



UNIVERSITI KUALA LUMPUR
Malaysian Institute of Marine Engineering Technology

FINAL EXAMINATION
JANUARY 2016 SEMESTER

COURSE CODE	: LGB11602 / LGB31002
COURSE NAME	: OCCUPATIONAL SAFETY AND HEALTH / OCCUPATIONAL SAFETY AND HEALTH IN MARITIME INDUSTRY
PROGRAMME NAME (FOR MPU: PROGRAMME LEVEL)	: BACHELOR
DATE	: 19 MAY 2016
TIME	: 02.00 PM – 04.00 PM
DURATION	: 2 HOURS

INSTRUCTIONS TO CANDIDATES

1. Please CAREFULLY read the instructions given in the question paper.
 2. This question paper has information printed on both sides of the paper.
 3. Please write your answers on the answer booklet provided.
 4. Answer should be written in blue or black ink except for sketching, graphic and illustration.
 5. Answer FOUR (4) questions only.
 6. Answer all questions in English.
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THERE ARE 6 PAGES OF QUESTIONS, INCLUDING THIS PAGE.

INSTRUCTION: Answer only FOUR questions.

Please use the answer booklet provided.

Question 1

Joint ILO/WHO Committee on Occupational Health at its first session in 1950 and revised at its twelfth session in 1995. The definition reads: "Occupational health should aim at: the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations; the prevention amongst workers of departures from health caused by their working conditions; the protection of workers in their employment from risks resulting from factors adverse to health; the placing and maintenance of the worker in an occupational environment adapted to his physiological and psychological capabilities; and, to summarize, the adaptation of work to man and of each man to his job."

- (a) Occupational Safety and Health is a cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work or employment. Apply your wise knowledge the reasons for establishing good occupational safety and health standards.

(6 marks)

- (b) Define the following terms of legislation and give example for each one with regards to OSH in Malaysia.

- i. Code of Practices
- ii. Standards
- iii. Guidelines
- iv. Act
- v. Regulations

(15 marks)

- (c) "Industrial Relation Act is defined to provide for the regulation of the relations between employers and workmen and their trade unions, and the prevention and the settlements of any differences or disputes arising from their relationship and generally to deal with trade disputes and matters arising." Define:
- Trade Union
 - Industrial Court

(4 marks)

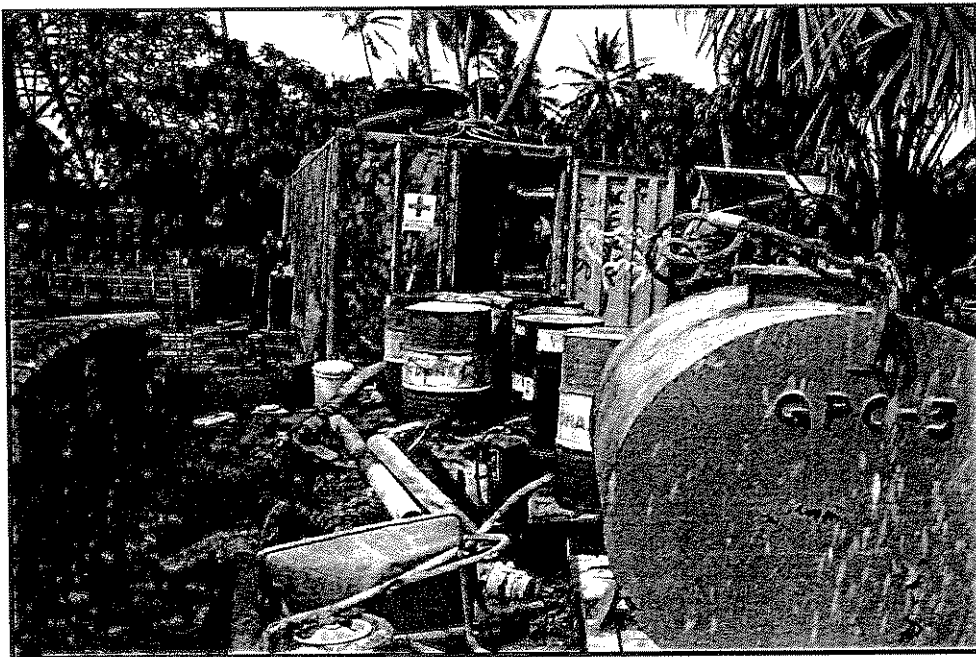
Question 2

- (a) Compare the difference between PHYSICAL, CHEMICAL, and BIOLOGICAL PSYCHOLOGICAL AND ERGONOMIC as mentioned in Hazard Classification.
- (b) Create a list of First Aid Content for Wood Working Workshop (at least five (5) items).

(5 marks)

(5 marks)

(c)

**Figure 2.1: Industrial Hazards**

Hazard is anything that could cause injury or illness. There are 4 sequences step on how to implement Hazard Control Management. Referring to the above situation in the Figure 2.1, apply your knowledge to classify the hazards. Also you are required to design on how to control the hazard and write your answer only for Step 3: Risk Control.

(15 marks)

Question 3

- (a) 5S housekeeping system originates from Japan and now used worldwide due to its effectiveness. Define each of 5S housekeeping system and explain the implementation of 5S concept in shipyard.

