
UNIVERSITI SAINS MALAYSIA

First Semester Examination
Academic Session 2009/2010

November 2009

EUP 222/3 – Engineer In Society
[Jurutera Dalam Masyarakat]

Duration : 3 Jam
[Masa : 3 jam]

Please check that this examination paper consists of **TWENTY (20)** printed pages before you begin the examination.

*[Sila pastikan kertas peperiksaan ini mengandungi **DUA PULUH (20)** muka surat bercetak sebelum anda memulakan peperiksaan ini.]*

Instructions: This paper consists of **FOUR (4)** parts : A,B,C and D. Answer **ALL** questions.

Part C : Please answer on the OMR answer sheet.

*[**Arahan:** Kertas ini mengandungi **EMPAT (4)** bahagian : A,B,C dan D. Jawab **SEMUA** soalan]*

Bahagian C : Sila jawab di atas kertas jawapan OMR.

You may answer the question either in Bahasa Malaysia or English.

[Anda dibenarkan menjawab soalan sama ada dalam Bahasa Malaysia atau Bahasa Inggeris.]

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

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

Write the answered question numbers on the cover sheet of the answer script.

[Tuliskan nombor soalan yang dijawab di luar kulit buku jawapan anda.]

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

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

PART A - BASICS OF LAW

Answer All Questions. (5 question)

1. In terms of contract obligation, a thing or matter is certain when its essence, quality, and quantity are described and set forth. Why is it important that the terms of an agreement have to be certain?

(5 marks)

2. The element of capacity in a contract is important to evaluate the completeness of an agreement. How is the capacity of a contracting party being determined?

(5 marks)

3. Although there are parties who have entered into a contract, they still can discharge the obligation to perform the terms of agreement based on specified reasons. How a contract can be discharged?

(5 marks)

4. Duty of care is usually the first element that has to be proved before a cause action based on negligence can proceed. When is there a breach of duty?

(5 marks)

5. A patent is a legal and exclusive right granted to the owner of an invention to prevent other parties from making, using or selling that invention. What are the five elements of patentability?

(5 marks)

PART B - BASICS OF ACCOUNTING

Answer All Questions. (1 question)

1. Presented below are the balances in the assets, liabilities and stockholders' equity for Sologan Engineering Company, on 31 January 2009. Other than this information, there is an extra information for the preparation of other financial statements. The balance for common stock is not obtained.

ITEM-ITEM: ITEMS:	RM (‘000)	ITEM-ITEM: ITEMS:	RM (‘000)
Accounts payable	225	Accounts receivable	180
Cash	108	Common stock	?
Equipment	144	Supplies	63
Retained earnings(31 January 2008)	241	Service revenue	456
Salary expense	194	Advertising expense	217
Utility expense	106		

- a) Prepare the income statement of Sologan Engineering Company for the year ended 31 January 2009. (5 marks)
- b) Prepare the statement of retained earnings of Sologan Engineering Company for the year ended 31 January 2009. (3 marks)
- c) Prepare the balance sheet of Sologan Engineering Company at 31 January 2009. (9 marks)
- d) For the following, identify these items in the correct section of a cash flow statement. Use (O) for operating activities, (I) for investment activities and (F) for financing activities in the cash flow statement.

		Parts in Cash Flow Statement
i.	Payment to employees	
ii.	Receiving dividends on investments	
iii.	Receiving cash from customers	
iv.	Paying taxes	
v.	Purchasing equipment by paying cash	
vi.	Purchasing inventory	
vii.	Receiving interest revenue	
viii.	Paying dividends to stockholders	

(8 marks)

PART C: Engineering in History, Engineering in Development, Engineering in Environment, and Ethics in Engineering (25 questions)

Respond by selecting the correct answer to each question.

Engineering in History

1. What normally is the duty regarded as foremost of an engineer?
 - a. Earn a living by truthful enterprise.
 - b. Create practical devises, structures, and processes the most ingenious way.
 - c. Serve mankind by applying knowledge to create practical devises, structures, and processes.
 - d. Serve Caesar and slaves alike by enslaving the forces of nature the most ingenious way through truthful enterprise.

