

**SULIT**



Second Semester Examination  
2017/2018 Academic Session

May/June 2018

**EUP222 – Engineers in Society**  
***(Jurutera dalam Masyarakat)***

Duration : 3 hours  
(Masa : 3 jam)

Please check that this examination paper consists of **FOURTY (40)** pages of printed material before you begin the examination.

[*Sila pastikan bahawa kertas peperiksaan ini mengandungi **EMPAT PULUH (40)** muka surat yang bercetak sebelum anda memulakan peperiksaan ini.*]

**Instructions** : This paper contains **FOUR (4)** parts. Answer **ALL** questions.

**Each part must be answered in a separate booklet.**

Parts A, B, C & D – Compulsory

Part C & D - Answer on OMR

[**Arahan** : Kertas ini mengandungi **EMPAT (4)** bahagian soalan. Jawab **SEMUA** soalan.

**Setiap bahagian mesti dijawab dalam buku jawapan yang berasingan.**

[Bahagian A, B, C & D Wajib jawab

Bahagian C dan D - Jawab di atas kertas OMR]

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

[*Sekiranya terdapat sebarang percanggahan pada soalan peperiksaan, versi Bahasa Inggeris hendaklah digunakan.*]

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**SULIT**

**PART A/BAHAGIAN A (25 marks/markah).**

1. (a). "Inability to work independently" has been found as one of the reasons that lead towards the failure of fresh graduates to secure a job during interview. Explain the key-related issues that might be looked into by the interviewer and how would you ensure that those issues have been thoroughly dealt with prior to a particular job interview.

*"Ketidakupayaan untuk bekerja secara bersendirian" telah ditemukan sebagai salah satu sebab kegagalan graduan baru untuk mendapatkan pekerjaan semasa temuduga. Jelaskan isu-isu berkaitan yang berkemungkinan dilihat oleh pewawancara dan bagaimana anda memastikan bahawa isu-isu tersebut telah diambil kira dengan teliti sebelum sesuatu temuduga kerja.*

[10 marks/markah]

- (b). Identify the sequential process how problems of staff could be resolved effectively. Explain how each process should be delivered in order to ensure an efficient outcome achieved when solving the problems of staff. Appropriate example/s can be used to support your explanation.

*Kenal pasti proses berturutan bagaimana masalah kakitangan dapat diselesaikan dengan berkesan. Jelaskan proses yang perlu dilaksanakan bagi memastikan hasil yang cekap dicapai apabila menyelesaikan masalah kakitangan. Contoh yang bersesuaian boleh digunakan untuk menyokong penjelasan anda.*

[15 marks/markah]

**PART B/BAHAGIAN B (25 marks/markah).**

2. The Helium Engineering Company is planning a new project. This project involves the introduction of a new product, Helix. This project duration is expected to be 5 years and because this is a pilot project, it will be terminated. An initial working-capital of RM 500,000 is required to get the production process started. For each year, the total investment in net working capital will be equivalent to 10% of the Ringgit value of sales for that year. Thus, the investment in working capital will increase during years 1 through 3, then decrease in year 4. Finally, all working capital will be liquidated at the termination of the project at the end of year 5. Details on this project are as follows:

*Syarikat Kejuruteraan Helium sedang merancang satu projek baru. Projek ini melibatkan pengenalan satu produk baru, Helix. Tempoh projek ini adalah dijangkakan selama 5 tahun dan disebabkan ini adalah projek perintis, ia akan dihentikan. Modal kerja awal sebanyak RM 500,000 diperlukan untuk memulakan proses pengeluaran. Untuk setiap tahun, jumlah pelaburan dalam modal kerja bersih akan bersamaan dengan 10% dari nilai Ringgit bagi jualan tahun tersebut. Maka, pelaburan dalam modal kerja akan meningkat semasa tahun 1 hingga 3, kemudian menurun dalam tahun 4. Akhirnya, semua modal kerja akan dicairkan semasa projek dihentikan iaitu pada akhir tahun 5. Perincian tentang projek ini adalah seperti berikut:*

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Cost of new machine and equipment: <i>Kos mesin baharu dan peralatan:</i>		RM 20,900,000
Shipping and installation costs: <i>Kos penghantaran dan pemasangan:</i>		RM 300,000
Sales price per unit: <i>Harga jualan seunit:</i>	Year 1 – 4 <i>Tahun 1 – 4</i>	RM 500/unit
	Year 5 <i>Tahun 5</i>	RM 380/unit
Variable cost per unit: <i>Kos berubah seunit:</i>		RM 260/unit
Annual fixed costs: <i>Kos tetap tahunan:</i>		RM 300,000
Year: <i>Tahun:</i>		Unit sold: <i>Unit terjual:</i>
1		100,000
2		130,000
3		160,000
4		100,000
5		60,000

The depreciation method: Use the simplified straight-line method over 5 years. It is assumed that the machine and equipment will have no salvage value after 5 years. This company considers a tax rate of 34% with a 15% required rate of return or cost of capital. Discount rate or discount factor for 5 years duration is given in the following table:

*Kaedah susut nilai: Guna kaedah garis-lurus mudah untuk 5 tahun. Adalah diandaikan bahawa mesin dan peralatan tidak akan mempunyai nilai sisa selepas 5 tahun. Syarikat ini mengambilkira kadar cukai sebanyak 34% dengan 15% kadar pulangan yang diperlukan atau kos modal. Kadar diskaun atau faktor diskaun untuk tempoh 5 tahun diberi dalam jadual berikut:*

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Discount rate <i>Kadar diskaun</i>	Time in years (t) <i>Masa dalam tahun (t)</i>					
	0	1	2	3	4	5
15%	1.0000	0.8696	0.7561	0.6575	0.5718	0.4972

As an engineering student with finance knowledge in project investment, based on the above information, you are requested to assist this company according to the following questions:

*Sebagai seorang pelajar kejuruteraan dengan ilmu kewangan dalam pelaburan projek, berdasarkan maklumat di atas, anda diminta membantu syarikat ini berdasarkan soalan-soalan berikut:*

- (a). What are the factors that need to be considered by an investor within the Net Present Value (NPV) model for the evaluation of investment prospects?

*Apakah faktor-faktor yang perlu dipertimbangkan oleh seorang pelabur dalam model Nilai Kini Bersih (NKB) untuk penilaian prospek-prospek pelaburan?*

[5 marks/markah]

- (b). Calculate profit of this project based on the change in depreciation, earnings before interest and taxes (EBIT) and tax.

*Kira untung selepas cukai berdasarkan perubahan dalam susutnilai, pendapatan sebelum faedah dan cukai (EBIT) dan cukai.*

[7 marks/markah]

- (c). Calculate the operating cash flow of this project.

