



UNIVERSITY OF COLOMBO, SRI LANKA



UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)
Academic Year 2010/2011 – 3rd Year Examination – Semester 5

IT5103 - Professional Issues in IT
Structured Question Paper with Model Answers

12th March, 2011
(TWO HOURS)

To be completed by the candidate

BIT Examination Index No:

Important Instructions:

- The duration of the paper is **2 (two) hours**.
- The medium of instruction and questions is English.
- This paper has **4 questions** and **10 pages**.
- **Answer all questions.**
- Question 1 & 2 (25 Marks) each, Question 3 (24 Marks) & Question 4 (26 Marks).
- **Write your answers** in English using the space provided **in this question paper**.
- Do not tear off any part of this answer book.
- Under no circumstances may this book, used or unused, be removed from the Examination Hall by a candidate.
- Note that questions appear on both sides of the paper.
If a page is not printed, please inform the supervisor immediately.

Questions Answered

Indicate by a cross (X), (e.g. X) the numbers of the **four** questions answered.

<u>To be completed by the candidate by marking a cross (X).</u>	Question numbers			
	1	2	3	4
To be completed by the examiners:				

1) (a) Why does a computer program come under Intellectual Property?

(05 marks)

<p><u>ANSWER IN THIS BOX</u></p> <hr/> <p>As it is a property that is intangible</p> <hr/> <hr/> <hr/> <hr/>
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(b) In Sri Lanka, there were over 16 million mobile phone users by March 2009. The vast majority are used legitimately, but mobile phones are also used by criminals and terrorists. Computer technology can now analyse calls and messages from many different mobiles at once. A computer program that could plot, map and analyse that data so that criminal networks could be identified would be valuable. The “XYZ” company in Sri Lanka is planning to develop and market such an analyser under the trademark “Criminal Phone Analyser”. If a competitor developed an equivalent product based directly on “Criminal Phone Analyser” software, all work undertaken by XYZ company would be undermined. The company would incur the development costs but not have the opportunity to recover those costs by being first to market. To prevent this happening, it took steps to protect its intellectual property rights from the beginning of the development process.

How would the developer of such a program protect the product before & after reaching the market?

(20 marks)

<p><u>ANSWER IN THIS BOX</u></p> <hr/> <p>Before investing in development, XYZ need to check whether such a product already existed.</p> <hr/> <hr/> <hr/> <p>By searching the National/International patent databases, a business can verify whether its idea is entirely new.</p> <hr/> <p>Then the company can apply for a patent.</p> <hr/> <hr/> <p>A patent gives protection from copying or imitation by competitors.</p> <hr/> <hr/>

Continued...

By registering the company name and the product name “Criminal Phone

Analyser”, as trademarks, it can prevent other companies using these names.

This provides clarity for customers too.

Rival businesses cannot offer similar products with identical names.

Companies use trade names to build and identify their brands.

2) (a) What is meant by discrimination?

(04 marks)

ANSWER IN THIS BOX

Discrimination means treating one person or one group of people less favourably than another on the grounds of personal characteristics.

(b) ABC Corporation was established in 2000 in India focusing on development of Software. Later it emerged as one of the richest software development companies in India with many global connections and their employees were recruited from many countries such as Sri Lanka, India and USA among many others. ABC's success was attributed to (among other things) its effective recruitment and employee retention strategies. ABC always attempted to attract the best talent.

ABC has an efficient performance appraisal system and work culture. They gave incentives to employees on the basis of their performance appraisal. Employees underwent a performance review every year.

In the year 2010, lawsuits were filed against ABC, claiming that ABC's employment policies and practices permit its managers to exercise discretion when deciding on evaluations (performance appraisals), pay packages, promotions and job selections. There were accusations by certain employees that they were paid smaller salaries, bonuses and stock options than what ABC paid certain others performing the same work. The suit also alleged that ABC had even retaliated against employees who protested against this kind of unfair practises.