2. Which of the following generally stereotyped qualities of an engineer no longer true for Malaysians at least?
 - a. To parents, engineers are highly regarded in society and well paid.
 - b. To the public, engineers lack communication skills.
 - c. To the public, engineers are responsible for failures of many public structures.
 - d. The stereotype engineer is male, socially inept, and politically naïve.

3. Which of the following lists all consists of the names of contributors from European renaissance period?
 - a. Ibn Sina, Al-Battani, Khwarizmi, Ibn Al-Haitham
 - b. Pythagoras, Aristotle, Archimedes, Hippocrates, Guternberg
 - c. Aristarchus, Hipparchus, Eratosthenes, Euclid, Demetrius Poliorcetes
 - d. Leonardo De Vinci, Nicholas Copernicus, Descartes, Galileo, Isaac Newton

4. Which of the following lists of World ancient civilizations has the correct chronological order – earliest mentioned first?
 - a. Neolithic (New Stone) Age, Paleolithic (Old Stone) Age, Bronze Age, Iron Age
 - b. Neolithic (New Stone) Age, Bronze Age, Paleolithic (Old Stone) Age, Iron Age
 - c. Paleolithic (Old Stone) Age, Neolithic (New Stone) Age, Bronze Age, Iron Age
 - d. Paleolithic (Old Stone) Age, Iron Age, Neolithic (New Stone) Age, Bronze Age

5. Which of the following rules does not say correctly of Hammurabi' codes.
 - a. Should the house fall, and killed the owner builder must be post to death.
 - b. Should the house fall, and killed the owner's son, the builder's son must be put to death.
 - c. Should the house fall, and killed the owner's glove the builder's slave must be put to death.
 - d. Should the house fall, the builder must give his own house s replacement.

6. Which of the following causes was not part of reasons that brought down Roman civilization?
 - a. Moral decay in life.
 - b. Decline in patriotism.
 - c. Cost of government and military became too much.
 - d. Roman Empire was too small as a country.

Engineering in Development

7. Which of the following statements does not give correct explanation of the meaning of development?
 - a. Development is growth, evolution, or advancement.
 - b. Development is a situation where politician is in full control of the society.
 - c. Development is the most important challenge facing humanity.
 - d. Development is the transformation from low-productivity society into high-productivity one.

8. In explaining VISION 2020, Mahathir has mentioned the followings, except:
 - a. Instead of being a net recipient, we should be a net contributor.
 - b. We are dependent on others, as it is right now.
 - c. There is inadequate development of indigenous technology.
 - d. In order to achieve our goals, we need to forget about the so called balanced development.

9. Over the past 30 years, how did our country has change economically?
 - a. The country has changed from a third world entity into a first world entity.
 - b. The agricultural based economy has changed to manufacturing based economy.
 - c. The population has changed from totally illiterate into 100 percent literate.
 - d. Those who populated the country 30 years ago are now 30 years older.

10. What was the about rate of poverty in Malaysia in 1970?
 - a. 70% of household
 - b. 50% of household
 - c. 20% of household
 - d. 10% of household

11. What was the aim of the New Economic Policy?
 - a. To displace and relocate foreigners out of Malaysia.
 - b. To eradicate poverty and restructure society in order to attain national unity and to foster nation building.
 - c. To help Bumiputera by taking away from other components of Malaysian population.
 - d. To achieve advanced country status for Malaysia by the year 2020.

12. Which of the following roles is not part of an engineer's responsibility for development of the country?
- a. To have a sense of ethics and professionalism.
 - b. To maintain high standard in practice.
 - c. To be always aware of environmental and safety issues.
 - d. To stick to traditional technology and way of life.