*Kira aliran tunai pengoperasian projek ini.*

[3 marks/markah]

- (d). Calculate the change in net working capital of this project by considering the liquidation of working capital at the end of the fifth year.

*Kira perubahan dalam aliran tunai bersih projek ini dengan mengambilkira pencairan modal kerja di akhir tahun ke lima.*

[5 marks/markah]

- (e). Calculate the net present value of this project and evaluate if the project can be accepted.

*Kira nilai kini bersih projek ini dan nilaikan jika projek ini boleh diterima.*

[5 marks/markah]

**PART C/BAHAGIAN C (25 marks/markah).****Answer all SIXTEEN (16) questions.****Jawab semua ENAM BELAS (16) soalan.**

1. Which of the following lists of Malaysian engineering achievements has the correct chronological order – earliest mentioned first?

*Yang mana satukah daripada senarai pencapaian kejuruteraan di Malaysia yang berikut mempunyai susunan kronologikal yang betul - yang awal didahulukan?*

- (A). Sepang Race Circuit, Petronas Twin Towers, KLIA, MEASAT1, Proton car production, First Penang Bridge, KL Tower, Second Penang Bridge, Double Track Electrified Railway from Padang Besar to Gemas
- (B). KL Tower, First Penang Bridge, Sepang Race Circuit, Petronas Twin Towers, KLIA, MEASAT1, Proton car production, Second Penang Bridge, Double Track Electrified Railway from Padang Besar to Gemas
- (C). MEASAT1, K L Tower, Proton car production, First Penang Bridge, KLIA, Sepang Race Circuit, Petronas Twin Towers, Second Penang Bridge, Double Track Electrified Railway from Padang Besar to Gemas
- (D). Proton car production, First Penang Bridge, KL Tower, MEASAT1, KLIA, Sepang Race Circuit, Petronas Twin Towers, Second Penang Bridge, Double Track Electrified Railway from Padang Besar to Gemas
- (E). First Penang Bridge, Proton car production, MEASAT1, Sepang Race Circuit, Petronas Twin Towers, KLIA, KL Tower, Second Penang Bridge, Double Track Electrified Railway from Padang Besar to Gemas

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2. Determine the combinations that properly describe the ages of the corresponding civilizations.

*Tentukan gabungan yang menerangkan dengan betul zaman bagi setiap tamadun yang diberi.*

- (A). Muslims (3000BC to 500BC); Mesopotamia (2850BC to 30BC); Egypt (800BC to 320BC); Greeks (750BC to 337); Romans (600 to 1900)
- (B). Mesopotamia (3000BC to 500BC); Egypt (2850BC to 30BC); Greeks (800BC to 320BC); Romans (750BC to 337); Muslims (600 to 1900)
- (C). Egypt (3000BC to 500BC); Mesopotamia (2850BC to 30BC); Greeks (800BC to 320BC); Romans (750BC to 337); Muslims (600 to 1900)
- (D). Greeks (3000BC to 500BC); Mesopotamia (2850BC to 30BC); Egypt (800BC to 320BC); Romans (750BC to 337); Muslims (600 to 1900)
- (E). Romans (3000BC to 500BC); Mesopotamia (2850BC to 30BC); Egypt (800BC to 320BC); Greeks (750BC to 337); Muslims (600 to 1900)



3. State which of the following statements that does not say correctly of the content of Code of Ethics of Malaysia engineers.

*Nyatakan yang mana diantara kenyataan berikut tidak menyebut dengan tepat tentang kandungan Kod Etika jurutera Malaysia.*

- (A). Every registered Engineer shall at all times uphold the dignity, high standing and reputation of his profession.  
*Setiap jurutera berdaftar hendaklah pada setiap waktu memastikan kehormatan, kedudukan, dan nama baik kerjayanya terpelihara.*
- (B). A registered Engineer in his responsibility to his employer, client or the profession, shall have full regard to the public interest.  
*Jurutera berdaftar, dalam melunaskan tanggungjawab kepada majikannya, pelanggannya, atau bidang kerjayanya hendaklah mengutamakan kepentingan orang awam.*
- (C). Every professional engineer shall strive to bring his name or name of his organization to fame or great reputation by taking part in professional competitions in design and innovation.  
*Setiap jurutera hendaklah berusaha supaya dirinya atau syarikatnya menjadi terkenal dengan sentiasa mengambil bahagian dalam setiap pertandingan rekabentuk dan inovasi.*
- (D). A Professional Engineer shall approve and sign only those engineering documents that he has prepared or are prepared under his direct supervision.  
*Jurutera profesional hanya mengesahkan atau menandatangani dokumen yang dia sendiri sediakan atau yang disediakan dibawah seliaannya.*

- (E). Except with the permission of his employer, a registered Engineer shall not accept any remuneration for services rendered other than from his employer.

*Kecuali dengan izin majikannya, jurutera berdaftar tidak boleh menerima apa-apa bayaran selain daripada majikannya.*

4. In which range of years was the First Malaysian Plan carried out?

*Pada tahun berapakah Rancangan Malaysia Pertama berlangsung?*

- (A). 1956-1960  
(B). 1961-1965  
(C). 1966-1970  
(D). 1996-2000  
(E). 1951-1955

5. State the vision and mission of the Department of Environment (DOE), Malaysia.

*Nyatakan visi dan misi Jabatan Alam Sekitar (JAS), Malaysia.*

- (A). The vision is 'Environmental Conservation of Nature' while the mission is 'To provide shelter for natives displaced by development projects'.  
*Visinya 'Melindungi Alam Sekitar dan Keaslian' manakala misinya 'Melindungi puak-puak asli yang terpinggir oleh projek-projek pembangunan'.*
- (B). The vision is 'Environmental Conservation which is in Balance with Economic Development' while the mission is 'To continue economic, social, and cultural progress and enhancement of the quality of life of people through environmentally sound and sustainable development'.

*Visinya 'Melindungi Alam Sekitar seiring dengan Kemajuan Ekonomi' manakala misinya 'Meningkatkan pembangunan ekonomi, sosial, dan budaya dan meningkatkan kualiti kehidupan dikalangan penduduk melalui pembangunan persekitaran yang baik.*

- (C). The vision is 'Environmental Conservation for the Well-being of the People' while the mission is 'To ensure sustainable development in the process of nation building'

*Visinya 'Melindungi Alam Sekitar demi kemaslahatan penduduk' manakala misinya 'Memastikan pembangunan mampan dalam pembangunan negara'*

- (D). The vision is 'Fair Environmental Partnership between Present and Future Generation' while the mission is 'To provide leadership and to encourage partnership in caring for the environment by inspiring, informing, and enabling the nation and people to improve their quality of life without compromising that of future generations'

*Visinya 'Perlindungan Alam Sekitar bagi manfaat manusia' manakala misinya 'membekalkan kepimpinan dan menggalakkan perkongsian dalam kerja-kerja pemeliharaan alam sekitar dengan menyatakan mutu hidup yang boleh ditingkatkan tanpa meminggirkan kepentingan generasi akan datang'*

- (E). The vision is 'Rational Nation Building' while the mission is 'To promote, enhance, and sustain sound environmental management procedure in the process of nation building'.