Though there were many complaints, it was only in 2010 that the employees initiated legal proceedings against ABC, demanding equality and justice. A lawyer representing one of the ex-employees of ABC had this to say "*There are glass ceilings and glass walls in place for certain kind of employees at ABC. We are stunned and disappointed in their treatment of such employees.*"

From the scenario given above, identify three grounds on which discrimination could have occurred. Briefly justify your answer.

(15 marks)

ANSWER IN THIS BOX

Sex

Female employees could have been given lesser salaries even if they did the same type and amount of work as male employees.

Continued...

Religion or sexual orientation
Racial grounds
There could have been discrimination against certain ethnic groups and religious groups.
Disability
Employees may have been discriminated due to disability or medical condition.
Age
Older employees may have been ignored for promotions on the ground of their age though their appraisals showed they were qualified.

(c) What things are needed in an organization to implement effective compliance with anti-discrimination legislation?

(06 marks)

<u>ANSWER IN THIS BOX</u>
Suitable written policy, well publicized and freely and easily available
A training programme for new and existing staff to ensure that they are all aware of the policy and importance
Effective procedures for implementing the policy

- 3) (a) (i) In the table given below, **Column I** contains instances/examples for the Data Protection Principles. **Column II** lists out the 8 Data Protection Principles.

	Column I		Column II
A	A General Practitioner discloses his patient list to his wife, who runs a travel agency, so that she can offer special holiday deals to patients needing recuperation.	1	Personal data shall be processed fairly and lawfully and in particular shall not be processed unless (a) at least one of the first principal conditions of any personal data is met and (b) in the case of sensitive personal data, at least one of the first principal processing conditions is also met.
B	Two laptops and a memory stick were stolen from a private school office in Colombo which has many branches. These contained sensitive personal information relating to a number of pupils and members of staff from two branches. All items were unencrypted and not physically locked away.	2	Personal data shall be obtained only for one or more specified and lawful purposes, and shall not be further processed in any manner incompatible with that purpose or those purposes.
C	A company provides various services to its customers using resources and servers located in various countries around the world. These may include countries outside the European Economic Area (EEA) that do not have laws providing specific protection for personal data or that have different legal rules on data protection.	3	Personal data shall be adequate, relevant and not excessive in relation to the purpose or purposes for which they are processed.
D	An individual is refused a job in the construction industry and discovers that this is because the prospective employer checked his name against a blacklist maintained by a third party. The blacklist consists of the names of people who are regarded as unsuitable to be employed in the construction industry because they are trade union activists. The individual writes to the person who maintains the blacklist asking them to remove his name as it is denying him the opportunity to gain employment.	4	Personal data shall be accurate and, where necessary, kept up to date.
E	A debt collection agency is engaged to find a particular debtor. It collects information on several people with a similar name to the debtor. During the enquiry some of these people are deleted. The agency should delete most of their personal data, keeping only the minimum data needed to form a basic record of a person they have removed from their search. It is appropriate to keep this small amount of information so that these people are not contacted again about debts which do not belong to them.	5	Personal data processed for any purpose or purposes shall not be kept for longer than is necessary for that purpose or those purposes.

Continued...

	Column I		Column II
F	An individual is dismissed for alleged misconduct. An Employment Tribunal finds that the dismissal was unfair and the individual is reinstated. The individual demands that the employer deletes all references to misconduct. However, the record of the misconduct is accurate. The Tribunal’s decision was that the employee should not have been dismissed on those grounds. The employer should ensure its records reflect this.	6	Personal data shall be processed in accordance with the rights of data subjects under the Data Protection Act.
G	An employer receives several applications for a job vacancy. Unless there is a clear business reason for doing so, the employer should not keep recruitment records of unsuccessful applicants beyond the statutory period in which a claim arising from the recruitment process may be brought.	7	Appropriate technical and organizational measures shall be taken against unauthorised or unlawful processing of personal data and against accidental loss or destruction of, or damage to, personal data.
H	A representative of the Electricity Board calls at a property to cut off the electricity supply. He finds that the property has been burgled and is not secure. The householder is out (and cannot be contacted). He therefore telephones the police. This is likely to involve disclosing the fact that the householder’s electricity is being cut off for non-payment. In such circumstances, it is reasonable to assume that, even if the householder may be embarrassed that others will know they have not paid their bills, they would be concerned about the burglary and about the protection of their property.	8	Personal data shall not be transferred to a country outside the region unless that country or territory ensures an adequate level of protection for the rights and freedoms of data subjects in relation to the processing of personal data.

