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UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER II
SESSION 2014/2015**

COURSE NAME : OCCUPATIONAL SAFETY AND HEALTH
COURSE CODE : BDA 31302
PROGRAMME : 3 BDD
EXAMINATION DATE : JUNE 2015/JULY 2015
DURATION : 2 HOURS
INSTRUCTION : PLEASE ANSWER **FOUR (4)** QUESTIONS FROM **FIVE (5)** QUESTIONS PROVIDED IN THIS SECTION.

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THIS QUESTION PAPER CONSISTS OF FOUR (4) PAGES

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- Q1** (a) You are the occupational safety and health officer at your organization. Your latest task need to be completed is to plan the hazard control strategy at the working place. You are very keen to adapt the Occupational Health and Safety Management System (OSH-MS) model which consists the components of “Plan, Do, Check and Act (PDCA)”.
- i. Provide justification for choosing the PDCA components
(5 marks)
 - ii. Propose the hazards control strategies implementation based on the required activities for each of the PDCA component.
(10 marks)
- (b) In a brief discussion, the owner of your organization does not agree to thoroughly implement activities related to occupational safety and health. He does not understand the duties of employers towards safety and health at workplace. Based on the provisions of the Occupational Safety and Health Act 1994, provide five (5) general duties of employers and self employed persons. For each of the general duties, explain the reason for its importance.
(10 marks)
- Q2** (a) Manual handling activities causes over a third of all workplace injuries. These include work-related musculoskeletal disorders (MSDs) such as pain and injuries to arms, legs and joints, and repetitive strain injuries of various sorts. To help prevent manual handling injuries in the workplace, you should avoid such tasks as far as possible. However, where it is not possible to avoid handling a load, employers must look at the risks of that task and put sensible health and safety measures in place to prevent and avoid injury. As a safety manager, propose a guide of good handling technique for lifting.
(15 marks)
- (b) A wholesale plant nursery dealt with very large plants and trees in pots. The plants were heavy, bulky and of varied sizes and shapes. Workers had reported severe back strain when handling these plants. As a safety officer of the company, you are requiring to evaluate the report and suggest solutions for the work activities.
(10 marks)

- Q3** (a) Accidents data statistics at construction sites in year 2015 was collected for research purposes. The data was analysed and categorised into several groups. You have reviewed and assessed the analysis report. Four most worrying accident categories are:
- Employees falling from elevated area
 - Struck by fallen object from high places
 - Buried by collapse cliff / earth / fallen structure
 - Electrical shock

You are requested to summarise the review and assessment findings for the main factors contributed to each of the above accident categories.

(12 marks)

- (b) You have been conducting safety and health audits related to mechanical handling equipment in many factories and buildings throughout the year. You have also reviewed the accident reports and analysed them in order to come up with appropriate recommendation to control the mechanical hazards in the future. Based on your studies, propose seven (7) methods for hazards preventive and control specifically for mechanical handling equipments. Each proposed method must be followed by justification explaining why the method is important.

(13 marks)

- Q4** (a) Differentiate between chemical, physical and biological hazards. Provide examples to support your comparison.

(9 marks)

- (b) As an engineer in a manufacturing factory, you are required to identify health hazards at your workplace. Based on the identified hazards, propose four (4) methods to control the risks. Support your proposal with suitable justification and examples.

(16 marks)

- Q5** (a) Briefly explain the measures can be taken to reduce accident risks.
(5 marks)
- (b) Briefly describe the important to report and investigate all accidents.
(5 marks)
- (c) Propose and design the on-site investigation strategy especially the gathering information and potential correction action.
(10 marks)

- END OF QUESTION -