

- (1). (a). Replacement or repair of damaged equipment is a cost that an organization may incur following an accident at work. Identify **EIGHT** other possible costs incurred by organization following a workplace accident.

*Penggantian atau pembaikan peralatan yang rosak ialah satu kos yang perlu ditanggung oleh sesebuah organisasi berikutan kemalangan di tempat kerja. Kenal pasti **LAPAN** kos yang mungkin ditanggung oleh organisasi berikutan kemalangan tempat kerja.*

(5 marks/markah)

- (b). Many problems in safety and health at the workplace arise due to poor communication. It is not just a problem between management and workers, but also for the same level within an organization. Explain the three basic methods of communication in safety and health. Suggest the best communication way to solve the safety and health issue at the workplace.

*Banyak masalah keselamatan dan kesihatan di tempat kerja timbul akibat komunikasi yang lemah. Ia bukan sahaja masalah antara pengurusan dan pekerja, tetapi ia juga berlaku pada tahap yang sama dalam organisasi. Terangkan tiga kaedah asas komunikasi dalam keselamatan dan kesihatan. Cadangkan cara komunikasi yang terbaik untuk menyelesaikan isu keselamatan dan kesihatan di tempat kerja.*

(8 marks/markah)

...3/-

- (c). On 25 August 2016, a woman was killed when a crane hook at a construction site fell on her car at Jalan Raja Chulan. The hook which was attached to the crane at a nearby construction site is believed to have detached and fell on the car. As a safety officer at the work site, you are required to conduct an investigation of the accident and write a full report comprise of hazard identification, caused of the crane hook failure and corrective and preventive action to ensure the same accident would not happen in future.

*Pada 25 Ogos 2016, seorang wanita terbunuh apabila cangkuk kren di tapak pembinaan jatuh di atas keretanya di Jalan Raja Chulan. Cangkuk yang disambung kepada kren di tapak pembinaan berdekatan dipercayai telah tertanggal dan jatuh ke atas kereta. Sebagai seorang pegawai keselamatan di tempat kerja, anda dikehendaki menjalankan satu siasatan kemalangan dan menyediakan satu laporan penuh yang mengandungi pengenalanpastian bahaya, penyebab kegagalan cangkuk kren dan pembetulan dan tindakan pencegahan untuk memastikan kemalangan yang sama tidak akan berlaku pada masa depan*

(12 marks/markah)

...4/-

- (2). (a). The World Health Organization (WHO) has recommended FOUR (4) risk group classification of the natural disease based on following principal characteristics: severity of disease, host range and the route of transmission. Elaborate the risk groups in table form by evaluating both individual and community risk.

*Pertubuhan Kesihatan Sedunia (WHO) telah mengesyorkan EMPAT (4) klasifikasi kumpulan risiko penyakit semula jadi berdasarkan ciri-ciri utama berikut: keterukan penyakit, kumpulan perumah dan laluan jangkitan. Huraikan kumpulan risiko dalam jadual dengan menilai kedua-dua risiko individu dan komuniti.*

*(12 marks/markah)*

- (b). In 2020, a significant threat to public health emerged. The novel severe acute respiratory syndrome Coronavirus disease (COVID-19) epidemic outbreak emerged in December 2019 from Wuhan City, Hubei Province, China and spread to the rest of the world. Therefore, preventive measures are very important to prevent and control the rapid spread of the COVID-19. As safety manager of the factory, prepare a draft of safe work procedure for prevention of COVID-19 at your workplace.

*Pada tahun 2020, satu ancaman besar terhadap kesihatan awam telah berlaku. Wabak novel sindrom pernafasan akut teruk Penyakit Coronavirus (COVID-19) berlaku pada Disember 2019 dari Bandar Wuhan, Wilayah Hubei, China dan merebak ke seluruh dunia. Oleh itu, langkah-langkah pencegahan adalah sangat penting untuk mencegah dan mengawal penularan COVID-19 yang pantas. Sebagai pengurus keselamatan di kilang anda, sediakan draf prosedur kerja selamat untuk pencegahan COVID-19 di tempat kerja anda.*

**...5/-**

- (i). List down SEVEN (7) main roles and responsibilities of the employer.

