UNIVERSITI SAINS MALAYSIA

First Semester Examination
2012/2013 Academic Session

January 2013

EUP 222/3 – Engineers in Society
[*Jurutera Dalam Masyarakat*]

Duration : 3 hours
[*Masa : 3 jam*]

Please check that this examination paper consists of **THIRTEEN (13)** pages of printed material before you begin the examination.

[*Sila pastikan bahawa kertas peperiksaan ini mengandungi* ***TIGA BELAS (13)*** *muka surat yang bercetak sebelum anda memulakan peperiksaan ini*].

Instructions : This paper contains **FOUR (4)** parts. Answer questions based on the following instruction:-
Part A - Compulsory to answer question 1 (a) and choose 1 other either 1 (b) or 1 (c).
Part B - Choose either question 2 (a) or 2 (b)
Part C & D - Compulsory to answer all questions.

[***Arahan*** *: Kertas ini mengandungi* ***EMPAT (4)*** *bahagian soalan.*
Bahagian A *- Wajib jawab soalan no. 1 (a) dan 1 lagi daripada soalan 1 (b) atau 1 (c).*
Bahagian B *- Pilih samada soalan 2 (a) atau 2 (b).*
Bahagian C & D *- Wajib jawab semua soalan.*

All questions **MUST BE** answered on a new page.

[*Semua soalan* ***MESTILAH*** *dijawab pada muka surat baru*].

In the event of any discrepancies, the English version shall be used.

[*Sekiranya terdapat percanggahan pada soalan peperiksaan, versi Bahasa Inggeris hendaklah diguna pakai*].

PART A

Compulsory to answer question no. 1 (a) and choose question 1 (b) or question 1 (c)

1. (a) Define the following meaning:

(i) Staffing
(ii) Emotional Skills
(iii) Interactive Skills

Discuss briefly the explanation made in (i), (ii) and (iii) through an appropriate example each.

[15 marks]

(b) (i) Name **THREE (3)** objectives of the Continous Quality Improvement (CQI)

[5 marks]

(ii) Explain briefly the important issues required in the philosophy element for Continous Quality Improvement (CQI)

[5 marks]

(c) (i) Desribe what is Project Management

[3 marks]

(ii) One of the key elements in Project Management's 10 commandments is "Be prepared to manage conflicts". How would you minimize this problem from occurring prior to carrying out an actual project.

[7 marks]

PART B

Please answer either qiestion 2 (a) or question 2 (b)

2. (a) Mr. Kia is the owner of vegetable farm located on a piece of land. Mr. Stream is the owner of a piece of land which is adjacent to Mr. Kia's vegetable farm. There is a stream running through the vegetable farm and Mr. Stream's land.

Mr. Kia has been carrying out vegetable farming activities on his land since 20 years ago. Mr. Stream was developing his land into a housing project and carried out earth works and tree felling.

There is a stream running through the vegetable farm and Mr. Stream's land.Encik Stream built a temporary earth road/embankment across the stream to enable Encik stream's lorries and vehicles to cross. The said construction works has caused a backflow of water from the stream and caused flood. The flood waters reached a height of more than eight feet and totally submerged Mr. Kia's vegetable plants and damaged Mr. Kia's properties.

Mr. Stream contends that he carried out the earth works guided by plans drawn up by its surveyors, engineers and architects which were approved by the relevant authorities. Mr. Stream said the floods that occurred at that material time were beyond Mr. Stream's control and were and Act of God.

It was evidenced that the relevant authorities has imposed conditions requires Mr. Stream to take the necessary steps and measures to prevent landslides, floods and the like from happening not only to Mr. Kia's land but to surrounding areas as well. According to the approved plans, Mr. Stream was required to build a concrete bridge over the stream measuring at least 100 feet by 40 feet. However, there was no concrete bridge. Instead Mr. Stream built a temporary earth road cum embankment across the stream.

Now, Mr. Kia wants to claim loss and damages caused by flood waters from Mr. Stream. Please advise Mr. Kia according to tort principles and his legal rights.

[25 marks]

2. (b) Please answer all the following questions:

(i) Fraud

- What is the meaning of fraud according to Contract Act 1950?
- What is the effect of the contract when it involves fraud?
- Please cite one(1) decided cases on contract which involves in fraud.
- What are the remedies when there is an element of fraud involve in the contract?

[5 marks]

(ii) Coercion

- What is the meaning of coercion according to Contract Act 1950?
- What is the effect of the contract when it involves coercion?
- Please cite one(1) decided cases on contract which involves in coercion.
- What are the remedies when there is an element of coercion involve in the contract?

[5 marks]

(iii) Undue Influence

- What is the meaning of Undue Influence according to Contract Act 1950?
- What is the effect of the contract when it involves Undue Influence
- Please cite one (1) decided cases on contract which involves in Undue Influence.
- What are the remedies when there is an element of Undue Influence involves in the contract?