*Visinya 'Pembangunan Negara secara berhemah' manakala misinya 'Menyokong, memantapkan, dan mengekalkan kaedah pengurusan alam sekitar berwibawa dalam proses pembangunan negara'*

6. Determine the terms that correctly states the definition of engineering according to the (American) Accreditation Board for Engineering and Technology or ABET.

*Tentukan ungkapan yang menyatakan maksud 'kejuruteraan' menurut Lembaga Akreditasi Kejuruteraan dan Teknologi (Amerika Syarikat).*

- (A). The art or science of making practical application of the knowledge of pure sciences, as physics or chemistry, as in the construction of [engines](#), bridges, buildings, mines, ships, and chemical plants. It is also the branch of profession that encompasses the generation and application of heat and mechanical power and the design, production, and use of machines and tools.

*Amalan menggunakan seni atau sains daripada ilmu sains tulen, fizik, atau kimia seperti dalam pembinaan enjin, jambatan, bangunan, lombong, kapal, dan loji kimia. Ianya juga bidang profesion meliputi penjanaan dan penggunaan haba dan kuasa mekanikal serta rekabentuk, pengeluaran, dan penggunaan mesin dan peralatan.*

- (B). The creative application of scientific principles to design or develop structures, machines, apparatus, or manufacturing processes, or works utilizing them singly or in combination. The creative application of scientific principles to construct or operate the same (items mentioned in the above sentence) with full cognizance of their design. The creative application of scientific principles to forecast their (items mentioned in the above sentence) behavior under specific operating conditions.

*Penggunaan prinsip-prinsip saintifik dalam merekabentuk atau membangunkan struktur, mesin, peralatan, atau proses pembuatan, atau kerja melibatkan mana-mana perkara di atas secara sendiri atau gabungan. Penggunaan kreatif prinsip-prinsip saintifik untuk membina atau menjalankan perkara-perkara yang sama (seperti dinyatakan di*

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*di atas) dengan penuh kesedaran akan rekabentuknya. Penggunaan kreatif prinsip-prinsip saintifik untuk meramal tindak balas perkara-perkara (seperti dinyatakan di ayat di atas) di bawah keadaan operasi tertentu.*

- (C). The application of science and mathematics by which the properties of matter and the sources of energy in nature are made useful to people. It is also, a professional discipline that involves the application of principles of physics for analysis, design, manufacturing, and maintenance of systems.

*Penggunaan ilmu matematik dan sains dimana sifat-sifat bahan dan bekalan kuasa diambil manfaatnya bagi kemudahan manusia sejagat. Ianya juga suatu profesion melibatkan penggunaan prinsip-prinsip fizik bagi menganalisa, merekabentuk, membuat, dan menyelenggara system.*

- (D). The work of designing and creating large structures (such as roads and bridges) or new products or systems by using scientific methods. It is also, the branch of profession concerned with the design, manufacture, installation, and operation of engines, machines, and manufacturing processes essential to an industrial economy.

*Suatu kerjaya melibatkan rekabentuk dan pembinaan objek besar, atau produk atau sistem baru menggunakan kaedah saintifik. Ianya juga suatu cabang profesion melibatkan rekabentuk, pembuatan, pemasangan, dan operasi enjin, mesin, dan proses pembuatan yang diperlukan oleh suatu enonomi industri.*

- (E). The profession in which a knowledge of the mathematical and natural sciences gained by study, experience, and practice, is applied with judgment to develop ways to utilize, economically, the materials and forces of nature for the benefit of mankind.

*Suatu kerjaya melibatkan penggunaan ilmu matematik dan sains yang didapati secara kajian, pengalaman, dan praktis, dan digunakan secara berhemah bagi membangunkan dalam menggunakan bahan-bahan dan kuasa-kuasa yang ada bagi manfaat manusia secepat.*

7. Determine which of the following statements that does not indicate properly of the expected character of a professional engineer.

*Tentukan manakah daripada yang berikut ini yang tidak menyebut tentang perilaku wajar bagi seorang jurutera professional.*

- (A). Possesses education, knowledge, and skills in an engineering specialty.  
*Mempunyai pendidikan, ilmu, dan kebolehan dalam bidang kejuruteraan.*
- (B). Stays abreast of discoveries and technological changes by participation in conferences, seminars, and meetings.  
*Sentiasa mendapat maklum tentang perkembangan terkini teknologi bidangnya melalui persidangan, seminar, dan perjumpaan.*
- (C). Ensures professional source of income and honor of the society by not revealing trade secrets.  
*Memastikan pendapatannya lumayan dengan cara menyimpan rahsia perniagaan.*
- (D). Guards his honor and ideals by following the codes of ethics.  
*Menjaga kehormatan dan kemuliaan kerjayanya dengan sentiasa berpegang teguh kepada kod etika.*
- (E). Puts people safety first before profit in each of his professional undertaking.  
*Mengutamakan keselamatan lebih dari keuntungan dalam setiap tindakannya.*

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8. Many countries in the world have been beset with problems preventing them from achieving the necessary milestones to be included as developed nations. Which of the following lists of countries has the lowest overall per capita GDP?

*Banyak negara di dunia telah dibelengu masalah yang menghalangnya daripada mencapai tanda aras sebagai negari maju. Yang mana diantara senarai berikut mengandungi negara-negara berperkapita GDP paling rendah?*

- (A). Venezuela, Argentina, Bolivia, Uruguay, Paraguay, Chile
  - (B). Albania, Austria, Serbia, Bosnia-Herzegovina, Malta, Estonia, Lithuania
  - (C). Zimbabwe, Somalia, Mozambique, Eritrea, Ethiopia, Madagascar
  - (D). Afghanistan, Uzbekistan, Tajikistan, Turkmenistan, Pakistan, Kazakhstan
  - (E). North Korea, Mongolia, China, Tibet, Bhutan, India
9. State which of the following statements that describes correctly the aims of VISION 2020.

