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UNIVERSITI TUN HUSSEIN ONN MALAYSIA

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

COURSE NAME : OCCUPATIONAL SAFETY AND HEALTH
COURSE CODE : DAE10102
PROGRAMME CODE : DAE
EXAMINATION DATE : JULY / AUGUST 2023
DURATION : 2 HOURS
INSTRUCTIONS :
1. ANSWER **ALL** QUESTIONS
2. THIS FINAL EXAMINATION IS CONDUCTED VIA **CLOSED BOOK**.
3. STUDENT ARE **PROHIBITED** TO CONSULT OWN MATERIALS OR ANY EXTERNAL RESOURCES DURING THE EXAMINATION CONDUCTED VIA CLOSED BOOK.

THIS QUESTION PAPER CONSISTS OF **FOURTEEN (14)** PAGES

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- Q1.** The technique below are used to analyse hazard **EXCEPT**
- A. Failure Mode and Effect Analysis (FMEA)
 - B. Job safety analysis (JSA)
 - C. Hazard Tree Analysis (HTA)
 - D. Hazard and Operability Studies (HAZOP)
- Q2.** Which of the following methods are used to identify hazard?
- I. Review salary of employee.
 - II. Organization restructure and reorganization.
 - III. Hazard analysis.
 - IV. Scheduled inspection and daily observation
- A. I and II
 - B. II and III
 - C. II and IV
 - D. III and IV
- Q3.** In general, the responsibilities of employers and self- employed is to provide an atmosphere suitable for work environment, such as;
- I. Prepare and maintain machinery, equipment and systems of work
 - II. Organize safety program, operation, storage, transportation of equipment, materials and machinery
 - III. Providers of information, instruction, training and supervision
 - IV. Prepare and maintain safety at the workplace and provide escape routes and safe entry into the premises of employment
- A. I,II and III
 - B. I,II and IV
 - C. II,III and IV
 - D. All of the above
- Q4.** Safety, health and environment culture can be achieved by
- I. Control of employees
 - II. Self-regulation
 - III. Consultation between employers and employees
 - IV. Collaboration and engagement between employers and employees
- A. I,II and III
 - B. I,II and IV
 - C. II,III and IV
 - D. All of the above

Q5. The element covered in the Environment Quality Act 1974 including

- I. Air
- II. Water
- III. Land
- IV. Noise

- A. I,II and III
- B. I,II and IV
- C. II,III and IV
- D. All of the above

Q6. Under the Occupational Safety and Health Act (OSHA) employers must:

- A. provide information, instruction, training and supervision to employees to enable them to work safely.
- B. consult with employees, but only with managers and supervisors.
- C. take care to look after their own safety but not that of others.
- D. appoint a leader to assist day-to-day operation.

Q7. Below are the severity can be used in Qualitative Risk Table **EXCEPT**

- A. Major injuries.
- B. Minor injuries.
- C. Negligible injuries
- D. No injuries.

Q8. When considering control measures, the risk control techniques should be used.

- I. Elimination - Getting rid of a hazardous job, tool, process, machine or substance is perhaps the best way of protecting workers.
- II. Substitution – replacing the hazard with one that presents lower risk.
- III. Isolation – isolating or separating the hazard from the person, or the person from the hazards.
- IV. Engineering control – requires thinking about ways work could be done differently to make the world safer such as rearranging aspects of workplace, modifying equipment, combining tasks, changing procedures to eliminate hazardous step.

- A. I,II and III
- B. I,II and IV
- C. II,III and IV
- D. All of the above

- Q9. Occupational Safety and Health is a _____ function.
- A. administrative
 - B. quality control
 - C. management
 - D. financial
 - E.
- Q10. Health and Safety Act of 1994 is designed based on principles mentioned in the list below, but does NOT include:
- A. The management and employees must work together to ensure the workplace is free of any accidents.
 - B. Involvement of top management is a priority in leading the implementation of workplace safety.
 - C. Occupational health and safety policy must be developed and known by all employees in the workplace.
 - D. Organizations and resources that need to be developed and provided by the government for support to health and safety at work.
- Q11. In Malaysia , Occupational Safety And Health related issues are currently regulated by these acts, but it **DOES NOT** include:
- I. Occupational Safety And Health Act 1994
 - II. Labour Law 1955
 - III. Environmental Quality Act 1974
 - IV. Electricity Supply Act 1990
- A. I and II
 - B. II and III
 - C. II and IV
 - D. III and IV
- Q12. What the effect of Mechanical hazard such as manual handling over exertion, lifting or pulling?
- A. Musculoskeletal injury – spinal injury, muscle strains, sprains
 - B. Acute physical injuries – severed/crushed limbs
 - C. Acute injury – crushed limbs
 - D. Acute injury – broken bones, brain damage
- Q13. Hazards can arise from physical working environment including;
- I. Electrocutation
 - II. Hazardous substances
 - III. Fire