Match an example/instance from **Column I** with the most appropriate Data Protection Principle in **Column II**. Write your answer in the box given below the table.

(24 marks)

<u>ANSWER IN THIS BOX</u>	
A – 2	B – 7
C – 8	D – 6
E – 3	F – 4
G – 5	H – 1

- 4) (a) Mr. Perera works for Quick Maintenance (QM), a company dealing with maintaining computer systems. He has worked for the company for three years. He works exclusively on QM's contract with Best Value Supermarkets (BVS), a large supermarket chain. BVS has complained about the standard of Mr. Perera's work. There have been no previous complaints about his workmanship and QM offers to monitor Mr. Perera's work at BVS but BVS refuse to have him on their jobs.

If QM dismisses Mr. Perera, the company may be alleged to have caused unfair dismissal. State at least three actions that must be taken by QM to avoid such an allegation and make it a fair dismissal.

(12 marks)

ANSWER IN THIS BOX

Negotiate with BVS and give time to bring Mr. Perera's performance up to standard, which has been refused by BVS.

Try to replace Mr. Perera at BVS with another employee from QM.

Try to find an alternative position for Mr. Perera within QM

Invite Mr. Perera for a discussion and explain the reasons before dismissal so that the dismissal would be considered as fair.

(b) Mallika worked as the area manager of a software company for ten years. Channa worked as the accountant of the company. Three years ago, Mallika went on maternity leave and after she returned to work, she found that many of her responsibilities were being gradually removed and given to Channa. Mallika claimed her position was intolerable.

She contacted her manager to complain and was assured her responsibilities would soon be transferred back to her and that her work situation would return to normal. When there was no improvement in the situation, she wrote to the manager again. Her letter said that unless she received a reply within seven days confirming her functions and responsibilities as area manager were the same as before, she would consider herself constructively dismissed and leave her employment.

What kind of claim could Mallika make against her employer after leaving her job and for what reasons?

(06 marks)

ANSWER IN THIS BOX

Mallika could claim constructive dismissal for the following reasons:

The Employment Appeals Tribunal could decide that the company had appointed Channa as joint area manager without consultation or notice to Mallika and this conduct had undermined the relationship of confidence and trust between her and the company.

The Tribunal found that it is reasonable that she found this undermining of her confidence and trust in her. The managing director had failed to communicate with her to reassure her about her position and to maintain the relationship of confidence and trust.

This conduct indicated that the company no longer intended to be bound by the terms of her contract as area manager. Therefore she was entitled to terminate her employment because of the conduct of her employer and was constructively dismissed.

(c) Shanthi was found to be under-performing as a sales assistant in a prominent computer hardware store in Colombo. Targets were not being met. After a while, the management had a meeting with Shanthi. They told her that her performance was not up to mark and also put it in writing. Initially, things improved, but once again performance levels dropped and the management was forced to put it in writing again. A few days later they sacked Shanthi but she objected to it saying she was not given sufficient time to improve her performance after the second warning. The management had someone more suitable waiting to replace Shanthi.

Briefly explain the issues with respect to dismissal of Shanthi in the above scenario.

(08 marks)

ANSWER IN THIS BOX

Dismissal due to lack of capability,

time given for improvement insufficient,

no further training provided,

the position was not redundant.