*Nyatakan yang mana satukah daripada yang berikut menerangkan tujuan WAWASAN 2020 dengan lebih tepat.*

- (A). Intelligent Malaysians; just, caring, and clever society; high GNP per capita population; high GDP economy; and entrepreneurial citizens.  
*Rakyat Malaysia yang bijaksana; masyarakat yang adil, bertimbang rasa, dan pandai; penduduk ber GNP per kapita tinggi; ekonomi ber GDP tinggi dan masyarakat peniaga yang giat mencari pendapatan.*

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- (B). United Malaysians; just, caring, and clever society high GNP per capita population; competitive, dynamic, and resilient economy; and entrepreneurial citizens.

*Rakyat Malaysia yang bersatu padu; masyarakat yang adil, bertimbang rasa, dan demokratik matang; penduduk ber GNP per kapita tinggi; ekonomi yang berdaya saing, dinamik, dan berdaya tahan; dan masyarakat peniaga yang giat mencari pendapatan.*

- (C). United Malaysians; just, caring, and democratically matured society; sustainably developed Malaysia; competitive, dynamic, and resilient economy; and entrepreneurial citizens.

*Rakyat Malaysia yang bersatu padu; masyarakat yang adil, bertimbang rasa, dan demokratik matang; Malaysia sebagai negara maju secara mampan; ekonomi yang berdaya saing, dinamik, dan berdaya tahan; dan masyarakat peniaga yang giat mencari pendapatan.*

- (D). United Malaysians and immigrants; democratically matured society; developed and wealthy Malaysia; competitive, dynamic, and resilient economy; and entrepreneurial citizens.

*Rakyat Malaysia dan pendatang yang bersatu padu; masyarakat demokratik matang; Malaysia sebagai negara maju dan kaya; ekonomi yang berdaya saing, dinamik, dan berdaya tahan; dan masyarakat peniaga yang giat mencari pendapatan.*

- (E). Free Malaysians with no undue political oppression; just, caring, and democratically matured society; sustainably developed Malaysia politically speaking; competitive, dynamic, and resilient economy; and entrepreneurial citizens.

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*Rakyat Malaysia yang bebas dan tidak tertindas dari segi politik; masyarakat yang adil, bertimbang rasa, dan demokratik matang; Malaysia sebagai negara mampan dari segi politik; ekonomi yang berdaya saing, dinamik, dan berdaya tahan; dan masyarakat peniaga yang giat mencari pendapatan.*

10. Describe which of the following requirements that is not part of prerequisite of a professional engineer seeking extension to his qualification for the following year?

*Tentukan diantara kenyataan berikut ini bukannya syarat bagi seseorang jurutera membolehkan dia memperbaharui kelayakan profesionalnya?*

- (A). To have attended or given professional courses recognized by the Institution of Engineers or Board of Engineers.  
*Telah menghadiri atau memberi kursus-kursus yang diiktiraf oleh Institusi Jurutera Malaysia.*
- (B). To have practiced engineering for the year either in design, supervision, management, teaching, and research.  
*Telah mengamalkan praktis kejuruteraan sama ada melalui rekabentuk, penyeliaan, pengurusan, pengajaran, atau penyelidikan.*
- (C). To have paid or to pay professional fee for the year he or she is seeking extension in.  
*Telah membayar yuran bagi tahun permohonannya.*
- (D). To have been a paying member of the Institution of Engineers, Malaysia.  
*Menjadi ahli berbayar Institusi Jurutera Malaysia.*

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- (E). To have served in engineering organizational/societal activities.  
*Telah berkhidmat dalam mana-mana pertubuhan kejuruteraan atau mengambil bahagian dalam mana-mana aktiviti sosial.*

11. State the rates of poverty in Malaysia in 1970, 1990, and 2014.

*Nyatakan kadar kemiskinan di Malaysia pada tahun 1970, 1990, dan 2014.*

- (A). 75% of household, 34% of household, and 10% of household  
*75% penduduk, 34% penduduk, dan 10% penduduk*
- (B). 50% of household, 17% of household, and 0.6% of household  
*50% penduduk, 17% penduduk, dan 0.6% penduduk*
- (C). 25% of household, 12% of household, and 6% of household  
*25% penduduk, 12% penduduk, dan 6% penduduk*
- (D). 5% of household, 10% of household, and 20% of household  
*5% penduduk, 10% penduduk, dan 20% penduduk*
- (E). 50% of household, 17% of household, and 20% of household  
*50% penduduk, 17% penduduk, dan 20% penduduk*

12. Describe the most pressing environmental concerns faced by the world today.

*Nyatakan tajuk-tajuk masalah persekitaran yang menjadi perhatian dunia masa kini.*

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- (A). Climate change, pollution, deforestation, water scarcity, loss of biodiversity, and soil erosion and degradation.

*Perubahan iklim, pencemaran, kekurangan air, kehilangan kepelbagaian bio, dan hakisan dan kehilangan tanah.*

- (B). Poverty, over population, malnutrition, stillbirth, maternal death, and suicides rate.

*Kemiskinan, kesesakan penduduk, kekurangan makanan, kematian kelahiran, kematian ibu sewaktu melahirkan, dan bunuh diri.*

- (C). Obesity, tobacco, drug abuse, nutrition and exercise, mental health, and immunization.

*Kegemukan, tembakau, salahguna dadah, pemakanan dan riadah, kesihatan mental, dan imunisasi.*

- (D). Roads and transportation, job opportunity, equality between men and women, political freedoms, and quality education.

*Jalanraya dan pengangkutan, peluang pekerjaan, jurang perbezaan lelaki perempuan, kebebasan politik, dan mutu pendidikan.*

- (E). Racial inequality, gender inequality, income inequality, wealth inequality, education inequality, employment inequality.

*Jurang perkauman, jurang jantina, jurang pendapatan, jurang kekayaan, jurang pendidikan, jurang pekerjaan.*

13. Who invented the typewriter, electric light bulb, wireless communication, and telephone communication?

*Siapakah pencipta mesin taip, lampu elektrik, perhubungan tanpa wayar, dan perhubungan telefon?*

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- (A). The Americans  
*Orang Amerika*
- (B). The Europeans  
*Orang Eropah*
- (C). The Asians  
*Orang Asia*
- (D). The Australians  
*Orang Australia*
- (E). All of the above  
*Semua di atas*

14. State which of the following conducts is considered inappropriate and would invite the attention of the Board of Engineers, Malaysia?

*Nyatakan yang manakah antara berikut yang melibatkan perlakuan tidak berperaturan dan boleh mengundang teguran pihak Lembaga Jurutera Malaysia?*

- (A). This person's name is Kia Peng but he wrote it as Kia P Eng in his letter to increase the chance that the receiver would think he was a professional engineer.  
*Seseorang bernama Kia Peng tetapi menulisnya sebagai Kia P Eng bagi meningkatkan peluangnya apabila penerima suratnya menyangka dia jurutera profesional.*

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- (B). This person's name is Mike Shoppe but he wrote it as Mike Shop PE in his letter so the one who received it would probably think he was a professional engineer.

