

THE BCS PROFESSIONAL EXAMINATIONS
Diploma

April 2007

EXAMINERS' REPORT

IT Service Management

Examiners were able to congratulate candidates last year for demonstrating they were much better prepared than in previous years to answer questions. Unfortunately this year has seen a return to the situation where too many candidates clearly lack even basic knowledge of the syllabus. Questions one, two and three seemed to cause most difficulty.

General advice is to cover and understand the syllabus and carefully read then answer the question as set. A review of past papers will show that memo format is often requested and candidates are advised to be prepared to present their answers in the format requested.

Question 1

(a) Through the use of examples, illustrate how a business can use information technology to;

1. Lock in customers.
2. Lock in suppliers.
3. Increase the cost to customers who might switch to competitors.

(15 marks)

(b) Provide an example that demonstrates how a business can leverage its investment in information technology to build a strategic capability that makes it difficult for potential new entrants to enter its markets.

(10 marks)

Answer Pointers

a)1 &2. Candidates were expected to demonstrate how investment in information technology enables a business to lock in customers/suppliers by building valuable relationships. The relationships must be so valuable to the customers/suppliers that it deters them from moving to competitors.

a) 3. Examiners required candidates to demonstrate how investment in information technology makes customers and/or suppliers dependent on the continuous use of mutually beneficial information systems in such a way that the cost required to switch to a competitor would have a detrimental effect on the business.

5 marks for each example.

b) The answer may be based on a factual or fictitious scenario.

Candidates must demonstrate that investments in information technology can provide an organisation with the ability to erect barriers to entry that discourage or delay competitors from entering a market. The candidate is expected to demonstrate that typically, the advantage comes from investment in an information technology platform enabling a firm to leverage its investment through the development of new products and services that would not be possible without such a platform. The net effect often turns out to be a game of "catch up" by competitors.

Examiners' comments

Less than one third of candidates who sat the paper, attempted this question.

Section (a) was answered very well by approximately 40% of candidates. Many candidates were unable to gain marks by not demonstrating how information technology can be used to lock in customers and suppliers.

Section (b) was answered well by approximately 30% of candidates. Many candidates were only able to answer the first part of the question and hence failed to demonstrate how such systems make it difficult for potential new entrants to enter the market.

Question 2

You are the software manager of a medium sized private company. Part of your role is to arrange the procurement of software for a large number of desktop computer systems.

- a) Discuss briefly THREE elements of this role where you would need to be able to demonstrate a high level of integrity in your business dealings. **(15 marks)**
- b) For ONE of these elements, describe a situation in which your ethical position could be placed at risk. **(10 marks)**

Answer pointers:

a)

Possible areas which could be discussed include, but are not limited to, the following:

- Stolen software being offered.
- Counterfeit software being offered.
- Incentives being offered to you to gain contracts

Up to five marks were awarded for each of three elements.

b)

- You might be subject to influence by potential contractors such as bribery. This can be very subtle – including inappropriate levels of entertainment or hospitality – or more overt.
- You might be offered software at a surprisingly low price by an organization which you have not used before. This may be a “special offer” to get your initial business, but it could be that the software is stolen or counterfeit.
- A sales person may leave one of your suppliers and join another company, taking a copy of the customer list with him. You would need to judge the relative ethics of doing business in this situation.

Up to five marks were awarded for the description of the situation

Up to five marks were awarded for the ethical stance taken by the candidate

Examiners comments

This was a very popular question with around two thirds attempting the question. However a question which a number of candidates had difficulty answering satisfactorily. The phrase “high level of integrity in your business dealings” was interpreted by a minority of candidates to refer to the technical integrity of computer systems. This was not the intention – and it was judged that the question as stated was clearly worded. Credit was given for material that was even remotely relevant to the question – but those candidates who adopted this interpretation did not attract many marks.

Question 3

- (a) Managers in the modern business environment use both management information systems (MIS) and decision support systems (DSS). Explain how the continuous evolution of information systems is having an impact on the presentation and the use of both MIS and DSS. **(15 marks)**
- (b) A manager can obtain information instantly from a management information system. Identify and explain the difference between this feature and the capabilities and features provided by a decision support system. **(10 marks)**

Answer pointers

a) Over the last decade, the evolution in information systems has resulted in major change to the form and use of management information systems and decision support systems.

These changes have been driven by developments in networking web based technologies and the plethora of end user tools available to managers and end users in general. The growth of corporate intranets and extranets has provided managers with more sophisticated management information systems and decision support systems. These advances have been achieved through the availability of interfaces to many portals and web enabled business intelligence software tools. The growth in e-business applications has also expanded the use of decision support tools by customers and suppliers alike.

b) The use of a decision support system (DSS) may result in a series of outputs in response to a “what-if” request by a manager. This differs significantly from the “pre-programmed” response from a management information system (MIS). Unlike an MIS, the manager using a DSS does not have to specify his/her information needs in advance, instead the manager uses the DSS to obtain the information he/she requires to assist in making a decision.

