



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

PEPERIKSAAN AKHIR SEMESTER I SESI 2009/2010

NAMA MATA PELAJARAN	:	ETIKA PROFESIONAL TEKNOLOGI MAKLUMAT
KOD MATA PELAJARAN	:	DIT 2152
KURSUS	:	2 DIT
TARIKH PEPERIKSAAN	:	NOVEMBER 2009
JANGKA MASA	:	2 JAM
ARAHAN	:	JAWAB SEMUA SOALAN.

PART A

Instruction: Choose the **BEST** answer.

- Q1 Which of the following is an example of biometrics?
- A. DNA.
 - B. Fingerprints.
 - C. Voice prints.
 - D. All of the above.
- Q2 Hacktivism is _____.
- A. a political activist group promoting tougher anti-hacking laws.
 - B. the counter-hacking techniques used by the FBI and other law enforcement agencies.
 - C. the use of hacking to promote a political cause.
 - D. a newsletter for hackers.
- Q3 Collecting evidence from computer files and disks is called _____.
- A. digital investigation.
 - B. computer forensics.
 - C. technology forensics.
 - D. electronic investigation.
- Q4 Which of the following jobs is subject to Repetitive Strain Injuries (RSI)?
- A. Sign-language interpreter for the deaf.
 - B. Musician.
 - C. Computer programmer.
 - D. All of the above.
- Q5 Which of the following is **NOT** a principle for producing good systems?
- A. Understand what success means.
 - B. Include users in the design and testing stages.
 - C. Be open and honest about capabilities, safety, and limitations of software.
 - D. Overestimate the costs and time a project will take.

- Q6 The development of digital cash is supported because it would _____.
- A. allow anonymous electronic transactions.
 - B. make it easier for law enforcement agencies to detect money laundering.
 - C. eliminate the problem of identity theft.
 - D. increase the amount of money given to charitable organizations.
- Q7 The Software Engineering Code of Ethics and Professional Practice was developed by _____.
- A. Computer Professionals for Social Responsibility.
 - B. the Association for Computing Machinery and the Institute for Electrical and Electronics Engineers.
 - C. a consortium of computer science departments in the United States, Canada, and Mexico.
 - D. Immanuel Kant.
- Q8 The Children's Online Privacy Protection Act _____.
- A. makes it illegal for an online service to request a credit card number from a child 17 years old and younger.
 - B. requires online services to create aliases for all customers who are 17 years old and younger.
 - C. requires online services to obtain parental consent before collecting any information from children 12 years old and younger.
 - D. makes it illegal for children 12 years and younger to participate in chat rooms.
- Q9 Virus may be found _____.
- A. on a hard disk.
 - B. on a floppy disk.
 - C. in an email attachment.
 - D. All of the above.
- Q10 The process of determining that a user has permission to perform a particular action on a computer is called _____.
- A. accountability.
 - B. authentication.
 - C. authorization.
 - D. debugging.

(10 marks)

PART B

- Q11** (a) List **FOUR (4)** examples of Intellectual Property. (4 marks)
- (b) Describe **TWO (2)** components of Malaysia Intellectual Property system. (8 marks)
- (c) Describe **TWO (2)** responsibilities that must be carry out by Malaysia Intellectual Property Division. (4 marks)
- Q12** (a) Differentiate between virus, worm and Trojan horse. (6 marks)
- (b) Describe **THREE (3)** defensive measures that can be taken to make computer less vulnerable to viruses, worms, and Trojan horses attack. (6 marks)
- (c) Describe **TWO (2)** MyCERT core functions. (4 marks)
- Q13** UTHM has underlined policy on bandwidth abuse and file sharing that must be followed by the university community. Describe **THREE (3)** forbidden activities under this policy. (6 marks)
- Q14** Discuss **TWO (2)** advantages and **TWO (2)** disadvantages of patent versus trade secrets. (8 marks)

Q15 Given the scenario, answer the following questions

A Safety-critical Application

Your team is working on a computer-controlled device for treating cancerous tumors. The computer controls direction, intensity, and timing of a beam that destroys the tumor. Treatment with the machine may be preferable than to undergo surgery because it is less invasive, require less hospitalization and recovery time and overall less expensive. Various delays have put the project behind schedule, and the deadline is approaching. There will not be time to complete all the planned testing. The system has been functioning properly in the routine treatment scenarios tested so far. You are the project manager, and you are considering whether to deliver the system on time, while continuing testing, and to make patches if the team find bugs.

- (a) Identify the central issue that must be considered. (4 marks)
- (b) Analyze the stakeholders involved and how your decision could affect each of them. (12 marks)
- (c) Decide whether to deliver the system or not after analyzing the impact to each stakeholder. Justify your answer. (8 marks)

BAHAGIAN AArahan: Pilih jawapan yang **TERBAIK**.**S1.** Manakah yang berikut merupakan contoh biometrik?

- A. DNA.
- B. Cap jari.
- C. Suara.
- D. Semua yang di atas.

S2. *Hactivism* adalah _____.

- A. sebuah kumpulan aktivis mempromosikan undang-undang anti-pencerobohan yang lebih ketat.
- B. teknik memerangi pencerobohan yang diguna oleh FBI dan agensi penguat kuasa yang lain.
- C. menggunakan cara pencerobohan untuk mempromosi agenda politik.
- D. laporan untuk penceroboh.