Engineering in Environment

13. Sustainability means:
- a. Consumption of non-renewable energy
 - b. Making rooms for future generations to live happily.
 - c. Consumption of renewable energy but much faster than the renew rate.
 - d. Polluting the environment over the ability of earth to absorb it.
14. How many percent of people in advanced countries are living sustainably?
- a. 5
 - b. 25
 - c. 45
 - d. 65
15. The world population has doubled in the last
- a. 30 years
 - b. 40 years
 - c. 50 years
 - d. 60 years
16. Which of the following crazy ideas have not yet actually been thought of and proposed by scientist?
- a. To green deserts with plants in enhancing carbon sinks.
 - b. To reflect solar radiation by injecting aerosols to upper atmosphere.
 - c. To dispose Carbon Dioxide by injecting liquid CO₂ to the bottom of the sea.
 - d. To grow trees on the moon for future habitation.

17. Which of the following reasons is not part of why according to NGO's Bakun project should not have been undertaken?
 - a. Potential catastrophic failure due to earthquake.
 - b. Potential shortened operating life due to sedimentation.
 - c. Potential problems due to resettlement of indigenous people has caused problems.
 - d. The country does not really need that much electrical power

18. What was the main idea behind the 2002 introduction of National Policy on the Environment?
 - a. Enhancement of the quality of life through environmentally sound and sustainable development.
 - b. The anticipation of a country without petroleum in 20 years from the date.
 - c. To ensure mistakes due to Bakun Dam will not again happen.
 - d. To please various Environmental pressure group in the country.

Ethics in Engineering

19. Which of the following activities is not part of activities carried out by the Institution of Engineers Malaysia?
 - a. Promote honest practice
 - b. Regulates honest practice
 - c. Arrange lecturers and conferences
 - d. Encourage study of engineering

20. Which of the following organizations officially maintains and cares for codes of ethics of Malaysian Engineers?
 - a. Engineering Accreditation Council, Malaysia.
 - b. National Board of Accreditation, Malaysia
 - c. Institution of Engineers, Malaysia
 - d. Board of Engineers, Malaysia

21. Which of the following statements does not say properly about the Board of Engineers, Malaysia?
- Board members consist of high standing engineers from public sector, private sector, and local authorities.
 - The government appoints board members and registrar
 - Board of Engineers, Malaysia promotes inter state games and other competitions.
 - Board of Engineers, Malaysia regulates the conduct and ethics of engineering profession.
22. Which of the following statements does not say correctly of the content of Code of Ethics of engineers?
- Every professional engineer shall strive to bring his name or name of his organization to fame or great standing by taking part in professional competitions in design and supervision.
 - Every professional engineer shall discharge his duties to his employer or client with complete fidelity.
 - Every professional engineer, in his responsibility to his employer, client or the profession, shall have full regard to the public interest.
 - Every professional engineer shall at all times uphold the dignity, high standing, and reputation of his profession.
23. Which of the following requirements is not prerequisite of a professional engineer seeking extension of his qualification?
- To have attended or given professional courses recognized by the Institution of Engineers or Board of Engineers.
 - To have practiced engineering for the year either in design, supervision, management, teaching, and research.
 - To have paid or to pay professional fee for the year he or she is seeking extension in.
 - To have been a member of Institution of Engineers, Malaysia.

24. Which of the following statement does not say properly of expected character of professional engineer?
- a. Possesses education, knowledge, and skills in an engineering specialty.
 - b. Stays abreast of discoveries and technological changes by participation in meetings and conferences.
 - c. Ensures professional source of income by not revealing trade secrets.
 - d. Guards his honor and ideals by following codes of ethics
25. Which of the following statement is not very correct when talking about ethics?
- a. Ethics is relative to one's own time, society, and generation.
 - b. An action is good if it maximize welfare of the public.
 - c. A virtuous person exhibit good and beneficial qualities.
 - d. Democracy is good from all angles of views

PART D – BASIC MANAGEMENT

Answer All Question (2 questions).

1. Define the following:
- i) Project management
 - ii) Negotiation

Elaborate briefly the definition specified in (i) and (ii) by using appropriate example if necessary.

(15 marks)

2. Describe five key elements required to manage a negotiation successfully. Also include examples that explained briefly each key element.