*Seseorang bernama Mike Shoppe tetapi menulisnya sebagai Mike Shop PE bagi meningkatkan peluangnya apabila orang menyangka dia jurutera profesional.*

- (C). This person's name is Irwan but he wrote it as Ir Wan in his letter so the one who he was writing to would hopefully think he was a professional engineer.

*Seseorang bernama Irwan tetapi menulisnya sebagai Ir Wan dan berharap ada orang menyangka dia jurutera profesional.*

- (D). This person's name is John Arumugam and he is a qualified professional engineer. He has a big screen in front of his office that says 'Ir John Arumugam, P E' to advertise his service.

*John Arumugam jurutera bertauliah. Dia menulis namanya sebagai 'Ir John Arumugam, P E' pada suatu papan besar untuk mengiklankan perkhidmatannya.*

- (E). All of the above conducts are considered inappropriate that would invite the attention of the Board of Engineers, Malaysia.

*Kesemua perlakuan di atas boleh dianggap melanggar peraturan dan boleh mengundang teguran pihak Lembaga Jurutera Malaysia.*

15. Over the past 40 years, how did our country change economically?

*Dalam 40 tahun kebelakangan, bagaimanakah ekonomi negara kita telah berubah?*

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- (A). The agricultural based economy has been gradually replaced by the manufacturing and knowledge based economy.  
*Ekonomi berteraskan pertanian telah diambalih oleh ekonomi berteraskan pembuatan dan ilmu pengetahuan.*
- (B). The illiteracy rate has decreased while the average income level has increased.  
*Kadar buta huruf telah menurun manakala kadar pendapatan telah meningkat.*
- (C). Life expectancy has increased for the male and female categories.  
*Jangka hayat telah meningkat bagi kategori lelaki dan perempuan.*
- (D). The size of the middle class population has increased tremendously  
*Kelas pertengahan telah meningkat dengan banyaknya.*
- (E). All of the above descriptions are true.  
*Semua kenyataan di atas benar.*

16. State which of the following statements describes the meaning of sustainability in development?

*Nyatakan kenyataan yang manakah menerangkan tentang maksud pembangunan lestari?*

- (A). Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.  
*Pembangunan yang memenuhi keperluan kini tanpa mengurangkan keupayaan generasi akan datang dalam mencari keperluan mereka.*

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- (B). The overriding priority of needs, particularly the essential needs, are given to the world's poor.  
*Keutamaan yang paling didahulukan adalah dalam memenuhi keperluan penduduk termiskin dunia.*
- (C). The limitations in technological undertakings are based on environment's capacity to absorb the consequences.  
*Kekangan kepada tindakan teknologi bergantung kepada keupayaan alam sekitar dalam menyerap mana-mana akibat buruk yang terhasil.*
- (D). An approach to development that looks to balanced needs, against an awareness of the environmental, social and economic limitations of the society, although the needs can be competing against each other.  
*Suatu kaedah pembangunan yang mengambil kira keperluan yang berbeza-beza, yang sedar tentang akibat kepada alam sekitar, dan kekangan sosial dan ekonomi, walau pun keperluan-keperluan ini berlawanan antara satu dengan lain.*
- (E). All of the above statements describe in parts the meaning of sustainability in development  
*Semua kenyataan di atas menerangkan sebahagian daripada maksud kelestarian dalam pembangunan.*

**PART D/BAHAGIAN D (25 marks/markah).**

Answer all SIXTEEN (16) questions.

Jawab semua ENAM BELAS (16) soalan.

Read the article below and answer questions 1 to 4.

Baca artikel di bawah dan jawab soalan 1 hingga 4

## AIR POLLUTION IMPACT

■ *Dust, soot, fly ash, diesel exhaust particles etc. which are suspended in the air lodge in the lungs and can trigger respiratory tract infections*

■ **The small particles in the polluted air can even penetrate the bloodstream**

■ *The particles also impair immune function, which causes infections to occur, resulting in asthma*

■ **People who already suffer from asthma have different triggers that set off problems in the major airways of the lungs,**

■ **making breathing even more difficult**

■ *A pollutant like sulfur-dioxide causes the constriction of smaller airways in the lungs and makes breathing harder even for healthy people*

■ **When it comes to pollen allergies, the introduction of pollen into the nasal passage cause rhinitis, or the inflammation of mucus membranes. This leads to a running nose, itching sensation and other such symptoms**

1. Determine the possible causes that lead to air pollution.  
*Nyatakan sebab-sebab yang mungkin yang membawa kepada pencemaran udara.*
  - I. Emissions from industrial plants and manufacturing activities.  
*Pelepasan daripada aktiviti pusat-pusat industri dan pengilangan.*
  - II. Combustion from fossil fuels.  
*Pembakaran daripada bahan bakar fosil.*

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III. Spraying of pesticides, insecticides, farming chemicals and household products.

*Semburan pestisid, insektisid, bahan kimia pertanian dan produk-produk penggunaan rumah.*

IV. Burning rubbish and dried leaves in the backyard.

*Pembakaran sampah dan dedaunan kering di halaman belakang rumah.*

(A). I and/dan II

(B). II and/dan III

(C). I, II and/dan III

(D). I, II, III and/dan IV

2. Determine which of the following legislations is related to the article above.

*Nyatakan mana antara undang-undang berikut berkaitan dengan artikel di atas.*

I. Section 21. Power to specify conditions of emission, discharge, etc.

*Seksyen 21. Kuasa untuk menentukan keadaan-keadaan emisi, pelepasan, dsb.*

II. Section 22. Restrictions on pollution of the atmosphere.

*Seksyen 22. Had ke atas pencemaran udara.*

III. Section 23. Restrictions on noise pollution.

*Seksyen 23. Had ke atas pencemaran bunyi.*

IV. Section 29. Prohibition of discharge of wastes into Malaysian waters.

*Seksyen 29. Larangan pelepasan sisa ke dalam perairan Malaysia.*

- (A). I and/dan II
- (B). I and/dan III
- (C). II and//dan III
- (D). I, II, III and/dan IV

3. Under the Environmental Quality (Clean Air) Regulations 2014, under subregulation [2] Interpretation, **“air pollutants”** means:

*Di bawah Kualiti Alam Sekitar (Udara Bersih) Peraturan 2014, bawah subperaturan [2] Intepretasi, “**bahan pencemar udara**” membawa maksud:*