[5 marks]

(iv) Explain briefly about Syariah Court and its establishment in Malaysia.

[5 marks]

(v) Explain briefly about Federal Constitution in Malaysia.

[5 marks]

PART C

Compulsory to answer ALL questions

3. (a) As the company's accountant, Alina deals with the finances of the company on a daily basis. Give **FIVE (5)** threats that she can be exposed to during the accounting process that can jeopardize her preparation of the company's financial statements.

[5 marks]

(b) Mr. Chong is currently setting up a second hand clothing shop in Bandar Baharu. The following are transactions that have occurred in April, 2012.

Date	Transaction
April 1	(1) Owner invested RM 25,000 of his own money into starting the second hand clothing shop
April 5	(2) Purchased furniture for office use for RM 1,000 cash
April 8	(3) Purchased furniture for use in the shop costing RM3,000 on credit
April 15	(4) Made payment of RM 2,000 for the furniture purchased in transaction made on April 8
April 18	(5) The bank loan of RM 10,000 has been approved and used to buy inventories for the shop

(i) Record the above transactions and their effects on the components of the accounting equation.

[10 marks]

(ii) Use the information from (i) to prepare the company's balance sheet for the month ending April 30, 2012

[6 marks]

(iii) Use the information from (ii) to determine the company's
(a) Quick ratio
(b) Current ratio

[4 marks]

PART D

Compulsory to answer ALL questions

4. (a) Describe briefly the following terms with respect to engineering ethics:

(i) Morality

[2 marks]

(ii) Virtue

[3 marks]

(b) Engineers must have the skill set and methodology to problem solving, including soft skill. Discuss five set of soft skill that would help the engineers to be successful in their profession.

[10 marks]

(c) The Board of Engineers Malaysia has made it compulsory for renewal of annual registration to submit records on continuous professional development (CPD). Evaluate the advantages and disadvantages of CPD.

[10 marks]

BAHAGIAN A

Wajib jawab soalan no. 1 (a) dan 1 lagi daripada soalan 1 (b) atau 1 (c)

1. (a) Jelaskan maksud dibawah:

(i) Pengambilan Staf
(ii) Skill Emosi
(iii) Skill Interaktif

Huraikan secara ringkas maksud yang dinyatakan di (i), (ii) dan (iii) dengan memberikan setiap satu contoh yang sesuai.

[15 markah]

(b) (i) Namakan **TIGA (3)** *objektif peningkatan kualiti berterusan (CQI)*

[5 markah]

(ii) Jelaskan dengan ringkas perkara penting yang diperlukan dalam Elemen falsafah untuk peningkatan kualiti berterusan (CQI)

[5 markah]

(c) (i) Jelaskan apa yang dimaksudkan dengan Pengurusan Projek

[3 markah]

(ii) Salah satu elemen penting didalam 10 commandment Pengurusan Projek ialah "Persediaan awal untuk menguruskan konflik". Bagaimanakah masalah ini dapat dikurangkan sebelum berlangsungnya sesuatu projek

[7 markah]

BAHAGIAN B

Jawab soalan 2 (a) atau soalan 2 (b)

2. (a) Encik Kia adalah pemilik ladang sayur-sayuran terletak di atas sekeping tanah. Encik Stream adalah pemilik sekeping tanah yang terletak bertentangan dengan ladang sayur-sayuran Encik Kia. Terdapat anak sungai yang merentasi ladang sayur-sayuran dan tanah Encik Stream.

Encik Kia telah mengusahakan aktiviti-aktiviti perladangan sayur-sayurannya di atas tanahnya sejak 20 tahun yang lalu. Encik Stream telah membangunkan tanahnya untuk projek perumahan dan telah membuat kerja-kerja tambakan tanah dan memotong pokok-pokok.

Terdapat anak sungai yang merentasi ladang sayur-sayuran dan tanah Encik Kia. Encik Stream telah membuat kerja-kerja penambakan tanah di atas tanahnya. Kerja-kerja penambakan tanah tersebut telah mengakibatkan aliran anak sungai tertutup dan mengakibatkan banjir. Banjir tersebut telah mencecah setinggi lebih daripada 8 kaki dan telah merosakkan kesemua pokok-pokok sayur dan harta-harta Encik Kia.

Encik Stream menyatakan bahawa dia telah menjalankan kerja-kerja penambakan tanah berdasarkan kepada plan yang dirangka dan dilukis oleh 'surveyor', juruter dan arkitek yang telah diluluskan oleh pihak berkuasa yang relevan. Encik stream menyatakan bahawa banjir tersebut berlaku adalah di luar kawalan Encik Stream dan ianya adalah perbuatan tuhan.

Telah dibuktikan bahawa pihak berkuasa yang relevan di dalam meluluskan pelan Encik Stream telah mengenakan syarat-syarat yang meminta Encik Stream mengadakan langkah-langkah kawalan yang mencukupi untuk mengelak kesan buruk seperti hakisan tanah dan banjir bukan sahaja di atas tanah Encik Kia tetapi juga bagi kawasan persekitarannya. Berdasarkan kepada pelan yang diluluskan.

