EUT440/3 Engineers of Society
Sem 2 2016/2017
School of Mechatronic Engineering

Assignment
20 Marks

http://afendirojan.wordpress.com

Deadline for submission: 21st April 2017
1. This is a **GROUP** assignment.

2. **DO NOT CHANGE THE QUESTION NUMBER ASSIGNED TO YOU!**

3. Used A4 paper **ONLY** to print.

4. Assignments **MUST** be typed using Times Roman font of size 12pt with single spacing.

5. **DO NOT** exceed 3000 words. Your assignment should typically be between 5–6 pages. Present your ideas and arguments neatly and clearly in paragraphs.
6. Print clearly on the **cover page** the following:
   a. Program
   b. Question Number
   c. Name & Matric Number
   d. Group Number

7. Your assignment should **ONLY be stapled**. Do not ring bind or booklet it.

8. You are reminded that **copying and plagiarism** is strictly **PROHIBITED**. Any indication of these unethical behaviors will result in ‘0’ being awarded to you (and the other party, if involved). It is your responsibility to ensure that this unethical academic behavior is avoided at all cost.

9. Your assignment **MUST** be in English. Proper language and grammar should be observed at all times.

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Assignment Questions

1. As a young engineer, you are instructed by your employer to prepare a bankable report for a prospective project based on the information by your employer. You have no access to ascertain the reliability of the information provided. In light of the IEM Regulations on Professional Conduct, how do you advise your employer so that you may complete your assignment with integrity?

2. You are assigned by your employer to prospect an area for an extractable material. However, in the course of your work, you discover no such material but some other valuable material which your employer is not interested. On the other hand, the information which you have is of great importance to the adjoining interest. As an engineer can you release the particular information which you have to the other party so that the other valuable material may be explored? Please discuss taking into consideration provisions of the IEM Regulations on Professional Conduct.

3. Engr A is a project engineer for a project contracted to X Company owned by Mr B. Then, Mr B tells Engr A that he is ordering the latest model of an electronic gadget for his company staff and he can get a set for Engr A at the company discounted price. Engr A agrees and pays on delivery. Did Engr A breach the IEM Regulations on Professional Conduct: “It is the responsibility of every engineer to give the highest regard to his profession and conduct himself with integrity when executing his task.
4. Discuss this statement in detail within the context of the Malaysian environment. Professionalism cannot be taught by regurgitating the IEM Regulations on Professional Conduct nor by memorizing a set of rules. Do you agree with the statement and why?

5. Discuss this statement in detail within the context of the Malaysian environment. The IEM Regulations on Professional Conduct speaks against active self-promotion and advertisement. In what ways would such restraint enhance the stature of engineers as professionals? More importantly, given the advent of the information technology age where virtual reality is becoming the norm, how would any violation of the IEM Regulations on Professional Conduct be detected and dealt with?

6. Discuss this statement in detail within the context of the Malaysian environment. You are an engineer and it is known that your project activities/plant production had caused an adverse health, safety and/or environmental (HSE) impact. To improve the HSE quality, you have to cease your project activities/plant production for a period time, resulting in the inability to meet the required schedule and targets. How would you handle a situation where there is a conflict between the IEM Regulations on Professional Conduct and commercial consideration?
7. Discuss this statement in detail within the context of the Malaysian environment. Very often codes of practices suggest discretion of engineering judgement. There are merits and demerits of international codes of practice and standards as opposed to national documents within the context of the Malaysian industry and practices. Discuss by giving examples of engineering judgement whereby such decisions does not conform to an international code of practices and how it is justified. Is international conformity always desirable?

8. Discuss this statement in detail within the context of the Malaysian environment. Engineers are often entrusted with the responsibility of implementing large-scale projects involving millions of Malaysian Ringgit. In view of the large amount of money changing hands, the integrity and ethical standards of engineers are being put to test. What measures can an engineer take to prevent corruption and unethical practice of cutting corners in order to safeguard the good image of the engineering profession?

9. Discuss this statement in detail within the context of the Malaysian environment. ‘Conflicts of professional interest frequently arises in the working environment of an engineer’. Discuss the statement and propose the appropriate solutions for overcoming the problems.

10. Discuss this statement in detail within the context of the Malaysian environment. Most projects are awarded on a competitive bidding basis. Supposing you had been the designated engineer of one of the bidders which was not awarded the letter of intent by the Client; and you are then approached by the ‘winner’ to join the Consultant Team; should you accept the second appointment? If yes, describe the situations, which might be seen as conflict of interests. If no, describe the reasons and/or clear-cut situations why you should decline the second appointment.
11. Discuss this statement in detail within the context of the Malaysian environment. You are in a position of responsibility administering an institution of higher learning with limited resources. You have been assigned to revise the engineering curriculum and directed to increase the number of graduates. From the standpoint of professional conduct, describe the necessary curriculum contents which must be included so as not to compromise the engineering standards.

12. Discuss this statement in detail within the context of the Malaysian environment. Corruption has undermined integrity in professional practice in the engineering industry. The professional engineer who steadfastly embraces the IEM Regulations on Professional Conduct is left in a dilemma. His option is that he could just ignore it or turn whistle blower. Explain how you would handle this problem.

13. Discuss this statement in detail within the context of the Malaysian environment. Assuming that you are the principal partner of a reputable engineering-based firm in a small state in the country. Your family is very well reputed, respected and influential, having lived and worked in the state for decades. Leaders of a certain political party approach you seeking your assistance to campaign for them in a forthcoming state by-election. Amongst others, they have promised upon winning the said elections, to award your company with all the major projects to be awarded by the state government. It is desirable for your firm to secure new projects. Discuss critically on your actions going forward, taking accounts of the IEM Regulations on Professional Conduct.