



UNIVERSITI KUALA LUMPUR  
INSTITUTE OF MEDICAL SCIENCE TECHNOLOGY

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**FINAL EXAMINATION**  
**OCTOBER 2025 SEMESTER**

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COURSE CODE : HRB20103  
COURSE TITLE : OSH MANAGEMENT SYSTEM  
PROGRAMME NAME : BACHELOR OF OCCUPATIONAL SAFETY & HEALTH (HONOURS)  
DATE : 28 JANUARY 2026  
TIME : 9:00AM - 12:00PM  
DURATION : 3 HOURS



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**INSTRUCTIONS TO CANDIDATES**

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1. Please read the instructions given in the question paper CAREFULLY.
2. This question paper is printed on both sides of the paper.
3. This question paper consist of TWO sections.
4. Answer ALL questions for Section A.
5. Section B consist of four questions. Answer THREE (3) questions only.
6. Please write your answer on the answer booklet provided.
7. Please answer all questions in English only.
8. Please answer MCQ/EMQ questions using OMR sheet.  *Tick if applicable*
9. Refer to the attached Formula/ Appendices.  *Tick if applicable*

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THERE ARE 18 PAGES OF QUESTIONS INCLUDING THIS PAGE

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## SECTION A (Total: 40 marks)

Answer ALL questions.

Please use the answer booklet provided.

1. When an organization conducts environmental monitoring, the company must ensure that calibrated or verified monitoring and measurement equipment is maintained as stated in clause \_\_\_\_\_ of ISO 14001:2015.
  - A. 9
  - B. 7
  - C. 5
  - D. 6
  
2. Which of the following is **NOT** a contributing factor to the success of OSH management system implementation in an organization?
  - A. Ignore regulatory requirements.
  - B. Employee participation in hazard identification.
  - C. Improve internal communication in organization.
  - D. Great leadership commitment of top management.
  
3. The mandatory statement of environmental policy includes \_\_\_\_\_ .
  - I. framework for setting environmental objectives
  - II. commitment to protect the environment in the business process
  - III. commitment to fulfill its compliance obligation
  - IV. pledge towards continual improvement
  - A. I, III and IV
  - B. I, II, and III
  - C. II, III and IV
  - D. I, II, III and IV

4. Clause \_\_\_\_ of ISO 9001:2015 mentioned statement of "The organization shall monitor customers perceptions of the degree to which needs, and expectation have been fulfilled".
- A. 7
  - B. 10
  - C. 9
  - D. 3
5. Life Cycle Assessment (LCA) is \_\_\_\_\_.
- A. used as an instrument to estimate the cost of product development
  - B. used to identify improvement opportunities of product in context of environmental aspect
  - C. applied to improve company image towards environmentally initiatives
  - D. focused only on the environmental impacts during the manufacturing stage
6. The principle of Environmental Management System (EMS) is to \_\_\_\_\_.
- A. establish good employers and workers relationship
  - B. minimize hazards exposure at work
  - C. increase sustainability of natural resources
  - D. enhance customer's satisfaction when using the product
7. In ISO 14001: 2015, Plan elements of PDCA includes following sub clauses **EXCEPT** \_\_\_\_\_.
- A. communication
  - B. supports
  - C. environmental objectives
  - D. performance evaluation

8. The following are internal issues related to ISO 14001 in an organization **EXCEPT** \_\_\_\_\_.
- A. appointment of new product development manager
  - B. price increase of raw material
  - C. expansion of warehouse facilities
  - D. changes in the type of product manufactured by the organization
9. In OSH management system, the procurement process in organization should ensure that \_\_\_\_\_.
- I. materials are delivered adhere to safety specification
  - II. cost is prioritized over health and safety requirements
  - III. training is provided to the workers upon receiving of machine
  - IV. installation of machinery are inspected and commission upon delivery
- A. I, III and IV
  - B. I, II, and III
  - C. II, III and IV
  - D. I, II, III and IV
10. Which component of a management system is responsible for identifying trends from previous non-conformance report?
- A. Management review
  - B. Emergency preparedness plan
  - C. Commitment from chairman
  - D. Standard Operational Procedures document

11. Below are examples of documented information for Integrated Management System (IMS) **EXCEPT** \_\_\_\_\_.
- A. IMS objectives
  - B. IMS policy
  - C. risk register template
  - D. attendance of noise awareness training for January 2025
12. Interested parties for OSH management system are \_\_\_\_\_.
- I. competitors in the same business chain
  - II. employee representatives
  - III. local authority
  - IV. Department of Occupational Safety and Health
- A. I,II, and III
  - B. II, III and IV
  - C. I, III and IV
  - D. I,II, III and IV
13. Companies shall recruit competent people in performing work related to safety and health. This statement refers to clause \_\_\_ of ISO 45001: 2018.
- A. 7
  - B. 5
  - C. 4
  - D. 10

