



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

PEPERIKSAAN AKHIR SEMESTER II SESI 2009/2010

NAMA MATA PELAJARAN : JURUTERA DAN MASYARAKAT
KOD MATA PELAJARAN : BDA 4052
KURSUS : 4 BDD
TARIKH PEPERIKSAAN : APRIL/MEI 2010
JANGKA MASA : 2 JAM
ARAHAN : JAWAB SEMUA **EMPAT (4)**
SOALAN

KERTAS SOALAN INI MENGANDUNGI TIGA (3) MUKA SURAT

- S1** (a) What are the important duties of a professional engineer in the fulfillment of his/her professional duties towards the society and employer?
(5 Marks)
- (b) Briefly discuss the Engineer Registration Act 1976 and Occupational Safety and Health Act (OSHA) 1994
(10 Marks)
- (c) Read the Case Study below and answer the following questions.
Clients hires Engineer A to design a particular project. Engineer A develops what he believes to be the best and meets with the client to discuss the design. After discussing the design plans and specifications, the client and Engineer A are involved in a dispute concerning the ultimate success of the project. The client believes Engineer A's design is too large and complex and seeks a simpler solution to the project. Engineer A believes a simpler solution will not be achieved and could endanger the public. The client demands that engineer A deliver over to him the drawings so that he can present the drawing to Engineer B to assist Engineer A in completing the project to his (client) liking. The client is willing to pay for the drawing, plans, specifications, and preparation but will not pay until Engineer A delivers the drawings, but the Engineer A still refuses to deliver the drawing.
- i) Analyse the facts and issues involved in the case?
ii) What is the important moral/ethical found in the case?
iii) Is it ethical for Engineer A to deliver over the plans and specifications to the client and why?
(10 Marks)
- S2** (a) A graduate engineer wants to become a professional engineer. What are the actions/processes that have to take by him/her?
(10 Marks)
- (b) Write briefly on the following:
- (i) Board of Engineer Malaysia (BEM).
(5 Marks)
- (ii) National Institute of Occupational Safety and Health (NIOSH)
(5 Marks)
- (iii) Continual Professional Development (CPD).
(5 Marks)
- S3** (a) What you understand about technology transfer? Provide some information on activities/process involves in the technology transfer.
(8 Marks)
- (b) Identify and discuss about the common problems/barriers for university-industry technology transfer process.
(10 Marks)

- (c) What kind of mechanism which you can suggest to improve the effectiveness of the technology transfer in particular for university-industry. (7 Marks)
- S4** (a) Defined globalization. (5 Marks)
- (a) Discuss the positive and negative effects of globalization. (10 Marks)
- (b) What are the preparations/needs by the engineers in facing the challenges of globalization? (10 Marks)