(10 marks)

(b)

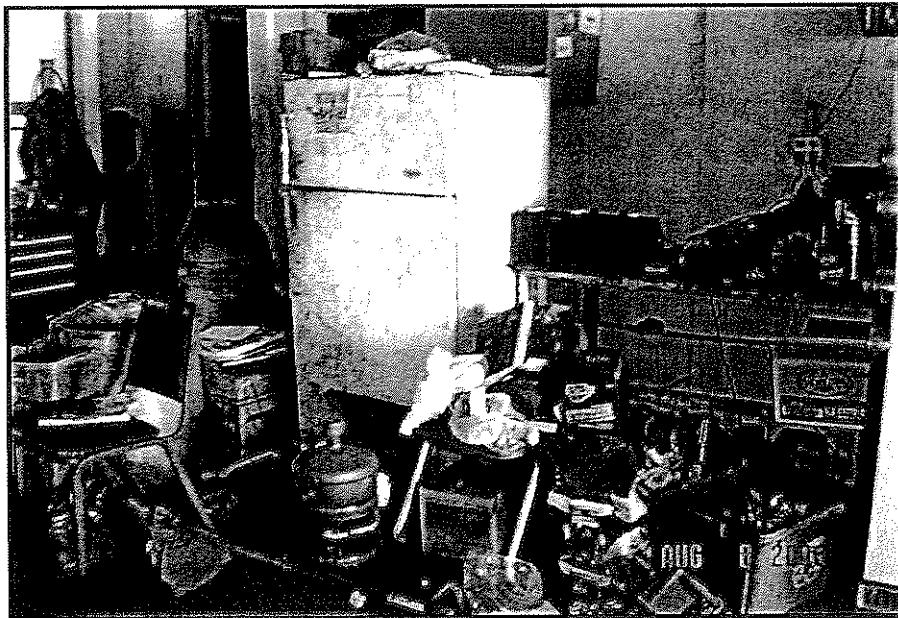


Figure 3.1: Poor Housekeeping Practice

Figure 3.1 showing an example of poor housekeeping practice. Design the instruction of good housekeeping practice through 5S System (*Seiri, Seiton, Seiso, Seiketsu, Shitsuke*) for the above situation.

(10 marks)

- (c) Explain the important aims of a good housekeeping practice.

(5 marks)

Question 4

Environmental pollution is caused when materials detrimental to life are released into the atmosphere, ground or water. Some materials may harm plant or animal life and cause an imbalance, which upsets the ecosystem of the area. Our government stated that "Now is the time to confront this challenge once and for all. Delay is no longer an option. Denial is no longer an acceptable response. (Nov 2008)".

- (a) Give five (5) example of each major pollutions effluent caused by the marine industry in Malaysia.
(10 marks)
- (b) There are many sources of indoor air pollution in workplace. These include combustion sources such as oil, gas, kerosene, coal, wood, tobacco products and etc; Examine any five (5) relates steps that may be taken to improve Indoor Air Quality (IAQ).
(5 marks)
- (c) Hearing loss from exposure to noise in the workplace is one of the most common of all Industrial diseases. Apply five (5) strategies for reducing noise pollution and noise exposure in the workplace.
(5 marks)
- (d) One of the main areas of concern regarding workplace pollution is chemical waste pollution. Discuss the source of this pollution in shipyard operations suggest for the control measures.
(5 marks)

Question 5

- (a) While handling with machinery, there are points where work is performed on the material, such as cutting, shaping, boring, or forming of stock must be guarded.

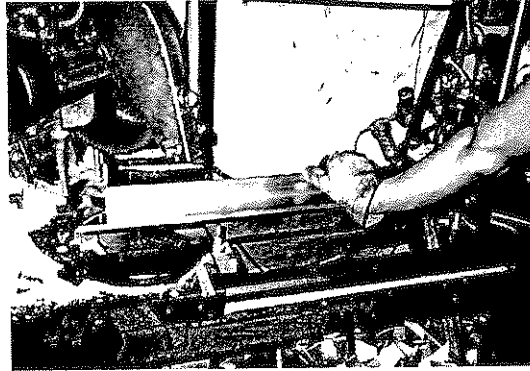


Figure 5.1: Work performs in the workshop

All above mentioned, task or work all parts of the machine which move, such as: flywheels, pulleys, belts, couplings, chains, cranks, gears, feed mechanisms and auxiliary parts of the machine. Discuss the requirement for safe guard.

(10 Marks)

- (b) Safeguards are essential for protecting workers from needless and preventable machinery-related injuries. Briefly creates the responsibilities of the Management, Supervisor and Employees.

(5 marks)

- (c) The Occupational Health, Safety and Welfare Act 1986 (OHSW Act) and Occupational Health, Safety and Welfare Regulations 1995 (OHSW Regulations) place a duty of care on employers and employees to ensure safety in the workplace. The Regulations use the principle of hazard identification, risk assessment and risk control to minimize the risk of injury in the workplace. Self-employed people must take reasonable care to protect their own health and safety and that of any other person. Identify four (4) potential hazards that possible when a person working at height with four (4) action plan to reduce of falling from height.

(10 marks)

END OF EXAMINATION PAPER