*Senaraikan TUJUH (7) peranan dan tanggungjawab utama majikan.*

*(7 marks/markah)*

- (ii). Briefly explain SIX (6) general rules of COVID -19 prevention in the workplace.

*Terangkan secara ringkas ENAM (6) peraturan am pencegahan COVID -19 di tempat kerja.*

*(6 marks/markah)*

- (3). (a). How would you describe occupational health and safety policy.

*Bagaimanakah anda menerangkan polisi kesihatan dan keselamatan pekerjaan.*

*(8 marks/markah)*

- (b). Explain why should an organization have an occupational health and safety policy statement.

*Jelaskan mengapa sesebuah organisasi perlu mempunyai polisi kesihatan dan keselamatan pekerjaan.*

*(8 marks/markah)*

**...6/-**

- (c). Identify the reasons on why an occupational health and safety policy becomes ineffective.

*Kenal pasti punca mengapa polisi kesihatan dan keselamatan pekerjaan menjadi tidak berkesan.*

(9 marks/markah)

- (4). (a). Mr Amran is a woodwork teacher in his thirties. During one of the practical class, he used a planing machine and he ran his ring finger over an exposed part of the blade. As a result, he was given 2 weeks of medical leaves and he had to have the top of his finger amputated.

*Encik Amran ialah seorang guru kerja kayu dalam usia tiga puluhan. Dalam salah satu kelas amali, dia menggunakan mesin mengetam dan dia tergosok jari manisnya pada bahagian mata pisau yang terdedah. Akibatnya, dia diberi 2 minggu cuti sakit dan bahagian atas jarinya terpaksa dipotong.*

- (i). Define “reportable accident” under Occupational Safety and Health Act 1994. In Mr. Amran’s case, should his case considered as reported case.

*Takrifkan “kemalangan yang perlu dilaporkan” di bawah Akta Keselamatan dan Kesihatan Pekerjaan 1994. Dalam kes Encik Amran, adakah kesnya dianggap sebagai kes yang perlu dilaporkan.*

(3 marks/markah)

...7/-

- (ii). Identify and justify the hazards posed in the job activity described above. Thereafter, classify the hazards (such as chemical, physical, biological and so on) and recommend TWO (2) appropriate control measures to mitigate the hazards.

*Kenal pasti dan terangkan bahaya yang timbul daripada aktiviti kerja yang diterangkan di atas. Selepas itu, klasifikasikan bahaya (contoh: kimia, fizikal, biologi dan sebagainya) dan syorkan DUA (2) langkah kawalan yang sesuai untuk mengurangkan bahaya.*

*(5 marks/markah)*

- (b). There are many ways to prevent or mitigate accidents. However, systematic approaches are needed to deal with the safety at the workplace. One of them is the Hierarchy of Control. As a safety manager, you have found that the noise level at a certain area in the workplace was constantly above the required safety limit. Noise was generated by various heavy equipment. Each worker working in the area is given an ear muffler. However, the workers often remove the ear muffler due to hot and sweaty condition.

*Terdapat banyak cara untuk mencegah atau mengurangkan kemalangan. Walau bagaimanapun, pendekatan yang sistematik diperlukan untuk menangani keselamatan di tempat kerja. Salah satunya ialah Hierarki Kawalan. Sebagai pengurus keselamatan, anda telah mendapati bahawa tahap hingar di kawasan tertentu di tempat kerja sentiasa melebihi had keselamatan yang diperlukan, disebabkan oleh bunyi bising yang dijana oleh pelbagai peralatan*

**...8/-**

*berat. Walaupun setiap pekerja yang bekerja di kawasan itu diberi penutup telinga, pekerja kerap menanggalkan penutup telinga tersebut kerana keadaan panas dan berpeluh.*

- (i). Sketch, define and explain the Hierarchy of Risk Control.

*Lakar, takrif dan terangkan hierarki kawalan risiko.*

(11 marks/markah)

- (ii). By using Hierarchy of Risk Control, describe the current approach and suggest other alternatives could be put in place to ensure that safety measure is not compromised.

*Dengan menggunakan Hierarki Kawalan Risiko, huraikan pendekatan semasa dan cadangkan alternatif lain boleh dilaksanakan untuk memastikan langkah keselamatan tidak terjejas.*

(6 marks/markah)

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