- IV. Explosion
- A. I,II and III
- B. I,II and IV
- C. II,III and IV
- D. All of the above

Q14. Which of the following is not a mechanical hazard?

- A. Explosion
- B. Shearing
- C. Cutting
- D. Entanglement

Q15. Guards attached to mechanical equipment

- A. can be removed if they get in the way while you are working, if you can still work safely
- B. as a temporary measure or as a last resort
- C. can be removed to clean the equipment, but must be replaced by an authorised person
- D. all of the above

Q16. Most construction sites require at least this personnel protection equipment (PPE):

- I. Hard hat
- II. Safety Boots
- III. Highly-visual jacket
- IV. Harnesses and lanyards.

- A. I,II and III
- B. I,II and IV
- C. II,III and IV
- D. All of the above

Q17. What action should be taken when personal protective equipment is provided at work but hazards in the workplace cannot be eliminated?

- I. be instructed and trained so you know how to use it correctly
- II. always wear it when required
- III. always wear it even it faulty
- IV. look after it and store it correctly

- A. I, II and III
- B. I, II and IV
- C. II, III and IV
- D. All of the above.

Q18. Hazard identification, risk assessment and risk control principles are made compulsory:

- A. under common law.
- B. under the Occupational Safety and Health Regulations.
- C. under the Occupational Safety and Health Act.

D. because they help prevent injury or harm to health and save money.

Q19. What is the best way to fix a hazard?

- A. substitute something less dangerous
- B. remove the hazard
- C. add safeguards
- D. use personal protective equipment

Q20. Who should legally responsibility to do alterations and repairs work for existing electrical installations?

- A. An experienced unsupervised electrical apprentice.
- B. A person with many years of electrical experience.
- C. A licensed electrical worker.
- D. A fresh graduate electrical engineer with no electrical experience.

Q21. What is the purpose of personal hearing protection?

- A. As the first measure adopted to control a noise hazard or to increase protection.
- B. As a temporary measure or as a last resort.
- C. Only when you hear ringing in the ears after a noisy activity.
- D. Allow you to concentrate on a work task without interruption.

Q22. Which of the following are basic type of incident?

- I. short term accident
- II. near miss accident
- III. minor accident
- IV. serious accident

- A. I, II and III
- B. I, II and IV
- C. II, III and IV
- D. All of the above

Q23. Which of the following conditions would NOT require a workplace label on a decanting container?

- A. When the decanting container is filled directly from the supplier labeled container.
- B. When the decanting container is used by several different people in the work area.
- C. When the material in the decanting container is used immediately.
- D. When the material in the decanting container is stored in the storage facilities.

- Q24.** Which of the following activities is NOT assigned by regulation to the employer?
- A. Providing equipment that is in safe condition
 - B. Ensuring a worker uses equipment safely
 - C. Checking that no worker can be injured before a worker starts up machinery
 - D. Establishing a code of practice for respiratory protective equipment
- Q25.** When are the employers required to select their own specific standards to comply with regulations?
- A. The regulation requires a level of performance to be met.
 - B. There is an existing regulation standard.
 - C. Equipment meeting the required external standard is no longer available.
 - D. The level of performance met is below than the minimum requirement of regulation.
- Q26.** Which of the following methods of control that is generally regarded to be the least desirable?
- A. ventilation
 - B. chemical substitution
 - C. personal protective equipment
 - D. administrative controls
- Q27.** According to The Occupational Safety and Health (OSH) Act, what action is required to take by employer when there has been an accident resulting in a serious injury at the work site?
- I. Notify a Director of Inspection as to the time, place and nature of the accident.
 - II. Carry out an investigation into the circumstances surrounding the accident.
 - III. Prepare a report in accordance with the regulations.
 - IV. Present the final report to board of management.
- A. I, II and III
 - B. I, II and IV
 - C. II, III and IV
 - D. All of the above.
- Q28.** Which of the following statement is NOT correct?
- A. Heat stress causes increased sweating.
 - B. Heat stress results in reduced capacity for work, inefficiency and increased risk of hazardous incidents.
 - C. Heat stroke is a rare condition and not life threatening.