Examiners Comments

Over two thirds of candidates who sat the paper, attempted this question.

a) The majority of candidates who attempted this question failed to gain sufficient marks as they did not explain how the continuous evolution of information systems is having an impact on the presentation and use of both MIS and DSS. Instead, they merely explained an MIS and a DSS, which is not what the question requested.

b) This part of the question was answered well by the majority who attempted it. They clearly explained the difference between obtaining information instantly from an MIS and the capabilities provided by a DSS.

Question 4

In your role as a team leader for PC support in a large hospital, you have become increasingly aware that your users (hospital staff) are using USB based memory devices, including MP3 players, to move quantities of data between computer systems.

- a) Write a memo to your manager, the Head of IT services, advising your manager of THREE possible problems which could arise. **(15 marks)**
- b) For ONE of the problems which you have included in your memo, describe the actions you would take to resolve the problem. **(10 marks)**

Answer pointers

a)

- Transfer of virus infections from home systems and other uncontrolled areas (e.g. cyber cafes).
- Moving sensitive personnel information – health records – outside the controlled environment of the hospital network. This breached the duty of care under the Data Protection Act 1998 and other legislation.
- Potential loss of version control by having documentation outside the document management environment.
- Concealment of potential important business requirements for data visibility by the users adopting a *de facto* solution. The information management is now uncontrolled – rather than strategic.

Up to three marks were awarded for the format of the response.

Up to four marks were awarded for each of the three potential problems described.

b)

- If flexible USB functionality is not required at the workstation, consider physically removing access to USB ports – with keyboard, mouse etc sockets being protected from tampering.
- If USB functionality is required, employ a software solution to require USB devices to be registered with the core network before being recognized. A number of commercial solutions are available to implement this.
- Institute an element within the staff contract banning the use of such devices. This may be very difficult to implement, however, given the ubiquity of the technology.

Up to ten marks were awarded for the description of the actions required to resolve the situation.

Examiners comments

This question was answered by almost all candidates. Most candidates gave a satisfactory answer to this question, and a number were very competent. The issues were generally well analysed, and coherent and effective solutions were proposed.

A number of candidates were unable to gain marks allocated for using the memo format as specified in the question. The aim in examination questions of this type is to demonstrate that the candidate can operate professionally in a business environment – and the use of appropriate document styles and formats is an important element of this.

Question 5

- (a) Users may develop unrealistic expectations during the development of major applications projects. Discuss TWO such expectations, using examples which clearly support your answer. **(14 marks)**
- (b) For the TWO expectations you discussed, explain how each expectation could be successfully managed. **(11 marks)**

Answer pointers

a) Expectations could include;
Reduced user involvement in development effort.
Reduction in timescale and cost.
Change to the overall goal.
Increase in functionality of the system.
Low impact on current work practices.

2 marks for each expectation (4 marks) and 5 marks for each example used to support the TWO expectations (10 marks).

b) An indication for the first two expectations in a) above) – 5.5 marks each.

By educating users as to why their input is required. This can be done over a number of weeks prior to the requirements phase commencing. Users can be educated in the need for requirements gathering and their involvement in doing so. Prototype techniques, testing and implementation strategies can be demonstrated. All of these activities will help show the need for large user involvement in the overall development effort.

By making users aware of the consequences of “project creep”. Again prior to the requirements phase, users must be made aware why changes to the requirements must be frozen by the end of the design phase, at the latest. Users must also be made aware that any request for change(s) to the system must go through a formal change control mechanism and the benefits that such a system brings to the overall project effort in terms of cost and timescale.

Examiners Comments

Around 60% of candidates who sat the paper, attempted this question. The majority of respondents answered this question very well and almost all obtained a pass. A minority of respondents failed to gain marks by not providing examples.

Question 6

The company you work for, as an IT systems developer, is experiencing financial problems. You are about to start a major new project, which will involve you team developing significant new skills in order to deliver the project successfully.

You have just been informed that the project will go ahead, but with the training budget cut by 80%.

- a) Write a memo to the Project Board expressing THREE concerns you have regarding this situation **(15 marks)**

- b) For ONE of the concerns you have described, provide a recommendation which will allow the project to be successfully concluded. **(10 marks)**

Answer pointers

- a)
- Without adequate training the project will run slowly as staff will be “feeling their way”
 - Staff may not implement the best solution, or may come to that solution too late to make good use of it.
 - The project may be put at risk of failure because the skills required cannot be developed in an *ad hoc* manner.
 - Staff may become less productive because they feel they are undervalued and not able to achieve their potential.

Up to three marks were awarded for the format of the memo.

Up to four marks were awarded for each of three concerns discussed.

- b)
- Review the scope of the project. See if the business aims can be achieved with a more compact solution – which will release additional training funds.
 - Consider whether the project can be carried out using a technology which is currently understood by the team – unless this binds the company to an obsolete technology.
 - Look at whether the project should be postponed until the business environment improves. Might it be more cost effective to apply small scale improvements to the existing system in the short term?

Up to ten marks were awarded for the recommendations provided by the candidate – based on the likelihood of a successful conclusion being reached.

Examiners comments

This was a popular question and the majority of candidates demonstrated a good understanding of the problems outlined in the scenario. A number of the recommendations made were creative and well thought out.

The range of concerns expressed in the responses was broad and reflected the differing backgrounds of candidates. The use of memo format was required for part (a) and some candidates lost marks by not adhering to this requirement.