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Universiti Tun Hussein Onn Malaysia

**UNIVERSITI TUN HUSSEIN ONN
MALAYSIA**

**FINAL EXAMINATION
SEMESTER I
SESSION 2019/2020**

COURSE NAME : OCCUPATIONAL SAFETY AND HEALTH
COURSE CODE : DAU 18102
PROGRAMME : DAU
EXAMINATION DATE : DECEMBER 2019/JANUARY 2020
DURATION : 2 HOURS
INSTRUCTION : ANSWER ALL QUESTIONS

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THIS QUESTION PAPER CONSISTS OF **SIX (6)** PAGES

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PART A

1. The person that is responsible to investigate and report accidents under the Occupational Safety and Health (OSH) if a serious accident or injury at work site happens is
 - A. an OSH officer
 - B. everyone at the work site
 - C. victim
 - D. the employer

2. Section 16, OSHA 1994 requires the employers to _____.
 - A. report accidents
 - B. provide PPE
 - C. have a written policy
 - D. be competent

3. Below are unsafe actions that led to the cause of an accident **EXCEPT**
 - A. the equipment does not work properly and appropriately
 - B. do not follow the safe work protocols
 - C. eating, drinking and smoking during work
 - D. the maintenance of machines and equipment are not done systematically

4. Here are some reasons why accidents are not reported **EXCEPT**
 - A. manager not skilled to make a report in accordance with regulations set by OSHA
 - B. a manager who does not properly manage or train or provide proper training can cause discomfort to make a report
 - C. manager or supervisor solves problems using identical other than OSHA regulations
 - D. a number of accidents reported was done to maintain safety records

5. The right action in case of accidents and prevention is
 - A. find reasonable grounds
 - B. reviewed through the risk assessment process to ensure that no changes will be implemented
 - C. tight schedule for implementation established
 - D. no further action is made

6. Generally, there are three main arguments that confirm why occupational safety and health should be managed, which include
 - A. Economic, humanitarian and education arguments
 - B. Legal, economic and humanitarian arguments
 - C. Education, engineering and economic arguments
 - D. Humanitarian, engineering and environment arguments

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7. Common mistakes during an accident investigation are as follows, **EXCEPT**
- A. often what is stated in an interview to be designed by their desire to escape or blame others, or to protect friends
 - B. professionals involved in the OSHA needs to be equipped with specialized training, or self-study investigation techniques.
 - C. employees who speak the truth even interviewed him guilty
 - D. although the main goal of accident investigation is to prevent future accidents and injuries, safety and health professionals should be aware that there may be another agenda in play in the investigation of the accident.
8. Accident prevention and control is important in controlling injuries. The following preventive measures for chemical hazards are true, **EXCEPT**
- A. Use of appropriate personal protective equipment at all times
 - B. Continuous exposure to volatile chemical substances
 - C. Good ventilation
 - D. Wash hands thoroughly after handling a chemical substance
9. Identify the statement which is **NOT** mentioned in Section 24 of OSHA 1994.
- A. To wear or use all times PPE provided by the employer
 - B. To ensure safety, health and welfare at work for all employees
 - C. To comply with any instruction or measure on occupational safety and health
 - D. To take reasonable care for safety and health of himself and of other persons who maybe affected at work
10. Noise levels are measured in _____.
- A. millimeters per second
 - B. dBs per second
 - C. decibel or dB
 - D. decimals or dB
11. The basic phases in construction work include
- I. Pre-Tender
 - II. Contract Management
 - III. Completion
 - IV. Documentation
- A. I only
 - B. I, II and IV only
 - C. I, II and III only
 - D. All of the above
12. Control by engineering design would not include
- A. limitation
 - B. supervision
 - C. interlocking
 - D. installing safety device

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13. Which of the following is **TRUE** for unsafe act
- A. Horseplay
B. Defect ladder
C. Brittle roof
D. Poor physical condition
14. Risk of accidents due to electrical hazards depending on how and where materials or electrical wires are used. Act involved in electrical hazards are as below, **EXCEPT**
- A. Occupational Health and Safety Act, 1994
B. The Factories and Machinery Act 1967
C. Electricity Supply Act 1990
D. Work Act 1955
15. According to the National Safety Council, machine guarding is a system of machines to reduce the risk of misfortune among
- A. operator and employer
B. workers and operators
C. operator and machine
D. machine and others equipment
16. Identify the penalty for non-compliance of Section 24 of OSHA 1994
- A. Fine not exceeding RM 1,000 or 3 months jail or both
B. Fine not exceeding RM 1,000 and 3 months jail
C. Fine more than RM 1,000 or 3 months jail or both
D. Fine not exceeding RM 1,000
17. Which of the following is **NOT** under OSHA 1994 scope
- A. Manufacturing
B. Construction
C. Armed forces
D. Mining
18. The requirement for the establishment of a safety and health committee is mentioned in
- A. Section 30, OSHA 1994
B. Section 29, OSHA 1994
C. Section 32, FMA 1967
D. Section 29, FMA 1967
19. Elements that are covered under EQA 1974 are as shown below, **EXCEPT**
- A. Air
B. Industrial Waste
C. Noise
D. Health
20. OSHMS is developed based on
- A. Plan Do Check Act (PDCA) model
B. Ask Do Prepare Close (ADPC) model
C. Plan Act Improve Check (PAIC) model
D. Plan Do Continuous Action (PDCA) model

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PART B

- Q1** (a) State **four (4)** purposes of constructing a risk assessment. (4 marks)
- (b) HIRARC is an integration tool to identify all the factors that may cause harm to employees and others. Sketch the flowchart of HIRARC process. (10 marks)
- (c) Explain **two (2)** techniques available to conduct hazard analysis. (6 marks)
- Q2** (a) Define the term physical injury. (2 marks)
- (b) List **three (3)** examples of physical injury. (3 marks)
- (c) Mechanical hazards are created as a result of either powered or manual (human) use of tools, equipment or machinery and plant.
- (i) Explain **three (3)** types of mechanical hazards usually found in industry. (6 marks)
- (ii) Generally safeguards are used for safety purpose in mechanical systems. Demonstrate types of safety guarding available and suitable for all the mechanical hazard mentioned in **Q2 (c) (i)**. (9 marks)
- Q3** (a) Define the terms acute and chronic. (4 marks)
- (b) Distinguish between heat stroke and heat exhaustion. (4 marks)
- (c) A physical hazard is an agent, factor or circumstance that can cause harm with or without contact such as noise, vibration and heat stress. Explain **six (6)** prevention and control strategies for the vibration effect to the workers' health. (12 marks)

- Q4** (a) List **four (4)** types of accident. (4 marks)
- (b) Construct the steps in conducting an accident investigation. (10 marks)
- (c) Discuss the important principles of the accident investigation. (6 marks)

– END OF QUESTIONS –

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