

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

PROFESSIONAL ISSUES IN INFORMATION SYSTEMS PRACTICE

Wednesday 28th September 2016 - Afternoon
Answer **any** FOUR questions out of SIX. All questions carry equal marks
Time: TWO hours

Answer any Section A questions you attempt in Answer Book A
Answer any Section B questions you attempt in Answer Book B

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

Calculators are NOT allowed in this examination.

EXAMINERS' REPORT

The pass rate for this sitting was comparatively good and is in line with some of the more recent pass rates for this module. However, approximately 20% of candidates gained a mark less than 30%; such candidates are not properly prepared for the exam and would do better to take further study before entering for the exam.

The number of candidates who register but then fail to attend the exam has risen to 16% in 2016, compared to a fall to around 10% in 2015.

Candidates who fail this module or obtain low marks do so for one or more of the following reasons:

- 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. It is common to see brief answers for parts of a question that have a higher mark and, therefore, needs more explanation and discussion.

It is also 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
Answer Section A questions in Answer Book A

- A1. a) Briefly describe the meaning of the term **professionalism** in the context of the computing industry. **(5 marks)**
- b) Briefly explain the **purpose** of a **Code of Conduct** for a professional body. **(5 marks)**
- c) Identify and describe **THREE** benefits to society of adopting a Code of Conduct in computing. **(3x5 marks)**

Answer Pointers

Part (a)

Professionalism is meeting standards set by the profession in terms of individual conduct, integrity etc. A computing professional is a moral individual who should carry out his or her duties and responsibilities honestly, demonstrating standards of good practice and professional competence with a commitment to the interests of all end-users and other stakeholders in a system.

Part (b)

A Code of Conduct sets out the professional standards of behaviour that members of the body are expected to follow in their professional life. It applies to all members. It looks outwards, in the sense that it is concerned with the relationship between members and society as a whole. It governs the conduct of the individual rather than the conduct of corporate bodies. The Code of Conduct identifies issues that are relevant to the profession.

Part (c)

The candidate should describe three benefits, such as:

- A Code helps computing professionals to understand and manage their responsibilities in an ethical manner.
- A Code defines standards of professional responsibility for members, which can be enforced by professional bodies.
- A Code encourages members to share good practice with colleagues and subordinates, helping to develop professionalism in the field of computing.

Syllabus Section: Professional Codes of Conduct and their limitations.

Examiners' Comments

The question was attempted by 90% of the candidates, 54% of whom achieved a pass mark.

The answers to part (a) were of a very mixed standard where candidates often lacked knowledge of what Professionalism is. Answers for part (b) were more knowledgeable. Some candidates only listed segments of the BCS Code of Conduct for part (b), which did not answer the question that was posed. Part (c) was answered poorly, with candidates not always giving the required 3 benefits.

- A2. a) Explain the meaning of the terms **sole trader** and **partnership**. **(6 marks)**
- b) Limited liability applies to shareholders of a limited company. Explain the meaning of the term **limited liability**. Compare the liability implications with both sole traders and partnerships. **(9 marks)**
- c) Two existing firms can join together in two different ways. One firm may takeover another, or a merger may take place.

Explain the difference between a **takeover** and a **merger**. **(10 marks)**

Answer Pointers

Part (a)

- (i) A sole trader is someone who runs his/her own business. There are no legal formalities required to become a sole trader. Depending on the amount of annual income, the sole trader may be required to register with Revenue for VAT purposes.
- (ii) If two or more people operate a business with a view to making profits, and the business is not a limited company, the law will perceive them as being in partnership. Problems in terms of ownership and how much money a partner should receive from the partnership upon retirement as well as problems in terms of ownership and how much money should go to the estate of a partner who dies while an active partner, can often arise.

Syllabus Section: Organisations and Their Structure

Part (b)

The limited company is a legal entity in itself. The ownership of the company is divided into a number of shares. If the company incurs debts or other legal liabilities, the owners (shareholders) of the company have no obligation to pay these. The most that shareholders stand to lose is the money they paid for their shares.

A sole trader is personally liable for all debts incurred by the business. A sole trader's personal assets are at risk in the event of attempts by others to recover debts or seek remedies to other legal liabilities.

For a partnership, the liability of each partner is unlimited and each partner is jointly and separately responsible for the liabilities of the partnership. Even if only one partner was responsible for actions which created the liability, all of the partners are liable. Any attempt to recover debts or seek remedies could be targeted at all of the partners or just focused on a subset of the partners who have appropriate assets. A partner's personal assets are at risk.

Syllabus Section: Organisations and Their Structure

Part (c)

In a takeover, one company gains control of another by acquiring a majority, if not all, of its shares. In a merger, the two companies come together on equal terms. A common mechanism is that a new company is set up, which acquires all the shares of the merging companies in exchange for its own shares and the merging companies then cease to exist.

Syllabus Section: Organisations and Their Structure

Examiners' Comments

The question was attempted by 91% of the candidates, 76% of whom achieved a pass mark.