14. In ISO, the term product refers to \_\_\_\_\_.
- I. car service center
  - II. e-hailing service
  - III. isotonic drinks
  - IV. canva software
- A. I,II and III
  - B. I,III and IV
  - C. II, III and IV
  - D. I, II, III and IV
15. \_\_\_\_\_ is the standard that integrate environmental aspects into product design and development.
- A. ISO 14031
  - B. ISO 14020
  - C. ISO 14040
  - D. ISO 14062
16. Which clause of ISO 9001:2015 elaborate on the external issue of an organization?
- A. 4
  - B. 7
  - C. 9
  - D. 5
17. An organization has high turnover and frequent complaints of workload stress. According to ISO 45003, what should be analyzed first?
- A. Penalties paid by organization.
  - B. Company's financial goals.
  - C. Perceived psychosocial risk factors.
  - D. Employees' social media activity.

18. Which international body is responsible for developing management system standards?
- A. Department of Standard Malaysia
  - B. International Organization for Standardization
  - C. United Nation
  - D. International Standard Organization
19. What is the main benefit of a documented management system?
- A. Avoids penalty due to incompliance.
  - B. Provides accountability for operating procedure.
  - C. Removes managerial responsibilities.
  - D. Increases communication within organization.
20. The main purpose of eco-labels under the ISO 14000 series is to \_\_\_\_\_.
- A. increase product sales
  - B. meet investors demands
  - C. better market value
  - D. indicate environmental performance of products or services

21. According to OSH management system, hazard identification process in an organization should consider the following,
- I. routine operation.
  - II. extension of operation time.
  - III. introduction of new hazards.
  - IV. unexpected disaster situation in the vicinity of the workplace.
- A. II,III and IV
  - B. I,II, and III
  - C. I,II and IV
  - D. I,II,III and IV
22. In OSH management system, subcontractors shall \_\_\_\_\_.
- A. comply with the organization's OSH requirements
  - B. be fully responsible on matters related to OSH at worksite
  - C. directly involved in planning OSH procedure
  - D. be appointed as the members of safety and health committee
23. An organization shall determine the interested parties that are relevant to the environmental management system. This statement refers to clause \_\_\_\_ of ISO 14001:2015.
- A. 4
  - B. 7
  - C. 5
  - D. 8

24. In an organization, management review shall be planned and carried out by taking into consideration of \_\_\_\_\_.
- I. changes in external issues relevant to the OSH management system
  - II. adequacy of resources
  - III. audit results
  - IV. company's annual sales performance
- A. I, II and IV
  - B. I, II, and III
  - C. II, III and IV
  - D. I, II, III and IV
25. Quality policy is \_\_\_\_\_.
- A. an ISO record
  - B. framework to support sustainable development
  - C. accessible only for safety and health committee
  - D. organization's commitment to deliver reliable products or services to customers
26. The following are **CORRECT** about continual corrective initiatives that can be done by an organization to address OSH non-compliance at workplace including \_\_\_\_\_.
- I. installation of automated machine
  - II. send workers for OSH awareness training
  - III. imposed penalty on workers for not wearing personal protective equipment
  - IV. management review process
- A. I, II, and III
  - B. I, II and IV
  - C. II, III and IV
  - D. I, II, III and IV

27. Principles of Quality Management System in an organization includes \_\_\_\_\_.
- I. customer focus
  - II. process approach
  - III. workers participation
  - IV. evidence-based decision making
- A. I, II, and III
  - B. I, II and IV
  - C. II, III and IV
  - D. I, II, III and IV
28. In Malaysia, statements in the OH&S policy shall include the following commitments **EXCEPT** \_\_\_\_\_.
- A. reward workers on their involvement in the safety campaign at work
  - B. reduce risk at workplace
  - C. continual improvement on OSH matters
  - D. adhere compliance obligation of Occupational Safety and Health (2022) Act
29. After introducing remote work, Seri Baja Sdn Bhd saw increased anxiety and isolation among staff. Which principle in ISO 45003 best supports the implementation of corrective actions?
- A. Provide meal allowance to workers.
  - B. Evaluate effect of changes in mode of working.
  - C. Conduct ergonomic assessment.
  - D. Get employee's to vote for preferred work mode.

