a)**

List Price	£45,000
Less Discount (10%)	£-4,500
Full payment discount 5%	£-2,250
Sales Tax	£7,650
Delivery Charges	£1,500
Installation	£5,000
Testing	£3,000
<b>Total Cost</b>	<b>£55,400</b>

All costs associated with an asset for its intended operation should be capitalised hence the cost of the server will be £55,400.

The maintenance contract is an expense and should have proportionate accrual in the accounts of every year over a period of 5 years.

If all of this is paid in one go then it can be taken as a pre-payment.

**Syllabus Coverage:** Finance, 3.1.

**Part b)**

**Straight Line Method**

Server Value: £55,400

Assumed salvage value: £10,000

Annual depreciation using straight line method:  $55,400 - 10,000 / 5 = 9080$  per year

The additional £2000 will be recorded as profit

### Declining Balance Method

	Depreciation	Book Value
Year 1	£9,080	£36,320
Year 2	£7,264	£29,056
Year 3	£5,811.2	£23,245
Year 4	£4,648.96	£18,596
Year 5	£3,719.168	£14,877

A loss of £2877 will be recorded in the accounts.

**Syllabus Coverage:** Finance, 3.1.

### Examiners' Comments

For part (a), candidates were able to handle some of the information but often failed to handle the maintenance contract fee appropriately. Answers for part (b), some candidates were able to show how the two types of depreciation worked, but a number of answers were unable apply the techniques or identify whether a profit or loss would be recorded in the accounts.

B5. This question is about the **UK Data Protection** law.

- a) You are web developer for a UK loans company. You have developed a website for the company that allows customers to apply for loans on-line. However, the website has been poorly developed.

When a customer has completed the on-line loan application, the details of the loan including the customer's name and address remain on the screen so that the next potential customer can view the personal data entered by the previous user. In addition, the user-entered data is stored on a back-end database. However, due to the poor design and coding, some of the personal data is missing from the database.

The personal data required for a loan is more than is necessary for the purpose of applying for a loan.

Explain how UK Data Protection law applies to this scenario. **(15 marks)**

- b) Outline how an organisation can register as a data user under the UK Data Protection law. **(10 marks)**

### Answer Pointers

#### Part a)

There would be a discussion of the UK Data Protection Act 1998. Answers that would discuss GDPR or the more recent Data Protection Act 2018 (based on GDPR) were also accepted. The discussion should relate to the given scenario. Some example points are:

Under the UK Data Protection Act 1998 appropriate security should be applied to personal data held. Displaying the personal data entered by a previous user to a new user would breach the security principle.

Under the UK Data Protection Act 1998 personal data held should be accurate and up to date. The fact that personal data entered by the user is not accurately stored in the database breaches this principle.

Under the UK Data Protection Act 1998 personal data held should be adequate, relevant and not excessive. Since the personal data is excessive for the purpose of applying for a loan this would breach this principle.

**Syllabus Coverage:** Legal Obligations, 5.1.

**Part b)**

To register as a data user under the UK Data Protection Act 1998 an organization would need to supply the UK Office of the Information Commissioner with the following information:

- The name and address of the data user
- A description of the personal data held and the purpose for holding such.
- A description of data sources and recipients.
- The names of any countries for data transfer.
- An address for data subject access.

**Syllabus Coverage:** Legal Obligations, 5.1.

**Examiners' Comments**

The candidates answered part a) reasonably well, showing an understanding of the UK Data Protection Act 1998. Students generally answered part b) rather poorly showing limited awareness of the process of registering as a data user under the UK Data Protection Act 1998.

B6. This question is about **Legal Obligations** and **the Internet**.

- a) You are a resident in the local authority of Downshire. You are concerned about a new shopping centre that is to be built on the edge of the town where you live. In particular, you wish to know how this will affect the levels of road traffic in the area. You apply to the Downshire local authority to request this information.

Outline what the local authority would need to do to process your request for information. **(15 marks)**

- b) Outline the different responsibilities of a UK based Internet Service Provider that provides transmission only, caching and hosting services for clients. **(10 marks)**

**Answer Pointers**

**Part a)**

An answer should discuss the relevance of the UK Freedom of Information Act 2000, with issues such as the following.

Under the UK Freedom of Information Act 2000 the council would need to confirm if the information requested is available or not. This could also concern whether the information was exempted, for example if it related to individuals.

If the information is available, the council would be required to provide the information requested provided that the cost of providing such did not exceed a specified limit.

If the council was planning to make the information available as part of a publication scheme (for example via a website or a newsletter) then the requestor could be referred to the forthcoming publication.

**Syllabus Coverage:** Legal Obligations, 5.2.

**Part b)**

The role of mere conduit means that the ISP does no more than transmit data, in particular, the ISP does not initiate transmissions, or select the receivers of transmissions, and does not select or modify the data transmitted. Data may be stored temporarily, provided that this is only done as part of the transmission process.

The caching role arises when data is automatically temporarily stored for the sole purpose of increasing the efficiency of the transmission of data to other recipients of the service upon their request.

The hosting role is when the ISP stores data provided by its customers. In this instance, the ISP could be held responsible for the contents hosted if there was reason to suspect such as being illegal.

**Syllabus Coverage:** The Internet, 7.2.

**Examiners' Comments**

Candidates generally answered part a) poorly, showing limited awareness of the UK Freedom of Information Act 2000. Some candidates answered part b) reasonably well showing an understanding of the different responsibilities of a UK based Internet Service Provider. However, other candidates showed only very limited awareness of the responsibilities.

**END**