(10 marks)

BAHAGIAN A - ASAS UNDANG-UNDANG

Jawab semua soalan. (5 Soalan)

1. *Dari segi obligasi kontrak sesuatu benda atau perkara adalah pasti apabila intipati, kualiti dan kuantitinya dinyatakan dan disenaraikan. Mengapakah ianya penting bahawa terma-terma bagi sesuatu perjanjian itu mestilah jelas?*

(5 markah)

2. *Elemen keupayaan dalam sesebuah kontrak adalah penting untuk menilai kesempurnaan sesuatu perjanjian. Bagaimanakah keupayaan sesuatu pihak yang berkontrak dikenalpasti?*

(5 markah)

3. *Walaupun terdapat pihak-pihak yang telah memasuki sesuatu kontrak, mereka masih boleh melepaskan tanggungjawab dari melaksanakan terma-terma perjanjian berdasarkan sebab-sebab tertentu. Bagaimanakah sesuatu kontrak boleh dilepaskan?*

(5 markah)

4. *Tugas untuk berhati-hati adalah elemen pertama yang perlu dibuktikan sebelum sesuatu tindakan berasaskan kecuaiian boleh diteruskan. Bilakah wujudnya sesuatu perlanggaran tugas?*

(5 markah)

5. *Paten adalah suatu hak eksklusif dan perundangan yang diberi kepada pemilik sesuatu rekacipta untuk menghalang pihak-pihak lain dari membuat, menggunakan dan menjual rekacipta tersebut. Apakah lima elemen kebolehpatenan?*

(5 markah)

PART B - ASAS PERAKAUNAN

Jawab semua soalan. (1 solan)

1. *Dipersembahkan di bawah ini adalah baki-baki aset, liabiliti dan ekuiti pemilik bagi Syarikat Kejuruteraan Sologan, pada 31 Januari 2009. Selain daripada maklumat ini, terdapat juga maklumat tambahan untuk penyediaan penyata-penyata kewangan lain. Baki bagi saham biasa tidak diperolehi.*

ITEM-ITEM:	RM (‘000)	ITEM-ITEM:	RM (‘000)
<i>Akaun belum bayar</i>	<i>225</i>	<i>Akaun belum terima</i>	<i>180</i>
<i>Tunai</i>	<i>108</i>	<i>Saham biasa</i>	<i>?</i>
<i>Peralatan</i>	<i>144</i>	<i>Bekalan</i>	<i>63</i>
<i>Pendapatan tertahan (31 Januari 2008)</i>	<i>241</i>	<i>Hasil perkhidmatan</i>	<i>456</i>
<i>Belanja gaji</i>	<i>194</i>	<i>Belanja pengiklanan</i>	<i>217</i>
<i>Belanja utiliti</i>	<i>106</i>		

- a) *Sediakan penyata pendapatan Syarikat Kejuruteraan Sologan bagi tahun berakhir 31 Januari 2009.*
(5 markah)
- b) *Sediakan penyata pendapatan tertahan Syarikat Kejuruteraan Sologan bagi tahun berakhir 31 Januari 2009.*
(3 markah)
- c) *Sediakan kunci kira-kira Syarikat Kejuruteraan Sologan pada 31 Januari 2009.*
(9 markah)
- d) *Bagi yang berikut, kenalpasti item-item ini dalam bahagian yang betul di penyata aliran tunai. Gunakan (O) untuk aktiviti operasi, (I) untuk aktiviti pelaburan dan (F) untuk aktiviti pembiayaan dalam penyata aliran tunai.*

		<i>Bahagian di Penyata Aliran Tunai</i>
<i>i.</i>	<i>Pembayaran kepada pekerja</i>	
<i>ii.</i>	<i>Menerima dividen atas pelaburan</i>	
<i>iii.</i>	<i>Menerima tunai dari pelanggan</i>	
<i>iv.</i>	<i>Membayar cukai</i>	
<i>v.</i>	<i>Membeli peralatan dengan membayar tunai</i>	
<i>vi.</i>	<i>Membeli inventori</i>	
<i>vii.</i>	<i>Menerima hasil faedah</i>	
<i>viii.</i>	<i>Membayar dividen kepada para pemegang saham</i>	

(8 markah)