- (A). Any type of industrial or manmade pollutant that is emitted in the form of gas.  
*Sebarang jenis bahan pencemar industri atau buatan manusia yang dilepaskan dalam bentuk gas.*
- (B). Any type of waste from domestic or industrial that remains suspended in the air.  
*Sebarang jenis sisa daripada domestik atau industri yang kekal terampai dalam udara.*
- (C). Smoke, cinders, solid particles of any kind, gases, fumes, mists, odours and radioactive substances or any other substances.  
*Asap, bara, partikel pepejal daripada sebarang jenis, gas, wasap, kabus, bauan dan bahan-bahan radioaktif atau bahan-bahan lain.*
- (D). Any natural or artificial substances, whether in a solid, semi-solid or liquid form, or in the form of gas or vapour, or in a mixture of at least two of these substances, that is emitted, discharged or deposited.  
*Sebarang bahan semula jadi atau tiruan, sama ada dalam bentuk pepejal, separa pepejal atau cecair, atau dalam bentuk gas atau wap, atau dalam bentuk campuran sekurang-kurangnya dua daripada bahan ini yang dilepaskan, didiscajkan atau didepositkan.*

4. Determine which of the following are **NOT** the health impacts of deteriorated air quality.

*Tentukan yang manakah antara berikut **BUKAN** impak terhadap kesihatan akibat kemerosotan kualiti udara.*

- I. Trigger respiratory tract infections.  
*Mencetus jangkitan saluran pernafasan.*
  
  - II. Impair immune function.  
*Merosakkan fungsi imunisasi.*
  
  - III. Sulfur-dioxide causes constriction of smaller airways in the lungs and makes breathing difficult.  
*Sulfur dioksida menyebabkan saluran udara dalam paru-paru semakin sempit dan pernafasan sukar.*
  
  - IV. Ear, nose and throat infection.  
*Jangkitan telinga, hidung dan tekak.*
- (A). I and/dan II
  - (B). I and/dan III
  - (C). Only/Sahaja III
  - (D). Only/Sahaja IV

5. The following are the roles and responsibilities of the Director-General and the officers of the Department of Environment **EXCEPT**:

*Berikut adalah peranan dan tanggungjawab Ketua Pengarah dan para pegawai Jabatan Alam Sekitar **KECUALI**:*

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- (A). To administer the Environmental Quality Act and any regulations and orders made thereunder.  
*Mentadbir Akta Kualiti Alam Sekitar dan mana-mana undang-undang serta order yang tertakluk di bawahnya.*
- (B). To be responsible for and co-ordinate all activities relating to the discharge of wastes into the environment.  
*Bertanggungjawab untuk mengkoordinasi aktiviti-aktiviti yang berhubungkait dengan discas sisa ke persekitaran*
- (C). To arrest and charge all polluters who are found discharging waste into the environment without license.  
*Menahan dan mendakwa para pencemar yang didapati bersalah melepaskan sisa ke persekitaran melebihi had ditentukan atau tanpa punyai lesen yang sah.*
- (D). To undertake investigations and inspections to ensure compliance with the Environmental Quality Act.  
*Menjalankan siasatan dan pemeriksaan untuk memastikan pematuhan dengan Akta Kualiti Alam Sekitar.*

6. Below are **TRUE** concerning electrical hazards **EXCEPT**:

*Di bawah adalah **BENAR** berhubung dengan bahaya elektrik **KECUALI**:*

- I. A dangerous condition where a worker could make electrical contact with energized equipment or a conductor and may sustain an injury from shock.  
*Keadaan merbahaya di mana seorang pekerja boleh bersentuhan dengan peralatan berkuasa atau konduktor dan mengalami kecederaan kekejutan.*

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- II. A dangerous condition where there is potential for the worker to receive an arc flash burn, thermal burn, or blast injury.

*Keadaan berbahaya di mana terdapat potensi seseorang pekerja mengalami kebakaran busur terbakar, kebakaran termal atau kecederaan ledakan.*

- III. A dangerous condition where a worker can drown in depression due to long hours of hard labor.

*Keadaan berbahaya di mana seseorang pekerja boleh tenggelam dalam depresi akibat bekerja waktu berpanjangan.*

- IV. A dangerous condition where a worker can suffer from inhaling toxic gases.

*Keadaan berbahaya di mana seseorang pekerja menderita daripada menghidu gas-gas toksik.*

- (A). I and/dan II  
(B). I and/dan III  
(C). II and/dan IV  
(D). III and/dan IV

7. Among the hazards of construction works that may be present in a construction site are:

*Antara bahaya kerja-kerja pembangunan yang hadir di sebuah tapak pembangunan adalah:*

- I. Two workers working 50 m above ground on an air passenger hoist.  
*Dua pekerja yang bekerja 50 m melebihi aras tanah di atas angkatan penumpang udara.*

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- II. A worker sweeping debris beneath a loosely tied scaffolding.  
*Seseorang pekerja yang menyapu habuk di bawah perancah yang diikat secara longgar.*
- III. A worker driving a forklift recklessly beyond the safety lines painted on the ground.  
*Seorang pekerja yang memandu forklift di luar garisan keselamatan yang dicat atas tanah.*
- IV. A group of workers piling up earth 10 meters from a parked excavator.  
*Sekumpulan pekerja yang menggali tanah setinggi 10 meter dalam jarak 10 meter daripada pengorek yang diparkir.*

- (A). I and/dan II  
(B). I and/dan III  
(C). I, II and/dan III  
(D). I, II, III and/dan IV

8. An employee of IWK is responsible to clear up built up sludge that have choked up the underground sewer lines. Describe the hazards that may be present in the confined working space that may affect the employee.

*Seseorang pekerja IWK bertanggungjawab membersihkan enapcemar yang meningkat sehingga menyebabkan saluran kumbahan tersumbat. Nyatakan bahaya yang mungkin hadir dalam ruang bekerja tertutup yang akan memberi kesan kepada pekerja.*

- I. Insufficient light and limited eyesight within the sewer lines.  
*Cahaya dan penglihatan yang terhad dalam saluran kumbahan.*
- II. Low oxygen, and concentrated levels of toxic and flammable gases.  
*Oksigen rendah, dan tahap kepekatan gas-gas toksik dan mudah terbakar.*

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- III. Drowning.  
*Lemas.*
  - IV. Electrical shock.  
*Kejutatan elektrik.*
- (A). I and/dan II
  - (B). I and/dan III
  - (C). I, II and/dan III
  - (D). I, II and/dan IV

Read the article below and answer questions **18 to 21**.

*Baca artikel di bawah dan jawab soalan 18 hingga 21.*

## Worker collapses after inhaling excessive carbon monoxide

**KUCHING:** A foreign worker was treated in hospital after he collapsed from inhaling excessive carbon monoxide in the lower deck of a tugboat yesterday.

