



**UNIVERSITI KUALA LUMPUR**  
**MALAYSIA FRANCE INSTITUTE**

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**FINAL EXAMINATION**  
**SEPTEMBER 2013 SESSION**

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**SUBJECT CODE** : FVB 40703  
**SUBJECT TITLE** : ENGINEERING ETHICS  
**LEVEL** : BACHELOR  
**DURATION** : 2 HOURS  
**DATE / TIME** :

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**INSTRUCTIONS TO CANDIDATES**

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1. Please read the instructions given in the question paper **CAREFULLY**.
  2. This question paper is printed on both sides of the paper.
  3. Please write your answers on the answer booklet provided.
  4. Answer should be written in blue or black ink except for sketching, graphic and illustration.
  5. This question paper consists of **TWO(2)** sections. Section A and B. Answer all question in Section A. For Section B answer **TWO(2)** question only.
  6. Answer all questions in English.
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**THERE ARE 5 PRINTED PAGES OF QUESTIONS**

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**SECTION A(Total Marks: 40 marks)**

**INSTRUCTION: Answer ALL questions.**

**Please use the answer booklet provided.**

**Question 1**

- a) There are THREE (3) responsibilities of a Technologist. List and explain all of them briefly.

( 5 marks)

- b) Explain these following terms by giving appropriate example for each of them.

- i. Extensive training
- ii. Vital knowledge and skills
- iii. Control of services
- iv. Autonomy in the workplace
- v. Claim to ethical regulation

(10 marks)

- c) There are THREE(3) type of ethic or morality. List and explain each one in details.

(5 marks)

**Question 2**

- a) Explain in details the meaning of the following terms by giving appropriate example for each of them based on the code of ethic principles..

- a. Plagiarism versus cheating
- b. Unauthorized sources
- c. Cheating versus teamwork
- d. Surrogate

(12 marks)

- b) List ALL of steps involve in Cost-Benefit Analysis. Explain the steps in details.

(8 marks)

**SECTION B(Total Marks: 60 marks)**

**INSTRUCTION: Answer TWO(2) questions only.**

**Question 3 (30 Marks)**

Write a brief summary of the issue of Odd One Out: Confronting Corruption in the workplace

- Refer to **Appendix 1** while incorporating all the question given below.

- a) What does utilitarianism telling us about this case?
- b) What are the factual issue in this case?
- c) By looking at the conceptual issue, decide which moral issue apply in this case.
- d) How can one balanced the word " you heard nothing, you saw nothing, you say nothing" in this case?

**Question 4 (30 Marks)**

Write a brief summary of the issue of What "wood" you do? A government Ethic case in the workplace - Refer to **Appendix 2** while incorporating all the question given below.

- a) Does it matter that the firefighters were off duty when they did the work?
- b) There was no mention in the news story on whether or not the firefighters took any wood. If they did, how should their case be treated?
- c) How should the chief handle this within the fire department?
- d) What role, if any, should the mayor or city manager play in addressing ethics laws?
- e) What do you think the best outcome could be in this situation?

**Question 5 (30 Marks)**

Write a brief summary of the issue of Cellular Phones and Automotive Safety- Refer to **Appendix 3** while incorporating all the question given below.

- a) What responsibility does the design engineer have to ensure that the product design are safe to use? A cell phone can be safely used by stopping the car while talking, but not everyone does this. Is this the engineer's fault?
- b) In what way could cell phone be made safe to use in an automobile.
- c) On balance, is the use of cell phone in automobiles a safety risk or a safety enhancement? Discuss in details.

**END OF QUESTION**

## Appendix 1

### **Odd One Out: Confronting Corruption in the Workplace**

Jenny recently completed her master's degree and was extremely excited to be hired for her dream job working for the local county government. During her first year, she began to notice that funds from grants were being mismanaged and misallocated. Some of her co-workers were also using county-owned materials, including cars, for personal business.

However, Jenny was most shocked by the hiring practices she witnessed at the office. Prospective applicants were supposed to take exams that were proctored by government employees. The results of these exams determined whether or not the applicants were hired and what they were hired for. Jenny began to notice that the proctors were allowing applicants to cheat on the tests because the applicants had already been chosen for the job. Many of these pre-chosen applicants were friends of current employees.