BAHAGIAN C: Jurutera Dalam Sejarah, Jurutera Dalam Pembangunan, Jurutera dan Persekitaran, dan Etika Jurutera

Sila pilih jawapan yang betul

II. Jurutera Dalam Sejarah

- 1. Apakah tugas utama para jurutera?*
 - a. Menyara hidup dengan cara yang jujur dan mulia.*
 - b. Membina peralatan dan struktur, dan mencipta kaedah secara paling bijak.*
 - c. Memberi khidmat dan sumbangan kepada manusia melalui pembinaan peralatan dan struktur, dan kaedah baru.*
 - d. Raja dan hamba sama saja, diberi khidmat dengan mengabdikan kuasa-kuasa alam, secara bijak dan jujur.*

2. *Yang mana daripada yang berikut ini menyatakan bagaimana bisanya orang memandang jurutera Malaysia, tetapi kini tidak lagi begitu?*
 - a. *Kepada kedua orang tua, jurutera berkedudukan tinggi dalam masyarakat, dan bergaji besar.*
 - b. *Kepada orang awam, jurutera tidak pandai berkomunikasi.*
 - c. *Kepada orang awam, juruteralah yang bertanggungjawab keatas beberapa kejadian bangunan dan tanah runtuh sejak akhir-akhir ini.*
 - d. *Jurutera mesti lelaki, tidak pandai bermasyarakat atau berpolitik.*

3. *Yang mana di antara senarai berikut kesemuanya mengandungi nama-nama penyumbang daripada zaman kebangkitan Eropah?*
 - a. *Ibn Sina, Al-Battani, Khwarizmi, Ibn Al-Haitham*
 - b. *Pythagoras, Aristotle, Archimedes, Hippocrates, Guternberg*
 - c. *Aristarchus, Hipparchus, Eratosthenes, Euclid, Demetrius Poliorcetes*
 - d. *Leonardo De Vinci, Nicholas Copernicus, Descartes, Galileo, Isaac Newton*

4. *Yang mana di antara senarai berikut menyusun dengan tertib tamadun kuno dunia – yang awal didahulukan?*
 - a. *Neolithic (New Stone) Age, Paleolithic (Old Stone) Age, Bronze Age, Iron Age*
 - b. *Neolithic (New Stone) Age, Bronze Age, Paleolithic (Old Stone) Age, Iron Age*
 - c. *Paleolithic (Old Stone) Age, Neolithic (New Stone) Age, Bronze Age, Iron Age*
 - d. *Paleolithic (Old Stone) Age, Iron Age, Neolithic (New Stone) Age, Bronze Age*

5. *Yang mana daripada yang berikut ini bukan daripada kod Hammurabi.*
 - a. *Jika rumah runtuh dan membunuh tuannya, yang membinanya dihukum mati.*
 - b. *Jika rumah runtuh dan membunuh anak tuannya, anak peminanya dihukum mati.*
 - c. *Jika rumah runtuh dan membunuh hamba tuannya, hamba peminanya dihukum mati.*
 - d. *Jika rumah runtuh, yang membinanya mesti memberikan rumahnya sebagai ganti.*

6. *Yang mana di antara sebab-sebab berikut sebenarnya bukan menyebabkan kejatuhan tamadun Rom?*
- a. *Keruntuhan akhlak.*
 - b. *Keruntuhan patriotisma.*
 - c. *Peningkatan kos kerajaan dan ketenteraan.*
 - d. *Empayar Rom menjadi sangat kecil.*