30. Which organization is responsible for ISO certification in Malaysia?
- A. Department of Environment
  - B. Petaling Jaya city council
  - C. Department of Standards
  - D. Ministry of Investment, Trade and Industry
31. Integrating risk management into a management system enhance decision-making can be achieved by \_\_\_\_\_.
- A. focusing decisions on past experiences only
  - B. depending on documentation only
  - C. mitigation of potential risk issues
  - D. reducing the need for leadership involvement
32. Keris Hebat Sdn Bhd, a construction company adopted ISO 45001:2018, however it still recorded high injury rates. Which of the following are **NOT** leading to the intended outcomes of ISO 45001: 2018?
- A. Detailed design of the developed product.
  - B. Absence of safety competence person.
  - C. Poor workers participation in safety campaign.
  - D. Poor commitment of top management on safety and health matters.
33. What is one of primary purpose of an ISO Management System Standard (MSS)?
- A. To reduce the number of workforce.
  - B. To ensure organizational compliance with tax laws.
  - C. To increase company profits.
  - D. To help organizations meet stakeholder requirements.

34. The aims of OSH management system are to \_\_\_\_\_.
- I. prevent work related injury
  - II. continually improve safety performance
  - III. secure trust from potential investor
  - IV. provide safe and healthy workplace
- A. I, II and IV
  - B. I, II, and III
  - C. II, III and IV
  - D. I, II, III and IV
35. An internal auditor is assigned to audit the Procurement Department. The auditor used to be the Procurement Manager six months ago. What is this issue during audit exercise?
- A. Auditors should not audit areas where they recently had direct responsibility.
  - B. It is only an issue if the auditor still has direct access to the department's documents.
  - C. The auditor knows the department well and will find too many mistakes.
  - D. It is a waste of time because they already know the procedures.
36. Wangi Sdn Bhd produces fabric softener for the local market. Who is the stakeholder that is directly affected by the environmental impacts from its operation?
- A. Department of Standard Malaysia (DOSM)
  - B. Kampung Jambu located 2 km from the factory
  - C. Malaysia Employee Federation (MEF)
  - D. SIRIM QAS Sdn Bhd

37. For Tadika Permata Jiwa, the interested parties of integrated management system are \_\_\_\_\_.
- I. parents
  - II. Ministry of Education (MOE)
  - III. Fire department
  - IV. Department of Occupational Safety and Health
- A. II, III and IV
  - B. I, II, and IV
  - C. I, II, and III
  - D. I, II, III and IV
38. In ISO 45001:2018, organization shall appoint a competence person to manage safety and health at workplace. OSH competence person includes \_\_\_\_\_.
- I. human resource personnel
  - II. safety and health Officer
  - III. first aider
  - IV. occupational safety and health coordinator
- A. I, II, and III
  - B. I, II, and IV
  - C. II, III and IV
  - D. I, II, III and IV
39. The OSH performance of an organization can be improved through \_\_\_\_\_.
- I. empowerment of the safety culture among top management
  - II. conduct safety awareness campaign at workplace
  - III. assurance of no reprisal towards workers for reporting safety issues
  - IV. offer performance bonus for workers who actively participate in OSH activities
- A. II, III and IV
  - B. I, II, III and IV
  - C. I, II, and III
  - D. I, II, and IV

40. Statement of "The organization shall implement production and service provision to prevent human errors" refers to clause \_\_\_\_ of ISO 9001: 2015.

- A. 7
- B. 10
- C. 8
- D. 6

**SECTION B (Total: 60 marks)**

**Answer THREE (3) questions only.**

**Please use the answer booklet provided.**

**Question 1**

Illustrate and discuss the iterative process used by an organization to achieve continual improvement in OH&S management system. Use diagram to support your explanation..

(20 marks)

**Question 2**

Internal audit results are valuable tools in ISO management systems.

(a) Point out TWO (2) benefits of Internal Audits of ISO to an organization.

(4 marks)

(b) Outline the steps in planning and Conducting ISO Internal Audit

(10 marks)

(c) Determine the following terminologies:

- i. audit
- ii. auditor
- iii. auditee

(6 marks)

**Question 3**

Organizations often transition from using standalone management systems to an Integrated Management System. This reflects the growing needs and expectations of organizations seeking to enhance their performance in three key areas: quality, environmental management, and occupational health and safety.

- (a) Assess **TWO (2)** differences between standards that are used to manage the above-mentioned key area.

(12 marks)

- (b) Describe **ONE (1)** similarity in the requirements of these standards that make integration possible.

(2 marks)

- (c) Discover **TWO (2)** challenges that an organization can anticipate during the implementation of the integration between standards system.

