



**UNIVERSITY OF COLOMBO, SRI LANKA**



**UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING**



**DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)**  
*Academic Year 2007/2008 – 3<sup>rd</sup> Year Examination – Semester 5*

***IT5102: Professional Issues in IT***  
***Structured Question Paper***  
**5<sup>th</sup> April, 2008**  
**THREE HOURS**

**To be completed by the candidate**

BIT Examination Index No: .....

**Important Instructions:**

- The duration of the paper is **3 (Three) hours**.
- The medium of instruction and questions is English.
- This paper has **4 questions** and **11 pages**.
- **Answer ALL questions.** (all questions **do not** carry similar 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.  the question numbers of the questions answered.

To be completed by the candidate by marking a cross (X).	1	2	3	4	
To be completed by the examiners:					

### Case Study

Marlon Brando was recently hired to supervise a large unit of a medical insurance company called Global Systems Inc., Sri Lanka. Marlon will be in charge of the unit responsible for processing insurance claims. When he was hired, the vice president made it clear to Marlon that he expects him to significantly increase the efficiency of the unit. The company has targets for the number of claims which should be processed by each unit and Marlon's unit has never been able to meet its target. One of the first things Marlon does when he starts his job is to install a software system that will allow him to monitor the work of each and every person processing claims. The software will allow Marlon to record the number of key strokes made per minute on any terminal in the unit. It also allows him to bring the work of others up on his computer screen so that he can watch individual work as it is being done. Further, Marlon can access copies of each employee's work at the end of each day. He can find out how much time each employee has spent while the terminal is off. He can see what correspondence the person has been responsible for. He can review emails which the employees have sent or received; and so on.

Global Systems Inc. specializes in Human Resources Management Systems too. The company is successful but does not have a well documented IT policy. Top management has decided that it is time for the company to have a formal IT policy. They set up a team comprising of the Claims Processing Manager, Systems Manager, HR Manager and Administrative Manager to formulate an IT policy.

Global Systems Inc. is planning to set up an on-line shop offering goods and services – in particular, books, CDs and insurance claim software – to Internet clients. The server supporting Global Systems Inc. website is to be located in Colombo, Sri Lanka. Clients purchasing goods or obtaining services will be required to fill in an order form and agree to Global Systems Inc. standard contractual terms and conditions. The Company intends to include a clause in the standard contractual terms and conditions whereby any dispute arising therefrom would be submitted to the exclusive jurisdiction of the courts of Sri Lanka.

- 1) (a) Is it ethical or not for Global Systems Inc. to use the software mentioned in the above case study to monitor employees? Briefly give reasons to justify your answer

(12 Marks)

**ANSWER IN THIS BOX**

Due to such monitoring, employees may feel dehumanized and this may exert an undue pressure on them. Surveillance takes a physical as well as an emotional toll on employees which may lead to a decrease in productivity.

Employee's dignity at the workplace is not respected and protected and it is a violation of employee's right to privacy at the workplace.

Hard working employees may be dissatisfied due to not being trusted by the employer or due to lack of confidence by the employer which in turn will lead to a decline of employee moral.

Employer owns the equipment and he has the right to monitor the employees when they are performing their rightful business.

It may prevent unnecessary lawsuits.

Employees will spend less time surfing the Internet and spend more time getting their work done.

This may result in creating electronic sweatshops.

(b) What are the legal implications of computer monitoring at the workplace? You are required to outline the general law (applicable either in Sri Lanka or any other part of the world) relating to e-mail and Internet surveillance that you are familiar with.

(06 Marks)

<b>ANSWER IN THIS BOX</b>
Violations of the following:
Employee's privacy
Data Protection Act 1998 (UK)
Data Protection Directives 95/46/EU
The Regulation of Investigatory Powers Act 2000
The Telecommunications Regulations 2000
Human Rights Act 1998

(c) What are your recommendations within an ethical and legal framework in order to avoid conflicts between the employer and employee?

(04 Marks)

<b>ANSWER IN THIS BOX</b>
Have Policies in place (02 Mark)
(The specific policy selected depends on the culture of the workplace, but most policies have common elements.)
The common policy components are:
Cautioning employees (01 Mark)
Informing employees (01 Mark)
Confidential information (01 Mark)
Limits of download (01 Mark)
Establishing monitoring procedures (01 Mark)

(d) Information about individuals is important to organizations. However collection of personal data must be protected by the private sector as well as the public sector and this should be based on Data Protection Principles. What are these Data Protection Principles? (05 Marks)

**ANSWER IN THIS BOX**

Personal Data should be processed fairly and lawfully.

