



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

PEPERIKSAAN AKHIR SEMESTER I SESI 2009/2010

NAMA MATA PELAJARAN : JURUTERA DAN MASYARAKAT

KOD MATA PELAJARAN : BDA 4052

KURSUS : BDD

TARIKH PEPERIKSAAN : NOVEMBER 2009

JANGKA MASA : 2 JAM

ARAHAN : JAWAB **SEMUA EMPAT** (4)
SOALAN

KERTAS SOALAN INI MENGANDUNGI TIGA (3) MUKA SURAT

- Q1**
- a) Identify and discuss THREE (3) different professional agencies in Malaysia where their function and objective of the agencies are related to the engineering profession.
(5 Marks)
 - b) National Institute of Occupational Safety and Health (NIOSH) Malaysia was established in 1992 to promote the occupational safety and health culture in Malaysia. Under NIOSH regulation, identify FIVE (5) different professions that requires competency examination and certification in order for them to practice and why you think it is needed.
(10 Marks)
 - c) Briefly explain the process/route to be a professional engineer.
(5 Marks)
 - d) What are the important duties of a professional engineer in the fulfillment of his/her professional duties towards the society and employer?
(5 Marks)
- Q2**
- a) Briefly discuss why the project management is importance and it functions in the organization.
(5 Marks)
 - b) Special or large projects that take months or years to complete are required good project management practice. Identify and discuss the THREE (3) phases of the project management activities.
(10 Marks)
 - c) Program Evaluation and Review Technique (PERT) and Critical Part Method (CPM) are the most common techniques used in the project management. Explain how this techniques work to help in schedule, monitor and control the project.
(10 Marks)
- Q3**
- 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)

Q4 Read the case study below and answer the following questions.

Client 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 the result 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 B 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.

- a) Analyze the facts, concept, moral and ethics involved in the case? (8 Marks)
- b) What is the important moral/ethical issues found in the case? (8 Marks)
- c) Is it ethical for Engineer A to deliver over the plans and specifications to the client and why? (9 Marks)