



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER I
SESSION 2022/2023**

COURSE NAME : OCCUPATIONAL SAFETY AND HEALTH

COURSE CODE : BEE 12202

PROGRAMME CODE : BEJ / BEV

EXAMINATION DATE : FEBRUARY 2023

DURATION : 2 HOURS

INSTRUCTION : 1. ANSWER ALL QUESTIONS.

2. THIS FINAL EXAMINATION IS CONDUCTED VIA **CLOSED BOOK**.

3. STUDENTS ARE **PROHIBITED** TO CONSULT THEIR OWN MATERIAL OR ANY EXTERNAL RESOURCES DURING THE EXAMINATION CONDUCTED VIA CLOSED BOOK

THIS QUESTIONS PAPER CONSISTS OF SEVEN (7) PAGES

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PART A: Objective (25 questions) – 50 marks

- Q1** Environmental audit means a periodic, systematic, documented and objective evaluation process. Select from the list that is **NOT** the main function of Environmental audit.
- (a) The compliance status to environmental regulatory requirements
 - (b) The establishment of Environmental Fund Committee
 - (c) The environmental management system
 - (d) The overall environmental risk of the premises
- Q2** Explain the function of Factories and Machinery Act 1967.
- (a) To provide for the control of factories with respect to matters regarding the safety, health and welfare of person
 - (b) To promote the working efficiency at work
 - (c) To schedule the maintenance of the machine
 - (d) To provide a regulation to protect the machines and the workers
- Q3** Choose the factors that contribute to the psychosocial hazards.
- I. Maladjustment with work environment
 - II. Lack of job satisfaction
 - III. Work in long durations
 - IV. Poor human relationship
- (a) I, II and III only.
 - (b) I, III and IV only.
 - (c) I, II and IV only.
 - (d) I, II, III and IV.
- Q4** State the main cause of an accident.
- (a) Unsafe condition.
 - (b) Unsafe act.
 - (c) Unsafe technique.
 - (d) Unsafe task.
- Q5** Determine an equipment that is **NOT** used to test indoor air quality.
- (a) Thermometer
 - (b) Anemometer
 - (c) Gas detector
 - (d) Strain gauge

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Q11 While the management give their best effort to correct unsafe condition/practices, show the key observation required by employees to safe guard themselves.

- (a) Hazards
- (b) Health
- (c) Safety
- (d) Risk

Q12 Recognize the causes of an accident.

- I. Basic causes.
- II. Immediate causes.
- III. Direct causes.
- IV. Personal causes.

- (a) I, II and III only
- (b) I, III and IV only
- (c) I, II and IV only
- (d) I, II, III and IV

Q13 Define a substance to be known as a pollutant.

- (a) The substance may cause sickness to human
- (b) The substance may cause sickness to animals
- (c) The substance may remain in the environment for a period of time
- (d) The substance cannot be degraded by human

Q14 Construct the information stated in The Job and Safety Analysis (JSA) table format.

- I. Fact problems
- II. Related job description
- III. Learning issues
- IV. List of things that can go wrong

- (a) I, and II only.
- (b) II and IV only.
- (c) I, and III only.
- (d) I, II, III and IV.

Q15 On the job injuries and illness, cost money, time, and effort. Select the most practical way to manage these losses.

- (a) Make sure safety is part of labor contracts
- (b) Aggressive claims handling
- (c) Effective safety and loss control programs
- (d) Good insurance coverage

Q16 Choose the significance of investigating an accident.

- I. To estimate compensation to the victim.
- II. Legal requirements as stated in Section 21 OSHA 1994.
- III. To avoid repetition of a similar accident
- IV. Organization's policy and business reasons.

- (a) I and III only
- (b) I, II and IV only
- (c) III and IV only
- (d) I, II, III and IV

Q17 Interpret the severity level if under the Semi-Quantitative risk assessment method, a person whom was on medical leave for more than **FOUR(4)** consecutive days.

- (a) Level 1
- (b) Level 3
- (c) Level 2
- (d) Level 4

Q18 Select from the following that are included in the 'Hazard Identification' process:

- I. Workplace inspection
- II. Hazard elimination
- III. Investigate accident records
- IV. Hazard isolation

- (a) I, and II only.
- (b) I, II and IV only.
- (c) I, and III only.
- (d) I, II, III and IV.

Q19 Identify the root of the OSH management system.

- (a) Identify, analyze, act and evaluate.
- (b) Discover, establish, perform, and evaluate.
- (c) Elimination, substitution, isolation, and PPE.
- (d) Plan, do, check, and act.

Q20 Give the safe range of electric current to be touched with bare hands.

- (a) 1mA – 5mA
- (b) 6mA – 15mA
- (c) 16mA – 30mA
- (d) 31mA and above

Q21 Discover the responsibilities of Safety and Health Officer (SHO) for incident investigation process.

- I. Organise camera, tape and report form.
- II. Investigate if incident is serious and require to notify authorities such as DOSH, DOE, Police, etc.
- III. Complete incident record form.

- (a) I and II only.
- (b) II and III only.
- (c) I and III only.
- (d) I, II, and III.

Q22 State the size range of organic dust.

- (a) 0.1 to 150 microns.
- (b) 0.1 to 200 microns.
- (c) 0.01 to 150 microns.
- (d) 0.01 to 200 microns.

Q23 There are several factors that are often used to determine when an organization should have the services of a full time Safety Professional. Show from the following that is generally acknowledged to be the prime-determining factor in assigning safety personnel.

- (a) The incident rate of organization
- (b) The seriousness of incidents suffered by the organization
- (c) The potential for serious injuries in the organization
- (d) The type of industry the organization is involved in

Q24 From the following, what is **NOT** the method used in the Hazard analysis.

- (a) Job Safety Analysis (JSA)
- (b) Hazards and Operability Studies (HAZOP)
- (c) Fault Tree Analysis
- (d) Economic analysis

Q25 Choose the appropriate cases of serious accidents category.

- I. Box of materials dropped.
- II. Falling off a ladder.
- III. Hazardous chemical spill.
- IV. Hearing loss.

- (a) I and II only.
- (b) II, III and IV only.
- (c) II and III only.
- (d) I, II, III and IV.

Part B – Subjective (2 Questions) - 50 Marks

- Q1**
- (a) Define the following terms:
 - (i) Hazard (2 marks)
 - (ii) Risk (4 marks)
 - (b) Risk assessment is one of the requirement of OSHA 1994. Explain why a review of risk assessment needs to done in a workplace. (7 marks)
 - (c) You are required to perform a risk control in your workplace. Show how you are going to implement this task. (12 marks)
- Q2**
- (a) Define health hazards and give an example. (3 marks)
 - (b) List the **FIVE (5)** types of health hazards. (5 marks)
 - (c) Explain the following ergonomic risk factors:
 - (i) Awkward posture (2 marks)
 - (ii) Forceful and sustained exertions (2 marks)
 - (d) As a supervisor in the production department, discover the symptoms of ergonomic hazards that exist in your workplace. (9 marks)
 - (e) Give **FOUR (4)** control and monitoring approach of ergonomic hazards. (4 marks)

– END OF QUESTIONS –