Data shall be obtained for a specific purpose.

Personal data shall be adequate.

Personal data shall be accurate.

Personal data shall be processed for the specified purpose only.

2) (a) Assume that you have been consulted to draft the IT policy for Global systems Inc. By considering the events which have occurred in the past and possible similar events which may occur in future, list the main points you would consider when drafting an IT Policy. (10 Marks)

**ANSWER IN THIS BOX**

Policy should include the following:

- Carry out work with due care and diligence in accordance with the relevant authority.
- As a professional, include regard for public health safety and environment.
- Shall have regard to the legitimate rights of third parties.
- Have knowledge and understanding of relevant legislation, regulations and standards.
- Conduct professional activities without discrimination against clients or colleagues.

Continued...



- (c) List some responsibilities of computer professionals according to various computer professional bodies.

(05 Marks)

**ANSWER IN THIS BOX**

**Contribute to society and human well being.**

**Avoid harm to others.**

**Be honest and trustworthy.**

**Honour property rights including copyright and patent.**

**Give proper credit to intellectual property.**

- 3) (a) What types of electronic resources are included in copyright law?

(06 Marks)

**ANSWER IN THIS BOX**

**Literary works – any original written work e.g.: novels, letters, directories, music lyrics, web pages, emails, bulletins, etc.**

**Dramatic works – different from literary works because it includes spoken words or describes actions.**

**Artistic work – e.g. photos, maps, plans, all pictures, images, logos and other graphics on the web etc.**

**Sound Recordings.**

**Films – all moving images and video clips.**

(b) It has been a common practice in many South Asian countries to use unlicensed software. Comment on the facts in this situation with respect to ethical issues.

(06 Marks)

**ANSWER IN THIS BOX**

Unlicensed software is spreading in developing countries around the world.

Therefore it is encouraged to develop a code of ethics respecting others' property rights in these countries.

Consider ethical behaviour to be that which respects fundamental rights shared by all human beings.

Professional associations must bring up codes of conduct.

(c) Briefly explain the requirements for a valid on-line contract?

(10 Marks)

**ANSWER IN THIS BOX**

**Briefly explain**  
**Offer**

**Acceptance**

**Acknowledgement of acceptance**

**Consideration**

**Exceptions on on-line contracts**

Continued...



- 4) (a) The definitions or examples in column X and column Y are from Professional Issues in IT. Match the terms in the column X with the most appropriate definitions or examples in the column Y.

(28 Marks)

COLUMN X		COLUMN Y	
1.	Provide access to appropriate members of staff	A	Cookies
2.	In your professional role, you shall have regard for public health, safety and environment	B	Patent
3.	Treating one person or one group of people less favourably than another on the grounds of personal characteristics	C	An issue of privacy under the Regulation of Investigatory Powers Act
4.	Information with respect to a criminal offence or environmental damage	D	SPAM
5.	A denial of service attack	E	A qualifying disclosure
6.	Personal data shall be adequate, relevant and not excessive in relation to the purpose or purposes for which they are processed	F	A rule of professional conduct in the interest of public
7.	Conform to recognized good practise including quality standards which are in their judgement relevant, and shall encourage their subordinates to do likewise	G	Obligation of the client
8.	Manipulating a computer dishonestly in order to obtain money, property or services, or to cause loss	H	A rule of professional conduct with respect to professional competence and integrity
9.	A person knowingly causes a computer to perform any function with intent to secure access to any unauthorized program or data held in any computer	I	Whistle blowing
10.	Unsolicited email sent without the consent of the addressee and without any attempt at targeting recipients who are likely to be interested in its contents	J	Computer fraud
11.	Organisations which provide computer and telephone services can monitor and record communications without the consent of the users of such service for certain reasons such as to prevent or detect crime	K	Data protection principle
12.	They can gather personal information about the user without the users being aware of it when users are browsing websites	L	Computer Misuse
13.	Can be used to protect intellectual property rights in software	M	Discrimination
14.	Disclosures about malpractices such as criminal behaviour, activities that endanger health and safety of the environment in an organization	N	A breach of availability

Continued...

**ANSWER IN THESE COLUMNS**

COLUMN X	COLUMN Y
1	G
2	F
3	M
4	E
5	N
6	K
7	H

COLUMN X	COLUMN Y
8	J
9	L
10	D
11	C
12	A
13	B
14	I

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