(4 marks)

- (d) Based on your answer in (c), discuss **ONE (1)** action that can be done by the organization to address the issues.

(2 marks)

**Question 4**

EcoBuilders Sdn Bhd is a construction company that has secured new township housing project The company. He appointed a subcontractor, Maribina Sdn Bhd to execute the project. Maribina Sdn Bhd hired 40 foreign workers from different countries (Eg: Indonesia, Nepal) as workforce at construction site. The workers need to work from 8 am to 6 pm, 6 days per week. The workers did not have experience working at construction site and zero knowledge on safety and health. They are responsible for a number of on-site tasks, such as removing debris, erecting scaffolding, loading and unloading building materials, and assisting with operating heavy equipment. Mr. Lexus, a local people is the site supervisor in charge and has to monitor two (2) other projects' site. Due to time limitation, the toolbox meeting only conducted once/week.

In February 2023, the Safety, Health, and Environment (SHE) department recorded two (2) cases of OSH at the construction site.

Case 1: Bambino, 35 years old, male, Nepalese, was assigned for mixing, pouring, and leveling concrete every day, being struck by falling objects on his head, undergone surgery, hospitalized for 1 month, given 4 months medical leave, need to follow up with doctor. Investigation revealed that the scaffold was erected without following standard safety procedures. The worker sustained serious injuries, resulting in project delays and increased costs due to medical expenses and investigation procedures.

Case 2: Meah, 50 years old, male, assigned for regulating traffic and erecting traffic signs every day, suffered of heat stress symptoms such as hydration, hospitalized, just join in 2 weeks

Annual report 2024 on matters related to environmental issues at the construction site, reported the following issues:

- management of construction waste
- Area exploration
- Noise from construction activities
- Storage and handling of construction materials (cement, diesel, paint)

Based on the information above, answer the following:

- (a) Identify TWO (2) advantages of IMS implementation to organization

(4 marks)

- (b) Based on the Integrated Management System (IMS), assess the following:
- i. Management risk
  - ii. Safety and health risk
  - iii. Environmental aspects

For each, provide **ONE (1)** example

(12 marks)

- (c) Point out **TWO (2)** actions that can be taken by an organization to achieve the intended outcomes of IMS.

(4 marks)

**END OF EXAMINATION PAPER**

## APPENDIX

Table 1 Likelihood Table

LIKELIHOOD (L)	EXAMPLE	RATING
Most likely	The most likely result of the hazard / event being realized	5
Possible	Has a good chance of occurring and is not unusual	4
Conceivable	Might be occur at sometime in future	3
Remote	Has not been known to occur after many years	2
Inconceivable	Is practically impossible and has never occurred	1

Table 2 Severity Table

SEVERITY (S)	EXAMPLE	RATING
Catastrophic	Numerous fatalities, irrecoverable property damage and productivity	5
Fatal	Approximately one single fatality major property damage if hazard is realized	4
Serious	Non-fatal injury, permanent disability	3
Minor	Disabling but not permanent injury	2
Negligible	Minor abrasions, bruises, cuts, first aid type injury	1

Table 3 Likelihood Table

Rating	Description @ Frequency on incident
Almost Certain (5)	It is almost certain that the consequence will occur. Common or frequent occurrence. Occur on daily basis
Likely (4)	The consequence is likely to occur. It is known too occur or 'it has happened'. Occur on weekly basis
Possible (3)	The consequence could occur or 'I've heard of it happening'. Occur on monthly basis
Unlikely (2)	The consequence is not likely to occur. There is confidence that it will not occur. Occur on yearly basis
Rare (1)	The consequence may only occur in exceptional circumstances. Once in 2 years

Table 4 Severity Table

Rating	Description
Catastrophic (5)	The impact of Environmental Pollution to goes to International scale, trans boundary impacts
Major (4)	The impact of Environmental Pollution to goes to National scale
Moderate (3)	The impact of Environmental Pollution to local scale
Minor (2)	The impact of Environmental Pollution to goes to organizational scale
Insignificant (1)	Positive impact to environment @ no negative impacts to the environment

Table 5 Risk Rating Table

		Consequence Severity				
		Insignificant Significant	Minor Extreme	Moderate Extreme	Major Extreme	Catastrophic Extreme
Likelihood	Almost Certain					
	Likely	Significant	Significant	Extreme	Extreme	Extreme
	Possible	Moderate	Moderate	Significant	Significant	Extreme
	Unlikely	Low	Low	Moderate	Significant	Significant
	Rare	Low	Low	Low	Moderate	Significant

