



UNIVERSITI
TEKNOLOGI
PETRONAS

FINAL EXAMINATION MAY 2024 SEMESTER

COURSE : TEB2173/TEB3233/TFB2133 - IT PROFESSIONAL
AND ETHICS/COMPUTER ETHICS AND CYBER LAW

DATE : 8 AUGUST 2024 (THURSDAY)

TIME : 9:00 AM - 12:00 NOON (3 HOURS)

INSTRUCTIONS TO CANDIDATES

1. Answer **ALL** questions in the Answer Booklet.
2. Begin **EACH** answer on a new page in the Answer Booklet.
3. Indicate clearly answers that are cancelled, if any.
4. Where applicable, show clearly steps taken in arriving at the solutions and indicate **ALL** assumptions, if any.
5. **DO NOT** open this Question Booklet until instructed.

Note :

- i. There are **SEVEN (7)** pages in this Question Booklet including the cover page
- ii. **DOUBLE-SIDED** Question Booklet.

1. a. Define Information Ethics in governing human conduct in the society.
[2 marks]

- b. Discuss **TWO (2)** examples on how Cyber-Libel may contribute to cyber-ethical issues.
[6 marks]

- c. An employer installs hidden recording devices in the rest area of the workplace.
Construct **ONE (1)** issue related to invasion of employee privacy and explain how the ethical practice should be applied.
[6 marks]

- d. Breaking into someone's computer systems with the intention to destroy the normal computer functions is one of cybercrime activities.
Explain **THREE (3)** security tips that can be practiced to prevent damage.
[6 marks]

2. Company LMP has just signed a business agreement with Company MLM, which entitles both to access each other's client records. Marry Anne, a software developer at Sahara Holding, was assigned the task of developing a software program that handles the access and retrieval of records from each company's database system into the other. A first run of the software on real data indicated that the work was well within the state of the art, and no difficulties were found or anticipated. A few weeks later and during a normal test on the software developed, Marry Anne discovered a serious security hole in the database system of Company MLM by which hackers can easily obtain confidential information about clients. She further confirmed that the code in Company MLM could not be trusted as the security hole posed a threat even on Company's LMP database system. Marry Anne then told her manager about the issue and explained its significance, but the response she received was, "That's not our problem, let's just be sure that our software functions properly". Marry Anne decided to follow her manager's work order as she is afraid of losing her position at Sahara Holding.

- a. Discuss **SIX (6)** moral problems that have been violated in the case study with reference to the list of fundamental principles IEEE/ACM Code of Ethics.

[12 marks]

- b. From the above case study, recommend **FOUR (4)** ethical actions that could be applied as alternative solutions to the raised issues.

[8 marks]

3. James is employed as an accounting analyst in a company that manufactures heavy plants. James and the financial controller both report to the finance director. During work, James overhears the financial controller saying that he has not been disclosing certain things to the external auditors. These include the fact that a recent acquisition has resulted in a large piece of machinery becoming redundant and of very little value. James is unsure whether to believe this, but he is concerned that the culture within the finance department appears to be one of antagonism towards the external auditors, who are seen as adversaries of the company. In addition, James has heard that a bribe was paid to an overseas company to secure a sales contract. James feels uneasy about the situation, and he is concerned that the close relationship between the financial controller and the finance director may prevent him from exploring the accuracy of the information that he has received.

- a. Examine **FOUR (4)** concerns of professional ethics that should be considered from the case study.

[8 marks]

- b. Apply Barger's scenario-based approach to the case study so that James could be advised on matters pertaining to ethical and legal concerns from the actions.

[12 marks]

4. Back in 2000, Valley, a media company sued YouVibe, a website where people can share videos, for \$1 billion. Valley said that YouVibe lets people upload more than 200, 000 videos of their TV shows and other copyrighted stuff without asking for permission. Since they are only an online service provider, YouVibe claimed that they are not legally liable for content that violates the rights of third parties. The case hinged on whether YouVibe was responsible for the content on its site or not. The judge overseeing the case ordered YouVibe to hand over their internal communications logs and transcripts to Valley for review to see if they knew about the copyrighted content. However, Valley made a significant mistake. As part of a guerilla marketing campaign, Valley hired 18 advertising firms to create “unofficial accounts” and upload content as random users before the trial began. They did not keep track of which accounts were theirs.

This blunder hurt Valley's case. They ended up suing third-party accounts that they had uploaded themselves, without realizing it. YouVibe has argued that they could not remove accounts without knowing if they were owned by Valley, and it was unreasonable to do so. As YouVibe had no way of identifying which accounts were violating the copyrights, they were powerless to do anything about it. As a result, the judge ultimately sided with YouVibe, ruling that they were not responsible for the copyrighted content on their site. This decision potentially spared YouVibe from paying \$1 billion to Valley.

- a. Explain the type of infringement and **ONE (1)** possible penalty for the party that is proved to commit the action in the case study.

[4 marks]

- b. Based on Software Engineers Code of Ethics, describe **FOUR (4)** ways on how a computing professional could play a role in addressing the issues raised in **part (a)**.

[8 marks]

- c. Explain how Copyright Act 1987 could be applied in addressing the issues identified in the case study.

[4 marks]

- d. Based on **part(c)**, examine **TWO (2)** exclusive rights of the copyright holders.

[4 marks]

5. Country X censored many controversial events from news coverage, preventing the citizens from knowing about the actions of their government, and severely restricting freedom of the press. The censorship includes the complete blockage of various websites, apps and video games using DNS spoofing, blocking access to IP addresses and filtering the URLs, packet inspection and resetting the connections.

a. Discuss **FOUR (4)** consequences of censoring web content by the government authority of Country X as an approach to address cyber ethical issues.

[NOTE: Your answer should include the importance of such a censorship and its consequences in building an ethical society.]

[8 marks]

b. Examine **THREE (3)** challenges posed with the Internet which can trigger the regulation access as mentioned in the case study.

[6 marks]

c. Freedom of speech is a principle that supports the freedom of individuals or community to share ideas without censorship or legal sanction.

Explain the freedom of speech to include the balance required between expression and censorship for the betterment of society.

[6 marks]

-END OF PAPER-