This question was addressed well overall. For part (b), a common error made by a number of candidates was explaining the difference between a public limited company and a private limited company and failing to compare the liability implications.

- A3. a) Explain what is meant by the term **job evaluation**. Describe how job evaluations can help an organisation manage its obligations under anti-discrimination legislation. **(13 marks)**
- b) **Job enlargement, job enrichment** and **job rotation** are techniques used in the process of job design. Describe how a large electronics company can use each of these techniques. **(12 marks)**

Answer Pointers

Part (a)

Job evaluation is often used for comparing the relative worth of jobs and allocating jobs to specific grades.

Organisations need to be able to demonstrate that they comply with the doctrine of 'equal pay for work of equal value'. In performing a job evaluation, a company is attempting to provide an objective measure of the relative worth of jobs and grades. The evaluation can identify inequalities between positions or people performing comparable roles. This is useful within an organization to assess roles over time. It is also useful in mergers and acquisitions where the companies involved need to harmonise remuneration policy.

Syllabus Section: Human Resources Management

Part (b)

The answer should explain what the techniques are and how the example electronics company could make use of the techniques. Examples are given below, but other relevant examples will be given credit.

- Job rotation is rotating staff through a series of jobs and is a method that can prevent staff from becoming bored with a very narrow and specialised task. An example might look at the finance department, where different members of the team are responsible for tasks on generating invoices, checking supplier details and producing payments. Staff who are involved in one task could be asked to move on to another task for a period of time.
- Job enlargement involves redesigning a job so it includes more tasks which require essentially the same level of skill and responsibility. Taking the finance example from job rotation, the staff could be asked to handle all stages (invoices, checking details and payments) for specific suppliers.
- Job enrichment means redesigning jobs so the amount of responsibility, discretion and control required of the staff member is increased. As an example, a member of the design team might be asked to liaise with suppliers for a new product and handle some of the issues, rather than passing all communications to the manager for the section.

Syllabus Section: Human Resources Management

Examiners' Comments

The question was attempted by 65% of the candidates, 57% of whom achieved a pass mark.

Many respondents failed to describe how job evaluations can help an organisation manage its obligations under anti-discrimination legislation. Quite a large number of respondents incorrectly equated job evaluation to appraisal schemes. Not all respondents applied examples from a large electronic company and failed to gain marks as a result.

Section B

Answer Section B questions in Answer Book B

- B4. a) Explain the **purpose** and **content** of both a balance sheet and a profit and loss account. **(10 marks)**
- b) Jericho Cowley Associates (JCA) is an IT support company having offices in a £2.8 million building. The company also holds £1 million in cash at bank and debtors worth £0.5 Million. Operating for more than a decade, the company is struggling financially and first time ever recorded a loss. The revenue recorded for the last financial year was £190,000, technical staff costs of £65,000 were included in overall expenditure of £194,000.
- Making various assumptions on assets, liabilities, income and expenditures, prepare the following two documents for JCA. In your answer, use the figures given above and add further figures to illustrate the document.
- i) Balance sheet. **(8 marks)**
ii) Profit and loss account. **(7 marks)**

Answer Pointers

Part (a)

The balance sheet is a statement of the company's value at the time when the statement is drawn up, that is, its assets (what it owns) and its liabilities (what it owes).

Assets are divided into fixed assets and current assets. Fixed assets are items such as property and major capital equipment that are part of the productive capacity of the company; they are not disposed of as part of normal operations but their value is depreciated annually.

Current assets include cash itself and items such as stock or debtors that will be turned into cash in the course of normal operations.

Liabilities are similarly divided into current liabilities and long-term liabilities. Current liabilities are items that will have to be paid in the next twelve months, e.g. outstanding invoices or short-term loans. Long-term liabilities are liabilities that do not need to be settled until after the next financial year.

The balance sheet will also contain a balancing item, excess of assets over liabilities, which is the notional net worth of the company.

The profit and loss account shows the income received and the expenditure incurred during the year, excluding capital expenditure and income derived from the disposal of fixed assets.

Syllabus Section: Finance

Part (b)

Example Balance Sheet. The candidate's response for the Balance Sheet and P&L Account will vary and be based on assumptions made. The totals should remain the same.

Assets

Current Assets

Debtors	500,000
Cash in Hand	1,000,000
Total Current Assets	<u>1,500,000</u>

Fixed Assets

Building	2,800,000
Furniture and Fixture	12,000
Servers	50,000
Depreciation	- 11,200
Total Fixed Assets	<u>2,850,800</u>
Total Assets	<u>4,350,800</u>

Liabilities

Current Liabilities

Creditors	20,000
Tax	25,000
Short term Loan	20,000
Total Current Liabilities	<u>65,000</u>

Long term liabilities

Loan	<u>500,000</u>
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Total Liabilities	<u>565,000</u>
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Owner's Equity	3,789,800
Retained Earnings	-4000

Total liability and owner's equity	4,350,800
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An example profit and loss account is shown below. The candidate's response should be relevant for the given scenario and state any assumptions about what is required.