S3. Mengumpul bukti daripada fail dan cakera komputer dipanggil _____.

- A. penyiasatan digital.
- B. komputer forensik.
- C. teknologi forensik.
- D. penyiasatan elektronik.

S4. Manakah pekerjaan berikut yang berhadapan dengan *Repetitive Strain Injuries* (RSI)?

- A. Penterjemah bahasa isyarat untuk orang pekak.
- B. Ahli muzik.
- C. Pengaturcara komputer.
- D. Semua yang di atas.

S5. Manakah yang berikut **BUKAN** prinsip untuk membangunkan sebuah sistem yang baik?

- A. Memahami apakah makna kejayaan.
- B. Menggalakkan penyertaan pengguna dalam peringkat reka bentuk dan ujian.
- C. Sentiasa jujur apabila menyatakan mengenai kebolehan, keselamatan dan kekangan perisian.
- D. Membuat anggaran yang berlebihan untuk kos dan jangka masa projek.

- S6. Pembangunan wang digital disokong kerana ia akan _____.
- membenarkan transaksi elektronik tanpa nama.
 - memudahkan agensi penguat kuasa undang-undang untuk mengesan aktiviti pengiriman wang yang didapatkan secara haram.
 - menghapuskan masalah pencurian identiti.
 - meningkat jumlah wang yang diberi kepada badan-badan kebajikan.
- S7. *The Software Engineering Code of Ethics and Professional Practice* dibangunkan oleh _____.
- Computer Professionals for Social Responsibility.*
 - the Association for Computing Machinery and the Institute for Electrical and Electronics Engineers.*
 - Konsortium jabatan komputer sains di Amerika Syarikat, Kanada dan Mexico.
 - Immanuel Kant.
- S8. Akta *Children's Online Privacy Protection* _____.
- Menyatakan adalah salah bagi perkhidmatan dalam talian untuk memohon nombor kad kredit daripada kanak-kanak berumur 17 tahun dan ke bawah.
 - Memerlukan perkhidmatan dalam talian mencipta gelaran untuk semua pelanggan berumur 17 tahun dan ke bawah.
 - Memerlukan perkhidmatan dalam talian untuk mendapatkan kebenaran ibu bapa sebelum mengumpul sebarang maklumat daripada kanak-kanak berumur 12 tahun dan ke bawah.
 - Menyatakan adalah salah bagi kanak-kanak berumur 12 tahun dan ke bawah untuk menyertai ruang berbual dalam talian.
- S9. Virus boleh dijumpai _____.
- dalam cakera keras on a hard disk.
 - dalam cakera liut.
 - dalam attachment e-mel.
 - Semua yang di atas.
- S10. Proses untuk menentukan bahawa seseorang pengguna itu mendapat kebenaran untuk melakukan sesuatu aksi ke atas sebuah komputer dipanggil _____.
- accountability.*
 - authentication.*
 - authorization.*
 - debugging.*

BAHAGIAN B

Instruction : Answer **ALL** questions.

- S11.** (a) Senaraikan **EMPAT (4)** contoh Harta Intelektual. (4 markah)
- (d) Terangkan **DUA (2)** komponen sistem Harta Intelektual Malaysia. (8 markah)
- (e) Terangkan **DUA (2)** tanggungjawab yang mesti dilaksanakan oleh *Malaysia Intellectual Property Division*. (4 markah)
- S12.** (a) Nyatakan perbezaan di antara virus, worm dan Trojan horse. (6 markah)
- (d) Terangkan **TIGA (3)** kaedah pencegahan yang boleh diambil untuk mengelakkan serangan virus, worms, dan Trojan horses terhadap komputer. (6 markah)
- (e) Terangkan **DUA (2)** fungsi utama MyCERT. (4 markah)
- S13.** UTHM telah mengariskan polisi terhadap penyalahgunaan jalurlebar dan perkongsian fail yang perlu dipatuhi oleh komuniti universiti. Terangkan **TIGA (3)** aktiviti yang perlu dicecah oleh UTHM dibawah polisi ini. (6 markah)
- S14.** bincangkan **DUA (2)** kebaikan dan **DUA (2)** kekurangan paten dan *trade secrets*. (8 markah)

S15. Jawan soalan berdasarkan scenario dibawah,

A safety-critical application

Your team is working on a computer-controlled device for treating cancerous tumors. The computer controls direction, intensity, and timing of a beam that destroys the tumor. Treatment with the machine may be preferable than to undergo surgery because it is less invasive, require less hospitalization and recovery time and overall less expensive. Various delays have put the project behind schedule, and the deadline is approaching. There will not be time to complete all the planned testing. The system has been functioning properly in the routine treatment scenarios tested so far. You are the project manager, and you are considering whether to deliver the system on time, while continuing testing, and to make patches if the team find bugs.

- (d) Terangkan isu utama yang perlu diberi perhatian. (4 markah)
- (e) Analisis keterlibatan stakeholders dan bagaimana keputusan anda mempengaruhi mereka. (12 markah)
- (f) Tentukan sama ada untuk membangunkan system atau tidak setelah analisa terhadap kesannya kepada stakeholder dibuat. Berikan justifikasi anda. (8 markah)