The foreigner, an Indian national in his early 20s, had gone to the lower deck of the tugboat around 10am to fetch some supplies but fell unconscious within moments of setting foot below.

The tugboat was berthed at a jetty in the Pending area after arriving from Sibu a few days ago.

Fortunately for the victim, his crew members became aware of the incident and immediately rushed to his aid and carried him back to the main deck.

They then rushed the victim, who appeared to be convulsing, to the Tanah Puteh government clinic where he was given first aid before being transferred to the Sarawak General Hospital for further medical attention.

His condition is reported to be stable.

According to one crew member, the victim had only joined them a couple of months ago and probably did not know that there was often a high build-up of carbon monoxide in the lower deck.

9. State the cause of incident that befell on the foreign worker.

*Nyatakan punca kejadian yang menimpa pekerja asing tersebut.*

- (A). The worker was injured by the blade of the tugboat.  
*Pekerja tercedera disebabkan bilah kapal tunda.*
- (B). The worker fell of a tugboat near a jetty in Pending.  
*Pekerja jatuh daripada kapal tunda berhampiran jeti di Pending.*
- (C). The worker inhaled too much carbon monoxide gas from the tugboat that cause him to collapsed.  
*Pekerja menghidu terlalu banyak gas karbon monoksida yang dilepaskan daripada kapal tunda yang menyebabkan dia rebah.*
- (D). The worker was overburden with carrying too much supplies from the tugboat.  
*Pekerja dibebani dengan membawa terlalu banyak bekalan daripada kapal tunda.*

10. Describe the statements that are considered **TRUE** related to the incident above?

Tentukan yang mana di antara kenyataan-kenyataan berikut berkaitan dengan kejadian di atas dan dianggap **BENAR**?

- I. The worker should have kept a safe distance from the point of emission where the carbon monoxide gas was released.  
*Pekerja sepatutnya memastikan jarak yang selamat daripada titik pelepasan gas karbon monoksida.*



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- II. The employer should have shielded the worker from breathing too much carbon monoxide gas.

*Majikan sepatutnya melindungi pekerja daripada menghidu terlalu banyak gas karbon monoksida.*

- III. The workers should be informed by the employer concerning the hazards of lower deck where carbon monoxide gas is known to build up easily in the lower deck.

*Para pekerja sepatutnya memaklumkan kepada majikan berkenaan bahaya yang wujud di mana kepekatan gas karbon monoksida diketahui mudah meningkat di geladak bawah.*

- IV. The employer should be imprisoned for his negligence on the welfare of the worker's safety.

*Majikan hendaklah dipenjarakan atas kecuaiannya menjaga kebajikan dan keselamatan pekerja.*

- (A). I and/dan II  
(B). I and/dan III  
(C). I, II and/dan IV  
(D). II and/dan IV

11. Identify legislations that are concerned with the incident mentioned in the article that are related to occupational safety and health.

*Kenalpasti undang-undang yang berkaitan dengan kejadian yang disebutkan dalam artikel di atas yang ada hubungkait dengan keselamatan dan kesihatan pekerjaan.*

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- I. Section 15. General duties of employers and self-employed persons to their employees.  
*Seksyen 15. Tanggungjawab Am Majikan dan Orang-orang Bekerja Sendiri Terhadap Pekerja.*
- II. Section 24. General duties of employees at work.  
*Seksyen 24. Tanggungjawab Am Pekerja di Tempat Kerja.*
- III. Section 32. Notification of accidents, dangerous occurrence, occupational poisoning and occupational diseases, and inquiry.  
*Seksyen 32. Makluman Kemalangan, Kejadian Merbahaya, Keracunan Pekerjaan dan Penyakit Pekerjaan dan Pertanyaan.*
- IV. Section of 39. Powers of entry, inspection, examination, seizure, etc.  
*Seksyen 39. Kuasa memasuki, inspeksi, memeriksa, merampas, dsb.*
- (A). I and/dan II  
(B). I and/dan III  
(C). I, II and/dan III  
(D). I, II, III and/dan IV

12. Why is carbon monoxide considered hazardous to human health?

*Kenapa karbon monoksida dianggap merbahaya terhadap kesihatan manusia?*

- I. Carbon monoxide is a toxic gas that causes poisoning and is found in exhaust from cars, and trucks, constructions equipment, airplanes and other vehicles or equipment that burn fuel.  
*Karbon monoksida adalah gas toksik yang menyebabkan keracunan dan didapati daripada ekzos kereta, dan lori, peralatan pembinaan, kapal terbang dan lain-lain kenderaan atau peralatan yang membakar bahan bakar.*

- II. Breathing carbon monoxide can cause headache, dizziness, vomiting, and nausea.  
*Menghidu karbon monoksida boleh menyebabkan sakit kepala, kepeningan, muntah-muntah dan loya.*
- III. High levels of carbon monoxide inhalation may lead to unconsciousness and fatality.  
*Penghiduan karbon monoksida pada paras tinggi boleh menyebabkan pengsan dan kematian.*
- IV. Long term exposure to concentrated levels of carbon monoxide has been linked to increased risk of heart disease.  
*Pendedahan jangka masa panjang terhadap paras karbon monoksida dikaitkan dengan peningkatan risiko penyakit jantung.*
- (A). I and/*dan* II  
(B). I and/*dan* III  
(C). I, II and/*dan* III  
(D). I, II, III and/*dan* IV

13. Determine which of the below is considered **TRUE** as an **UNSAFE ACT** and **UNSAFE CONDITIONS**.

Tentukan manakah antara berikut yang dianggap **BENAR** bagi **TINDAKAN TIDAK SELAMAT** dan **KEADAAN TIDAK SELAMAT**.

- I. Unsafe act is a performance of a task or other activity that is conducted in a manner that may threaten the health and/or safety of workers.  
*Tindakan tidak selamat adalah pelaksanaan tugas atau aktiviti lain yang dijalankan dalam keadaan yang boleh mengancam kesihatan dan/atau keselamatan para pekerja.*

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- II. Unsafe condition is a condition in the work place that is likely to cause property damage or injury.  
*Keadaan tidak selamat adalah keadaan di tempat bekerja yang berkemungkinan menyebabkan kerosakan harta atau kecederaan.*
- III. Hazards are present due to erroneous safety procedures, malfunctioning equipment or tools, etc.  
*Bahaya-bahaya yang hadir adalah berpunca daripada langkah-langkah keselamatan yang penuh kesilapan dan mengelirukan.*
- IV. Employers are fully responsible for any unsafe act and unsafe conditions that involves their employees and any person who are at the place of work.  
*Majikan adalah bertanggungjawab sepenuhnya ke atas keadaan-keadaan tindakan tidak selamat dan keadaan tidak selamat yang melibatkan para pekerja dan mana-mana orang yang berada di tempat kerja.*
- (A). I and/dan II  
(B). I, II and/dan III  
(C). II and/dan III  
(D). I, II and/dan IV

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Read the article below and answer questions **23 to 24**.

