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UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER I
SESSION 2017/2018**

COURSE NAME : ENGINEERS AND SOCIETY
COURSE CODE : BEE 10202
PROGRAMME CODE : BEV/BEJ
EXAMINATION DATE : DECEMBER 2017/ JANUARY 2018
DURATION : 2 HOURS
INSTRUCTION : ANSWER ALL QUESTIONS

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THIS QUESTION PAPER CONSISTS OF **THREE (3)** PAGES

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Q1 (a) Board of Engineers Malaysia (BEM) produces the Code of Professional Conduct of an engineer as the guidelines in engineering profession. Describe all **five (5)** main sections in this code.

(5 marks)

(b) Define ethics. In engineering profession, ethic can be divided into personal and professional ethics. Explain both of these ethics.

(10 marks)

(c) The Institution of Engineers Malaysia (IEM) and the Board of Engineers, Malaysia (BEM) are two important bodies that govern the engineers in Malaysia. Distinguish the functions of these institutions and assess their contribution in national human resources development. Compare the main difference between these two entities.

(10 marks)

Q2 (a) In the Board of Engineers Malaysia (BEM), there are two main groups of engineers, namely as graduate engineers and professional engineers. Explain the requirement to become both group of engineers

(5 marks)

(b) In the Code of Professional Conduct, it is stated that “Every registered Engineer shall at all times uphold the dignity, high standing and reputation of his profession.” Explain about this statement. Illustrate why it is important for all engineers to strictly comply with this code of ethics.

(6 marks)

(c) As consulting engineer, you have been asking by your client company to perform some study which is not in your area or expertise. The client insists you to conduct the study as soon as possible before your contract ended. Actually, your client doesn't want to hire a new consulting engineer to perform the study as the cost saving measures. Suggest the counter measures to handle this situation and provide your justification

(14 marks)



Q3 (a) The Earth Summit is the United Nations Conference on Environment and Development (UNCED) was held at Rio de Janeiro, Brazil, from 3-14 June 1992. UNCED brought together policy makers, diplomats, scientists, media personnel and NGO representatives from 179 countries in a massive effort to reconcile the impact of human socio-economic activities on the environment and vice versa. The objective of UNCED is to reconcile the globally development needs with environment protection. The main achievement of UNCED was Agenda 21 and four key results. Explain the Agenda 21 and list **four (4)** key results.

(10 marks)

(b) A government chief engineer took advantage of his office to solicit \$400,000 from a project manager of a land development company as a reward for his assistance in obtaining green light for the company's car park development project. Subsequent to the first application of the project being turned down by the relevant government department, the chief engineer asked for the advantages from the company. Frustrated at being asked to pay bribes to secure the project, the project manager reported the case to the Anti Corruption Agency (ACA). The chief engineer eventually convicted of soliciting and accepting illegal advantages, was sentenced to an imprisonment of four years and six months. Explain in brief the wrongdoing of the chief engineer in accepting bribes in granting project approval.

(8 marks)

(c) Engineer is often entrusted with the responsibility of implementing large-scale projects involving millions of Ringgit. In view of the large amount of money changing hands, the integrity and ethical standards of engineers are being put to test. Suggest the counter measures that an engineer can take to prevent corruption and unethical practice of cutting corners in order to safeguard the good image of the engineering profession.

(7 marks)

Q4 (a) Compare and contrast between the responsibilities of an employer and an employee under the OSHA Act.

(13 marks)

(b) Define whistle blowing. Characterise **four (4)** main features of whistle blowing. What are the necessary guidelines that must be followed when an engineer decides to proceed with the act of whistle blowing?

(12 marks)

- END OF QUESTIONS -

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