澳 門 理 工 學 院
Instituto Politécnico de Macau
Macao Polytechnic Institute

School of Applied Sciences
Academic Year: 20xx/20yy   Semester: 2

Sample Final Exam Paper

Programme:	Bachelor of Science in Computing
Course Title:	Ethics and Professional Issues in Computing
Course Code:	COMP422-421/422
Date of Examination:	
Time of Examination:	
Name of Teacher:	Dr. L. W. Yip

Name of Student: _____

Student Number: _____

Instructions:

1. This paper consists of 5 sections and has a total of 6 pages, including the cover page.

2. Dictionaries/electronic devices are not allowed to be used in the examination venue.

3. This examination carries 50% of the total assessment for this course.

4. This is a closed book examination.

5. Answer all questions and write the answers in the space provided.

6. Students must not take this examination paper away from the examination venue.

Total Score: _____   Signature of Teacher: _____

	For Examiner's use only		
Page No.	Questions	Assigned Marks	Marks Obtained
3	Section A Q1 ~ Q5	25	
4	Section A Q6 ~ Q10	25	
5	Section B Q11	25	
6	Section B Q12	25	
	Total	**100**	

Section A: Short questions. (Total: 50 marks; each question carries 5 marks.)

1. Define the term "time-sharing system".

Ans.:

2. How many ethical theories are discussed in Chapter 2? Name these theories.

Ans.:

3. Why the ethical theories "Kantianism", "Act Utilitarianism", "Rule Utilitarianism", and "Social Contract Theory" are considered as workable?

Ans.:

4. What is a negative right? Give an example.

Ans.:

5. Why the right to freedom of expression is not an absolute right?

Ans.:

6. What is the correlation between different types of rights?

Ans.:

7. Compare copyrights and patents in terms of their lifetimes and costs.

Ans.:

8. Name five characteristics of a mature Profession.

Ans.:

9. What is whistleblowing?

Ans.:

10. Give two reasons why Warschauer says that the notion of the digital divide is too simplistic and perhaps harmful.

Ans.:

Section B: Long questions. (Total: 50 marks; each question carries 25 marks.)

11. 11.1 State the second formulation of Kant's Categorical Imperative.   (4 marks)

> Kate is a journalism major who maintains a popular "life on campus" blog. Kate attends a private party for her friend Jerry, a college student active in the Whig Party. Someone gives Jerry a Tory Party T-shirt as a gag, and he puts it on. Kate uses her cell phone to take picture of Jerry when he isn't looking. She posts the photo on her blog without asking him permission. In the blog she identifies Jerry and explains the context in which the photo was taken.
>
> The story is read by many people on and off campus. The next day, Jerry confronts Kate, and demands that she remove the photo from her web site. Kate complies with Jerry's request, and the two of them remain friends. As a result of the incident, Jerry becomes more popular on campus, and the number of people who read Kate's blog increases.

11.2 Evaluate the above scenario using the second formulation of Categorical Imperative.   (5 marks)

11.3 Evaluate the above scenario using Act Utilitarianism.   (5 marks)

11.4 Evaluate the above scenario using Rule Utilitarianism.   (6 marks)

11.5 Evaluate the above scenario using Social Contract Theory.   (5 marks)

Ans.:

12. 12.1 Give the alternative list of nine fundamental principles that cut across the eight categories of *Software Engineering Code of Ethics and Professional Practice*.   (9 marks)

> The Internet is plagued by a new worm that infects PCs by exploiting a security hole in a popular operating system. Tim Smart creates an anti-worm that exploits the same security hole to spread from PC to PC. When Tim's anti-worm gets into a PC, it automatically downloads a software patch that plugs the security hole. In other words, it fixes the PC so that it is no longer vulnerable to attacks via that security hole.
>
> Tim releases the anti-worm, taking precautions to ensure that it cannot be traced back to him. The anti-worm quickly spreads throughout the Internet, consuming large amounts of network bandwidth and entering millions of computers. To system administrators, it looks just like another worm, and they battle its spread the same way they fight all other worms.

12.2 What fundamental principles are most relevant to the above "Anti-Worm" case?   (4 marks)

12.3 What mistakes were made by Tim in the above case?   (8 marks)

12.4 What good things did Tim do in the above case?   (4 marks)

Ans.:

— The End —