

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION SEMESTER I **SESSION 2015/2016**

COURSE NAME : ENGINEERS AND SOCIETY

COURSE CODE

BEE 10202

PROGRAMME

BACHELOR OF ELECTRONIC

ENGINEERING WITH HONOURS/ BACHELOR OF ELECTRICAL ENGINEERING WITH HONOURS

EXAMINATION DATE :

DECEMBER 2015 / JANUARY 2016

DURATION

2 HOURS 30 MINUTES

INSTRUCTION

ANSWER FOUR (4) QUESTIONS

ONLY

THIS QUESTION PAPER CONSISTS OF FIVE (5) PAGES

CONFIDENTIAL

- Wilayah Pembangunan Iskandar (IRDA) in collaboration with Kementerian Pendidikan Malaysia (KPM) and Kementerian Pendidikan Tinggi Malaysia (KPTM) will be organizing ISKANDAR MALAYSIA EMPLOYMENT FAIR 2015. John is elected and would sit for screening examination. Unfortunately, he is not prepared for this job examination, thus he plans to cheat and believe he can get the best result.
 - (a) Discuss John's action and analyse this case using ethical theory.

(10 marks)

(b) If you are appointed to be an engineer, write examples of your obligation towards profession.

(15 marks)

- Q2 Institutions and facilities where professionals see clients or pursue research have their own policies concerning safeguarding privacy and maintaining confidential records. It is compulsory on the professionals in such settings to familiarize themselves with such workplace policies and regulations and to perform their work in conformity with these requirements.
 - (a) Based on this statement, explain the professional rights and confidentiality.

(10 marks)

- (b) Company loyalty and whistle-blowing are a part of workplace responsibility and rights.
 - (i) Differentiate between company loyalty and whistle-blowing.

(10 marks)

(ii) Under what circumstances can a registered engineer whistle-blowing and disobey company loyalty.

(5 marks)

Q3 (a) Briefly compare the main roles between Institute of Engineers Malaysia (IEM) and Board of Engineers Malaysia (BEM).

(10 marks)

- (b) A new innovative product that can be used for Long Term Evolution application will be launched by OXE Communications Sdn. Bhd. in January 2016. However, the product does not meet the specific standards required by Standards and Industrial Research Institute of Malaysia (SIRIM).
 - (i) Explain the functions of Malaysian Standards.

(5 marks)

(ii) With the aid of relevant examples, describe the roles of SIRIM.

(5 marks)

(iii) As an engineer of OXE Communications Sdn. Bhd., you have been instructed by your manager to take over the job of your colleague in order to ensure the product could still be launched according to the expected timeframe. Based on the Code of Professional Conduct of Board of Engineers Malaysia (BEM), briefly justify further actions that needs to be taken.

(5 marks)

- Q4 Accidents at workplace are undesirable incidental and unplanned events that could have been prevented had circumstances leading up to the accidents been recognized, and acted upon, prior to its occurrence.
 - (a) Discuss possible causes of accidents.

(5 marks)

(b) Explain practical ways that should be taken into account to minimize accidents at workplace.

(5 marks)

- (c) Occupational Safety And Health Act (OHSA) 1994 is an act to make further provisions for securing the safety, health and welfare of persons at work and protecting others against risks to safety or health in connection with the activities of persons at work.
 - (i) Briefly differentiate between Factories & Machines Act (FMA) 1967 and Occupational Safety And Health Act (OHSA) 1994.

(5 marks)

(ii) Explain the fundamental roles of OHSA 1994.

(10 marks)

- Q5 "Environmental ethics can be defined as a commitment and responsibility toward the environment, including plants and animals as well as present and future generations of people." Unfortunately, most of young Malaysian generations were overlook on this issue.
 - (a) Formulate an idea to educate the young generation to appreciate, commit and be responsible toward the environment.

(10 marks)

(b) Engineers should not only inform the society about the impact of technologies and make companies aware about sustainable development issues, but also cooperate with all kind of stakeholders to improve the quality of our future. With the aid of codes of environmental ethics, express your opinion to guarantee the successfulness of this issue.

(15 marks)