Jenny reported what she witnessed to Matt, the department's business manager, who was second-in-command to the department head. Matt told her, "You heard nothing, you saw nothing, you say nothing." Jenny was absolutely shocked; not only by the corruption, but that it was deliberately being swept under the rug.

Jenny felt trapped. She really needed the job to pay off loans from graduate school, and she loved the actual content of the work she was doing. She was also concerned that it would look bad to leave her first job out of school in less than a year, as well as tarnish future chances to work in government. On the other hand, she felt extremely uncomfortable in her work environment due to the culture of corruption.

## Appendix 2

### What "Wood" You Do? A Government Ethics Case

When off-duty fire-fighters in North Bend, Oregon, cut down 25 alder trees in February, Fire Chief Scott Graham said he thought the fire-fighters could take the wood, and he could help himself to some as well. But the Oregon Government Ethics Commission has reprimanded Graham, saying he should have known he could not take the wood for personal use.

"Every public official in the state of Oregon is required to adhere to ethics laws," according to Ron Bersin, executive director of the commission. "One of those laws is that you are not able to financially gain from your position. He was using fire department equipment and city trees and he was going to burn the wood at his home."

A retired Coos Bay fire-fighter blew the whistle when he saw the city firewood stacked against the chief's house. "He had so much wood you couldn't see the roof of his house."

The sanction, rather than a fine, was recommended because Graham had not yet burned the wood. A part of the stipulation is that the wood be donated to an agency serving individuals with mental illnesses.

Chief Graham said the whole episode "basically boiled down to miscommunication."

## **Appendix 3**

### **Cellular Phones and Automotive Safety**

In October of 1993, A Ford Explorer was travelling on country highway in Suffolk County, New York. The explorer was equipped with a cellular phone mounted on the transmission hump between the front seats. While using the phone, the driver took her eyes off the road. The vehicle crossed over the center dividing line and struck an oncoming car head on. Three members of the family riding in the other car were severely injured and required extensive hospitalization. As a result of this accident, the victim sued the manufacturer of the cell phone, the company that made the mounting bracket for the phone, and the shop that installed the bracket and the phones.

This case is just one many traffic accidents that have been caused by the drivers whose attention was diverted by using cellular phones while driving. It seems intuitively obvious that using a cell phone while driving is dangerous, but how big is the risk? Surprisingly, there is little data on this since most police departments do not required accident investigations to gather information on whether a cell phone was in use during the time leading up to an accident. However, in a study published in early 1997, two Canadian researchers answered this important question. This study was motivated by an accident that happened to one of the researchers, a physician at a medical school in Toronto. he had returned a call to a patient. The number he dialed turned out to be a cell phone, which the patient answered while driving. During their brief conversation, the patient was in an accident, leading the physician to initiate a study on just how dangerous cell-phone use during driving a car.

The study was performed by looking at records of several hundred accidents in which cell phones were present in the car. With the permission of the drivers, the researchers obtained the cellular-phone records of the driver to see whether they were using the phones at the time of the accidents. Their results indicate that the risk of being involved in an accident is four times greater when the driver is using a cell phone. For comparison, the researcher pointed out that a driver whose blood alcohol content 0.10% has the same increased risk of being in

an accident. The blood alcohol level is above limit in most states in the USA. So using a cell phone in a car seems to be just as risky as drive and drunk.

How widespread is the problem? A study by national Highway Traffic Safety Administration(NHTSA) reported in 2001 that at any time given, 3% of all driver nationwide are talking on a cell phone. A 2006 study showed that 73%of all drivers are talking on a cell phone while driving, and 19% text message behind the wheel. another study in 2006, indicated that drivers who were using cell phone- a handheld or handle free-took 18% longer to brake than drive who were not using the cell-phone.

In response of the studies cell phones use while driving has been made banned in over 23 countries including Brazil, Israel and Sweden. In the USA, numerous states including California, Florida have banned talking on the cell phone while driving. In states without a ban, many cities have taken the initiatives to ban cell phones use by drivers except in an emergency.