Income

Fees paid by 'gold' clients (4x£25,000)	100,000
Fees paid by 'silver' clients (8x£10,000)	80,000
Fees paid by 'bronze' clients (10x£1000)	10,000
Total income	<u>190,000</u>

Cost of Sale

License	25,000
Gross Profit	<u>165,000</u>

Expenditure

Management and Payroll	65,000
Company Car lease	35,000
Marketing	26,300
Premises (heating, lighting)	25,000
Professional services	1,500
Insurance	5,000
Depreciation	11,200

Total operating cost	<u>169,000</u>
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Net Profit / Loss	-4,000
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Syllabus Section: Finance

Examiners' Comments

The question was attempted by 28% of the candidates, 36% of whom achieved a pass mark.

There were some good answers, with candidates showing appropriate knowledge for part (a) and the ability to apply those ideas using the given scenario in part (b). However, a lot of answers were limited and struggled to show an ability to apply the ideas to the scenario. The answer pointers show one possible response, which added other figures to produce a balance sheet and profit and loss account. Other valid answers were possible but often candidates only used the figures from the question scenario and did not enhance the example or state assumptions about what had been done.

- B5. a) Explain how the UK's Consumer Protection (Distance Selling) Regulations provides protection for consumers when purchasing items over the internet or via the telephone. **(15 marks)**
- b) In relation to disabled users, describe what obligations the UK Equality Act 2010 places on an e-commerce site. **(10 marks)**

Answer Pointers

Part (a)

The UK's Consumer Protection (Distance Selling) Regulations for (2000), and the subsequent legislation in place since 2014, the UK Consumer Contracts (Information, Cancellation and Additional Charges) Regulations (2013), ensures that:

- consumers should be provided with a description of goods or services prior to purchase of such.
- consumers have the right to cancel a purchase within a cooling off period of 7 days for the 2000 regulations, which has been changed to 14 days in the 2013 update.
- consumers should be provided with information regarding prices and delivery charges prior to purchase.

Syllabus Section: Legal Obligations

Part (b)

The UK Equality Act 2010 would oblige an e-commerce business to provide:

- services that should not be unreasonably difficult or impossible to use by those with a disability.
- services to the same standard for disabled and non-disabled users.

Syllabus Section: Legal Obligations

Examiners' Comments

The question was attempted by 45% of the candidates, 56% of whom achieved a pass mark.

The candidates generally answered part (a) reasonably well, showing awareness of the protection provided by the UK Consumer Protection (Distance Selling) Regulations. Some answers to part (a) were lists of possible issues and did not demonstrate a clear understanding of how those issues related to the question. The responses to part (b) were reasonable, but some students focused on issues on the layout and design of user interfaces, which did not focus on the main issue for the question.

B6. City Food Restaurants is a new restaurant chain. The company has created a website with the domain name of city-food.co.uk. The web-site allows customers to book tables and order their dinners.

a) In relation to the web-site, explain how City Food Restaurants can protect its intellectual property in terms of:

- a. Trade Marks **(5 marks)**
- b. Copyright **(6 marks)**
- c. Domain names **(5 marks)**

b) An independent restaurant review website contains user reviews about their experiences at restaurants. A person has written a review on the website that claims the City Food Restaurants chain has bribed the government authorities to ignore its breaches of food hygiene regulations.

Describe the potential defamation issues in this situation. **(9 marks)**

Answer Pointers

Part (a)

- Trademarks - The company can protect logos or other trade mark designs through registration. Registration is geographic and so needs to be repeated wherever they expect to trade.
- Copyright, covering:
 - Both are automatic rights granted through the creation of items. Copyright gives the author of any text, including code, rights of protection from copying – including that used to create the web site.
 - The law provides protection from copying the work; issuing copies; making adaptations. Copyright protection is for 70 years. It does not protect the idea – just the original code.
- Internet domain names are a way of identifying business's web sites. There is no direct link to trademarks, but an overlap in purpose. Domain names are globally unique, but trademarks are not. Domain names are allocated by a non-government body. It will be important for the company to register their domain name quickly to ensure no one else takes it.

Syllabus Section: Intellectual Property

Part (b)

- Defamation is making statements that will damage someone's reputation.
- This statement is potentially libel.
- There is little defence the customer could make, except proving that their points are correct.
- City Food Restaurants can make a claim against the restaurant review website for allowing the publication of this statement. The review website can claim it had not had time to vet the review. But once highlighted by City Food Restaurants the review website should remove the offending material immediately.

Syllabus Section: Intellectual Property**Examiners' Comments**

The question was attempted by 77% of the candidates, 32% of whom achieved a pass mark.

For part (a), candidate responses for Trademarks and Copyright were generally reasonable, demonstrating an understanding of the issues. Responses for Domain Names were often brief and needed further explanation. Candidate responses for part (b) were typically poor and showed limited awareness of defamation issues.