

INSTITUTE OF ADVANCED TECHNOLOGICAL EDUCATION

(Established in the Ministry of Higher Education, vide in Act No. 29 of 1995)

Higher National Diploma in Information Technology Second Year, Second Semester Examination - 2016 HNDIT2403 / IT4003 - Professional Issues in IT / IT and Society

Instructions for Candidates: Answer four questions only. All questions carry equal marks. No. of questions: 05 No. of pages

Time

: Two (02) hours

Question 01.

State three fields which have been changed due to integration of information i. technology and mention two uses of information technology in each field.

(06 marks)

- Information technology (IT) has both positive and negative effects to the students. ii.
 - a) List three (03) negative effects of IT to the students.

(03marks)

b) List three (03) positive effects of IT to the students.

(03marks)

iii. Briefly explain the following terms related to global workforce. (06 marks)

- a) Outsourcing
- b) Offshoring
- c) Inshoring or Onshoring

Explain the difference between law and ethics. iv.

(03 marks)

Ethical views can be divided into 3 categories as Deontological, Utilitarianism and (04 marks) Natural rights. Briefly explain two (02) of them.

(Total 25 marks)

Question 02.

- i. In using information technology, everybody wish to protect privacy. Mention three (03 marks) (03) aspects of privacy.
- ii. Briefly explain three (03) of the following terms in relation to computer data.

(06 marks)

- a) Invisible information gathering
- b) Secondary use

- c) Computer matching
- d) Computer profiling
- iii. Explain the way the concept of computer hacking changed over time from early 1960's up to today. (09 marks)
- iv. Consider the following statements.
 - Statement 1: "If the owners of a computer system want to keep outsiders out, it is their responsibility to provide better security."
 - Statement 2: "Breaking into a computer system can be considered as same as breaking into a neighbor's house. It should not matter that the neighbor's door is locked or unlocked."

Decide the correct statement, giving reasons to prove your answer. (03 marks)

v. A company that supplies filtering software to schools (to block access of websites with violence or pornography) has sold statistical data about the Web sites visited by school children, to a third party. Critically discuss this incident. (04 marks)

(Total 25 marks)

Question 03.

- i. Briefly describe three (03) requirements of forming laws for the field of Information and Communication Technology. (06 marks)
- ii. Mention three (03) key provisions relevant to IT systems defined under Intellectual Property Act No. 36 of 2003. (06 marks)
- iii. The Computer Crime Act 24 of 2007 specifies three broad categories of computer crimes. Briefly explain these categories. (06 marks)
- iv. Define the term anonymity. (03 marks)
- v. Explain pros and cons of protecting anonymity on the internet. (04 marks)

(Total 25 marks)

Question 04.

- i. a) What do you mean by the term intellectual property? (02 marks)
 - b) Types of intellectual property rights relevant to software can be given as Copyrights, Patents, Marks, Designs and Trade Secrets. Briefly explain three (03) of them. (06 marks)
- ii. a) What is NIPO of Sri Lanka? (02 marks)
 - b) Mention the responsibility of NIPO of Sri Lanka. (02 marks)

- iii. State three (03) international organizations, which administer certain areas of Intellectual Property. (03 marks)
- iv. "Digital technology and the Internet has made copyright violation easier and cheaper".
 - a) Do you agree with this?

(01 marks)

b) Give reasons to prove your answer.

(03 marks)

- v. a) Mention two (03) possible health problems arise due to IT industry.(03 marks)
 - b) Briefly explain how those problems can be avoided.

(03 marks)

(Total 25 marks)

Question 05.

i. a) Describe the term "computer crime."

(04 marks)

b) List four (04) examples for computer crimes.

(04 marks)

- ii. People use various techniques in stealing personal and financial information in the web. Briefly explain the following techniques. (04 marks)
 - a) Phishing
 - b) Pharming
- iii. State three (03) techniques to protect your personal and financial information in case of online shopping. (06 marks)
- iv. List two (02) examples for digital forgery.

(02 marks)

v. Explain the term 'Net neutrality' and state the purpose of it.

(05 marks)

(Total 25 marks)