*Baca artikel di bawah dan jawab soalan 23 hingga 24.*

## Nine deaths, 33 accidents at construction sites in first three months

**KUALA LUMPUR:** Nine workers died and another 24 were incapacitated in 33 accidents in the construction sector in the first three months of this year.

However, Deputy Human Resources Minister Datuk Ismail Abd Mutallib told the Dewan Negara that the numbers were smaller compared to the corresponding period last year.

There were then 10 deaths, two permanently incapacitated and 26 suffering from non-permanent disabilities in 38 accident cases, he said.

Ismail was replying to a question from Senator Datuk Chiu Tiang Chai on the accident statistics at the construction sites between 2013 and 2014.

Ismail said that among the main factors were ineffective occupational safety and health management system of the companies involved, no comprehensive evaluation of the hazard and risk levels, and inadequate training for the workers. "This is especially so for foreign workers," he added.

He said there was also a lack of monitoring over the implementation of work safety procedures by the contractors and sub-contractors over hazardous and high-risk activities.

Ismail said RM1.1mil in compound fines were imposed on those who had flouted safety rules at the workplace last year with 350 cases prosecuted.

To a supplementary question from Senator Syed Shahir Syed Mohamed, he said a special evaluation panel, comprising officers from his ministry and a medical team, would identify the type of accident, location and time of accident before deciding whether a worker was entitled to protection under the Social Security Organisation (Socso) scheme. — Bernama

14. Determine the **MAIN** factors that lead to accidents and fatalities in a construction site.

*Tentukan faktor-faktor **UTAMA** yang menyebabkan kemalangan dan kematian di sesebuah tapak pembinaan.*

- I. Employers are too controlling and protective of their employees.  
*Majikan yang terlalu mengawal dan melindungi para pekerjanya.*
- II. Ineffective occupational safety and health management systems.  
*Sistem pengurusan keselamatan dan kesihatan pekerjaan yang tidak efektif.*

III. No comprehensive evaluation of the hazard and risk levels that are present at the work place.

*Tiada penilaian menyeluruh berkenaan paras bahaya dan risiko yang wujud di tempat bekerja.*

IV. Inadequate training for the workers.

*Latihan yang tidak mencukupi bagi para pekerja.*

(A). I and/dan II

(B). I, II and/dan III

(C). II and/dan IV

(D). II, III and/dan IV

15. Select among the **TRUE** responsibilities of the employers to implement work safety procedures at the work place.

*Pilih antara tanggungjawab-tanggungjawab **BENAR** bagi para majikan untuk mengaplikasikan langkah-langkah keselamatan bekerja di tempat bekerja.*

I. Designate a safety and health officer for the company.

*Melantik pegawai keselamatan dan kesihatan bagi syarikat.*

II. Educate each manager on the health and safety program.

*Mendidik setiap pengurus berhubungkait dengan program kesihatan dan keselamatan.*

III. Conduct monthly safety trainings with employees.

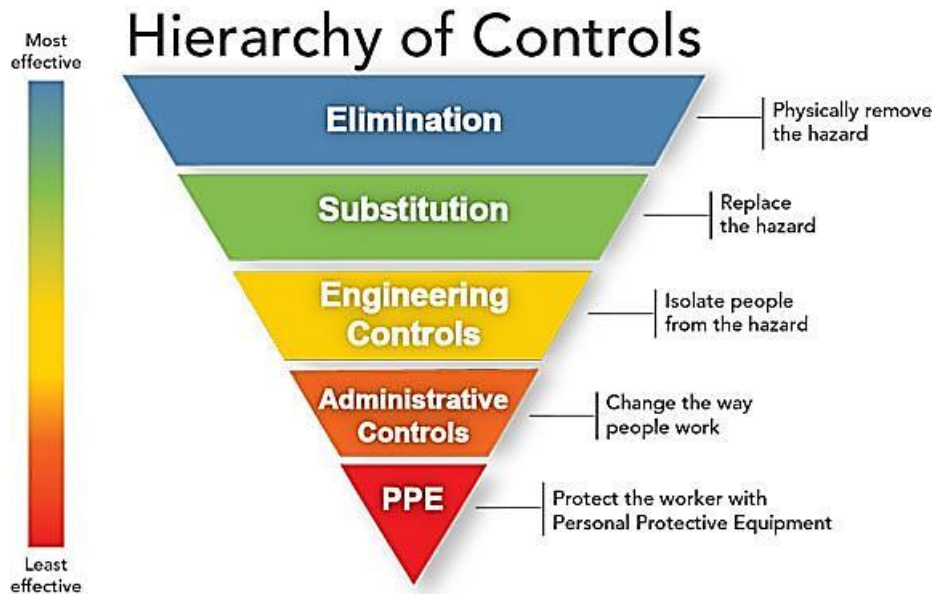
*Mengadakan latihan keselamatan bulanan dengan para pekerja.*

IV. Encourage the employees to buy the best insurance policy in the market.

*Menggalakkan para pekerja memberi polisi insurans terbaik di pasaran.*

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- (A). I and/dan II
- (B). II and/dan III
- (C). I, II and/dan III
- (D). I, II, III and/dan IV



16. Based on the six steps of the hierarchy of risk control shown in the image above, determine the common personal protective equipment given to employees to wear at the place of work.

*Berdasarkan enam langkah hierarki untuk pengawalan risiko yang ditunjukkan dalam imej di atas, tentukan peralatan perlindungan peribadi yang lazimnya diberikan untuk pemakaian para pekerja di tempat bekerja.*

- I. Neoprene gloves to protect hands while working with abrasive materials.

*Sarung tangan neoprene untuk melindungi tangan ketika bekerja dengan bahan mudah menghakis.*

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- II. Respiratory gas mask to protect the respiratory system from inhaling toxic gases.  
*Topeng gas respiratori untuk melindungi sistem pernafasan ketika menghidu gas-gas toksik.*
- III. Headband and hairclip to protect hair from getting caught in between machinery.  
*Cekak dan penyepit rambut untuk melindungi rambut daripada terperangkap di tengah-tengah mesin.*
- IV. Socks to keep feet warm and cosy.  
*Sarung kaki untuk memastikan kaki sentiasa hangat dan selesa.*
- (A). I and/dan II  
(B). II and/dan III  
(C). I and/dan III  
(D). III and/dan IV

-oooOooo-