III. *Jurutera Dalam Pembangunan*

7. *Kenyataan berikut yang mana satukah yang tidak menerangkan maksud pembangunan?*
- a. *Pembangunan itu pertumbuhan, evolusi, dan kemajuan.*
 - b. *Pembangunan itu apabila ahli politik berkuasa sepenuhnya.*
 - c. *Pembangunan suatu cabaran terbesar umat manusia.*
 - d. *Pembangunan itu suatu transformasi dari produktiviti rendah kepada produktiviti tinggi.*
8. *Dalam menerangkan WAWASAN 2020, Mahathir menyebut yang berikut, kecuali:*
- a. *Kita mestilah menjadi penyumbang, bukan penerima sumbangan.*
 - b. *Kita malangnya bergantung hidup daripada yang lain.*
 - c. *Pembangunan dinegara ini tidak melibatkan teknologi tempatan.*
 - d. *Bagi mencapai sasaran, kita perlu lupakan saja konsep pembangunan seimbang.*
9. *Sejak 30 tahun lepas, bagaimana negara telah berubah ekonominya?*
- a. *Negara dunia ketiga ini telah menjadi negara maju.*
 - b. *Ekonomi pertanian telah menjadi ekonomi perindustrian.*
 - c. *Daripada keseluruhannya buta huruf, penduduk kini 100 peratus celik huruf.*
 - d. *Selepas 30 tahun, penduduk negara ini kini 30 tahun lebih dewasa.*

10. *Berapakah kadar kemiskinan di Malaysia pada tahun 1970?*
- a. 70%
 - b. 50%
 - c. 20%
 - d. 10%
11. *Apakah tujuan Dasar Ekonomi Baru?*
- a. *Menghalau keluar semua orang asing.*
 - b. *Membasmi kemiskinan dan menyusun semula masyarakat demi perpaduan dan pembangunan negara.*
 - c. *Membantu kaum bumiputera dengan cara mengambil sedikit daripada kaum lain.*
 - d. *Mencapai status negara maju pada tahun 2020.*
12. *Yang mana daripada peranan yang berikut ini bukan sebahagian daripada tanggungjawab jurutera dalam membangunkan negara?*
- a. *Beretika dan profesional.*
 - b. *Sentiasa meningkatkan mutu hasil kerjayanya.*
 - c. *Sentiasa arif tentang isu-isu persekitaran dan keselamatan.*
 - d. *Berpegang teguh kepada teknologi dan cara hidup tradisi.*

IV. *Jurutera dan Persekitaran*

13. *Lestari bermaksud:*
- a. *Penggunaan tenaga tak boleh diperbaharui*
 - b. *Pemberian ruang untuk kehidupan generasi akan datang.*
 - c. *Penggunaan tenaga boleh diperbaharui yang lebih cepat daripada kadar penjanaanya.*
 - d. *Pencemaran alam sekitar yang lebih cepat daripada kadar yang boleh diterima bumi.*

14. *Berapa peratus penduduk negara maju mengamalkan cara hidup lestari?*
- 5*
 - 25*
 - 45*
 - 65*
15. *Penduduk dunia meningkat sekali ganda dalam tempoh:*
- 30 tahun*
 - 40 tahun*
 - 50 tahun*
 - 60 tahun*
16. *Yang mana daripada idea gila yang berikut ini belum lagi dicadangkan oleh para saintis bagi menangani beberapa masalah tentang kehidupan didunia ini?*
- Menghijaukan gurun.*
 - Menangkis pancaran cahaya matahari secara menyuntik aerosol di atmosfera.*
 - Membuang CO₂ dengan cara menyuntiknya ke dasar lautan.*
 - Menanam pohon-pohon di bulan. .*
17. *Yang mana di antara yang berikut ini bukan antara sebab yang disebut oleh Pertubuhan-Pertubuhan Bukan Kerajaan mengapa projek Bakun sepatutnya tidak dijalankan?*
- Kemusnahan yang dahsyat sekiranya berlaku gempa bumi.*
 - Jangka hayat empangan yang pendek sekiranya berlaku pengelodakan.*
 - Masalah besar daripada keperluan memindahkan orang asli.*
 - Negara sebenarnya bukan perlukan tenaga elektrik yang begitu banyak.*
18. *Apakah tujuan utama diperkenalkan Dasar Alam Sekitar Kebangsaan?*
- Peningkatan kualiti hidup melalui pembangunan lestari dan celik alam sekitar.*
 - Menghadapi kemungkinan bahawa negara ini tiada lagi memiliki petroleum selepas 20 tahun.*
 - Memastikan kesilapan Empangan Bakun tiada berulang.*
 - Menjawab tekanan kumpulan-kumpulan alam sekitar di negara ini.*

