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UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER I
SESSION 2014/2015**

COURSE NAME : ENGINEERS AND SOCIETY
COURSE CODE : BEE 10202
PROGRAMME : BEJ/BEV
EXAMINATION DATE : DECEMBER 2014/JANUARY 2015
DURATION : 2 HOURS
INSTRUCTION : ANSWER **FOUR (4)**
QUESTIONS ONLY

THIS PAPER CONSISTS OF **FOUR (4)** PAGES

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Q1 In our context, ethic refers to moral values that are sound in terms of right, policies and desirable laws.

(a) Why are professional ethics important to engineers?
(4 marks)

(b) "Ethical standards of practice have never been more besieged than they are today. Those with strong moral character, a dedication to professional integrity, and the ability to reason soundly must find the power to resist the attack." According to the statement, why should the engineers refrain from the offering and acceptance of illegal advantages?
(8 marks)

(c) 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 practices in order to safeguard the good image of the engineering profession?
(7 marks)

(d) Consider the following case: A residence engineer took advantage of his office to solicit an amount of RM500,000 from a project manager of a construction company as a reward for his assistance in obtaining approval for the company's condominium development project, after being turned down by the relevant government department on the initial application. Frustrated at being asked to pay the bribes to secure the project, the project manager reported the case to authority, in this case, SPRM. The residence engineer eventually convicted of soliciting and accepting illegal advantages, was sentenced to an imprisonment of four years. Explain in brief the wrongdoing of the residence engineer in accepting bribes for the granting of project approval.
(6 marks)

Q2 Occupational Safety and Health Act (OSHA) was enacted for the purposes of securing to the safety, health and welfare of persons at work and for protecting other person against risks to safety or health in connection with activities of persons at work.

(a) Compare and contrast between the responsibilities of an employer and an employee under the act.
(15 marks)

- (b) (i) Describe the act of whistle blowing. (2 marks)
- (ii) Demonstrate **FOUR(4)** main features of whistle blowing. (4 marks)
- (iii) Explain the necessary guidelines that must be followed when an engineer decides to proceed with the act of whistle blowing. (4 marks)

Q3 Engineering is a profession that has standards of conduct and responsibilities based on specialised knowledge and professional status that can be acquired through well defined ways. The scope of engineering works can be classified according to disciplines, careers or functions.

- (a) Categorize and elaborate on duties of engineers based on functions. (15 marks)
- (b) How do engineers enhance their competencies in order to attain the class of effective engineers. (10 marks)

Q4 (a) (i) Explain an engineer's obligation. (3 marks)

(ii) Distinguish the **THREE(3)** types of obligations. (9 marks)

(b) Consider the following scenario regarding an engineer's obligation:
"A registered electrical engineering contracting firm by the name of MR Sdn Bhd, engaged an engineer, Ir Kosiman to design an industrial electrical installation for a medium scale food processing plant. Within two months, Ir Kosiman produced, what he believed, the best possible design considering all factors and local bylaws. Upon delivering it to his client, the problem emerged. MR Sdn Bhd did not agree with the design in which the Executive Director of MR Sdn Bhd, speculated that it would be expensive and complex. The company then demand Ir Kosiman to surrender the design to the company, in which case the director would like to engage another consulting engineer. Ir Kosiman refused to cooperate with the company's decision."

- (i) Illustrates the ethical clauses that are closely related to the scenario described above. (5 marks)

- (ii) Relate the kind of obligations that motivate Ir Kosiman from cooperating with the decision made by the Executive Director.
(8 marks)

- Q5** (a) The obligations and rights of an employment contract are covered by the Employment law. Describe briefly the Employment law.
(4 marks)

A contract of service must contain a provision for its termination. In each of the following cases, determine the period of notice for termination if an employee is employed for:

- (i) three years.
(ii) one and half year.
(iii) ten years.

(6 marks)

- (c) With regards to the Employment Act 1955, evaluate on the following statements that are concerned with the employee's right.

- (i) If an employee has been continuously absent from work for more than two consecutive working days without prior leave application from his employer and reasonable excuse for such absence, his/her employer has right to terminate his/her service.
(ii) An employee is eligible for advance payment from his/her employer, which exceeds the amount of wages which the employee earned in the preceding month, to purchase a car.
(iii) A female employee also can be employed in any underground working.
(iv) Female employee is entitled to maternity leave until three months.
(v) Birthday of Prophet Muhammad is a federal public holiday.

(15 marks)

- END OF QUESTIONS -