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Encik Stream dikehendaki membina jambatan konkrit menyeberangi anak sungai tersebut berukuran sekurang-kurangnya 100 kaki X 40 kaki. Namun, tiada jambatan konkrit yang dibina. Malah, Encik Stream telah membina jalan sementara dengan menambak tanah menyeberangi anak sungai tersebut.

Sekarang, Encik Kia hendak menuntut kehilangan dan gantirugi akibat banjir daripada Encik Stream. Sila nasihatkan Encik Kia berdasarkan prinsip-prinsip tort dan hak-haknya di sisi undang-undang.

[25 markah]

(b) *Sila jawab* ***semua*** *soalan berikut:*

(i) *Frod*

- *Apakah maksud fraud mengikut Akta Kontrak 1950?*
- *Apakah kesan kontrak yang melibatkan frod?*
- *Sila berikan satu (1) kes yang telah diputuskan di Mahkamah berkenaan dengan kontrak yang melibatkan frod.*
- *Apakah remedi-remedi apabila terdapat unsure frod di dalam kontrak?*

[5 markah]

(ii) *Paksaan*

- *Apakah maksud paksaan mengikut Akta Kontrak 1950?*
- *Apakah kesan kontrak yang melibatkan paksaan?*
- *Sila berikan satu (1) kes yang telah diputuskan di Mahkamah berkenaan kontrak yang melibatkan paksaan.*
- *Apakah remedi-remedi apabila terdapat unsur paksaan di dalam kontrak?*

[5 markah]

(iii) *Pengaruh Tidak Wajar*

- *Apakah maksud pengaruh tidak wajar mengikut Akta Kontrak 1950?*
- *Apakah kesan kontrak yang melibatkan pengaruh tidak wajar?*
- *Sila berikan satu (1) kes yang telah diputuskan di Mahkamah berkenaan kontrak yang melibatkan pengaruh tidak wajar.*
- *Apakah remedi-remedi apabila terdapat unsur pengaruh tidak wajar di dalam kontrak?*

[5 markah]

(iv) *Jelaskan secara ringkas berkenaan dengan Mahkamah Syariah dan penubuhannya di Malaysia.*

[5 markah]

(v) *Jelaskan secara ringkas berkenaan dengan Perlembagaan persekutuan di Malaysia.*

[5 markah]

BAHAGIAN C

Wajib jawab semua soalan

3. (a) *Sebagai akauntan syarikat, Alina menguruskan kewangan syarikat setiap hari. Berikan* **LIMA (5)** *ancaman yang dia boleh terdedah semasa proses perakaunan yang mana boleh mengugat penyediaan penyata kewangan syarikat.*

[5 markah]

(b) *Encik Chong sedang membangunkan sebuah kedai menjual pakaian guna semula di Bandar Baharu. Berikut adalah transaksi yang telah berlaku dalam bulan April, 2012.*

Tarikh	***Transaksi***
April 1	*(1) Pemilik melaburkan RM 25,000 duitnya sendiri untuk memulakan perniagaan pakaian guna semula*
April 5	*(2) Membeli perabot untuk pejabat sebanyak RM 1,000 tunai*
April 8	*(3) Membeli perabot untuk kedai berharga RM 3,000 secara kredit*
April 15	*(4) Membuat bayaran sebanyak RM 2,000 untuk perabot yang telah dibeli pada transaksi yang dibuat pada April 8*
April 18	*(5) Pinjaman bank sebanyak RM 10,000 telah diluluskan dan digunakan untuk membeli inventori bagi kedai*

(i) *Rekod transaksi diatas dan kesannya kepada komponen persamaan perakaunan*

[10 markah]

(ii) *Gunakan maklumat dari (i) untuk menyediakan kunci kira-kira syarikat bagi bulan berakhir April 30, 2012*

[6 markah]

(iii) *Gunakan maklumat dari (ii) untuk menentukan keadaan syarikat seperti*

(a) *Nisbah cepat*

(b) *Nisbah semasa*

[4 markah]

BAHAGIAN D

Wajib jawab semua soalan

4. (a) Jelaskan secara ringkas mengenai terma-terma berikut berdasarkan etika kejuruteraan:

(i) Moral

[2 markah]

(ii) Kemurnian

[3 markah]

*(b) Jurutera mesti mempunyai set kemahiran dan kaedah untuk penyelesaian masaalah, termasuk kemahiran insaniah. Bincangkan **LIMA (5)** set kemahiran insaniah yang boleh membantu jurutera berjaya dalam kerjayanya.*

[10 markah]

(c) Lembaga Jurutera Malaysia telah menetapkan untuk memperbaharui pendaftaran tahunan perlu menghantar rekod tentang pembangunan profesional berterusan (CPD). Buat penilaian mengenai kebaikan dan keburukan CPD.

[10 markah]

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