V. Etika Jurutera

19. Aktiviti berikut yang mana satu tiada sangkut paut dengan Institusi Jurutera Malaysia?
- Menggalakkan amalan jujur*
 - Memperuntukkan undang-undang amalan kejuruteraan*
 - Mengadakan syarahan dan persidangan berkaitan*
 - Menggalakkan pelajar-pelajar mengambil jurusan kejuruteraan.*
20. Badan berikut yang manakah yang mengendalikan secara resmi hal ehwal kod etika para jurutera?
- Lembaga Akreditasi Kejuruteraan Malaysia.*
 - Lembaga Akredetasi Nasional Malaysia*
 - Lembaga Jurutera Malaysia*
 - Lembaga Jurutera Malaysia*
21. Yang mana diantara kenyataan berikut tidak menyebut dengan wajar tentang Lembaga Jurutera Malaysia?
- Ahli-ahli lembaga terdiri daripada jurutera-jurutera berwibawa sektor kerajaan, swasta, dan kerajaan tempatan.*
 - Kerajaan melantik ahli-ahli lembaga dan pendaftar.*
 - Lembaga mengadakan acara sukan peringkat negeri..*
 - Lembaga mengadakan peraturan amalan kejuruteraan.*
22. Yang mana di antara kenyataan berikut tidak menyebut dengan tepat kandungan Kod Etika jurutera?
- Setiap jurutera mestilah berusaha mengharumkan namanya atau nama syarikatnya melalui pertandingan-pertandingan rekabentuk dan penyeliaan.*
 - Setiap jurutera hendaklah bekerja secara jujur kepada majikan atau pelanggannya.*
 - Setiap jurutera hendaklah mendahulukan kepentingan orang ramai dalm setiap tindak tanduknya.*
 - Setiap jurutera hendaklah sentiasa menjaga nama baik kerjanya.*

23. *Yang mana di antara kenyataan berikut bukan syarat bagi seseorang jurutera bagi memperbaharui kelayakan profesionalnya?*
- a. *Menghadiri kursus yang diiktiraf oleh Lembaga Jurutera Malaysia atau Institusi Jurutera Malaysia.*
 - b. *Mengamalkan kerjaya dalam rekabentuk, penyeliaan, pengurusan, pengajaran, dan penyelidikan.*
 - c. *Membayar yuran*
 - d. *Menjadi ahli Institusi Jurutera Malaysia*
24. *Yang mana di antara kenyataan berikut tidak menyebut tentang perilaku yang wajar bagi jurutera professional?*
- a. *Berpelajaran. berpengalaman, berkelayakan, dan berkebolehan dalam salah satu bidang kejuruteraan.*
 - b. *Sentiasa mengambil tahu kemajuan terkini dalam bidangnya.*
 - c. *Melindungi pendapatannya dengan menyimpan rahsia perniagaan.*
 - d. *Mengamalkan kod etika kejuruteraan.*
25. *Kenyataan berikut yang mana satu tidak begitu betul apabila bercakap fasal etika?*
- a. *Kebenaran sesuatu etika bergantung kepada dari sudut mana ia dilihat. .*
 - b. *Sesuatu tindakan itu betul sekiranya ia tidak merugikan orang ramai.*
 - c. *Seseorang itu baik sekiranya dia menunjukkan sifat-sifat yang baik dan berguna kepada orang lain.*
 - d. *Sistem demokrasi itu baik dari segala sudut.*

BAHAGIAN D – PENGURUSAN ASAS

Jawab semua soalan (2 soalan).

1. *Jelaskan maksud di bawah:*

- i) Pengurusan projek*
- ii) Perundingan*

Huraikan secara ringkas maksud yang dinyatakan di (i) dan (ii) dengan menggunakan contoh yang sesuai jika diperlukan.

(15 markah)

2. *Jelaskan lima elemen utama untuk menguruskan sesuatu perundingan yang berjaya. Sertakan juga contoh-contoh ringkas bagi memperjelaskan setiap elemen utama tersebut*

(10 markah)

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