D. High temperatures can result in heat stress.

- Q29.** Work on a brittle or fragile roof should be done from _____
- A. the protective mesh that has been installed
 - B. a scaffolding or work platform
 - C. anti-fall equipment suspended from a crane
 - D. climb from below using safety harness
- Q30.** How to protect worker from falling into holes or shafts?
- A. ladders
 - B. mesh nets
 - C. wire mesh and covers
 - D. scaffolding
- Q31.** Who should erect Mobile scaffolds?
- A. a competent person
 - B. the manager of the project
 - C. a licensed builder
 - D. a person from the hire company.
- Q32.** Falls from a height can be described as
- A. falls from one level to another
 - B. falls on the same level
 - C. falls into a hole
 - D. falls into a depth
- Q33.** Which of the following is NOT a manual handling task?
- A. carrying paint cans
 - B. moving a portable (wheeled) scaffold
 - C. climbing up a ladder
 - D. applying paint with a brush
- Q34.** Which of the following must be reported to your employer or supervisor without delay?
- A. a change in the weather forecast
 - B. any safety concern, incident or 'near miss' while you are at work
 - C. any idea you have for completing the job more quickly
 - D. the discovery that you have forgotten to bring your lunch with you.

- Q35.** What is the most common mechanical equipment injuries?
- A. the eyes
 - B. hands and fingers
 - C. the right hand
 - D. the face
- Q36.** Personal protective equipment should _____
- A. always be used to control hazards
 - B. only be used if other measures to control hazards are not practicable, or if other measures have not reduced the risks sufficiently
 - C. be the first measure adopted to control hazards or to increase protection
 - D. be used in preference for isolating the hazard.
- Q37.** Which of the following is the risk control options for work in enclosed areas?
- A. wearing earmuffs or ear plugs
 - B. working alone so there is more room to move
 - C. only working at times when the weather is cool outside
 - D. wearing a respirator to prevent inhalation of paint fumes.
- Q38.** Solvents can enter the body _____
- I. when a person breathes in their vapour
 - II. through direct contact with skin
 - III. seeing from faraway
 - IV. through the mouth from contact with food or hands
- A. I, II and III
 - B. I, II and IV
 - C. II, III and IV
 - D. All of the above.
- Q39.** Why lead is a hazardous substance?
- A. toxic
 - B. flammable
 - C. corrosive
 - D. heavy

Q40. The scope of application for Occupational Safety And Health Act 1994 **DOES NOT** include;

- A. Construction and Manufacturing
- B. Malaysia Armed Force
- C. Agricultural and Fishing
- D. Transportation and Storage

Q41. Which of the following are types of risk assessment?

- I. Qualitative Risk Assessment
- II. Semi-Qualitative Risk Assessment
- III. Quantitative Risk Assessment
- IV. Semi-Quantitative Risk Assessment

- A. I, II and III
- B. I, II and IV
- C. II, III and IV
- D. All of the above.

Q42. For maximum safety disposable masks should be discarded after?

- A. 1 day or 1 shift
- B. 3 days
- C. 5 days
- D. 1 week

Q43. Why investigation of the accident at workplace is compulsory?

- I. To prevent repetition of the same work- related injuries, ill health, diseases and incident.
- II. Legal Requirement
- III. To protect from any financial obstacle
- IV. Accurate record for insurance, legal prosecution or public enquiries

- A. I, II and III
- B. I, II and IV
- C. II, III and IV
- D. All of the above.

- Q44.** Which of the following describing “severity” in HIRAC?
- A. An event possible to occur within the specific period or in specified circumstances.
 - B. The chance of the something happening that will have negative impact if exposed to a hazard.
 - C. Outcome from an event such as harshness of injury or health of people, or damage to property, or insult to environment.
 - D. A procedure by which each potential failure and the kinds of failures that could happen.
- Q45.** The greatest danger to humans suffering electrical shock results from _____
- A. voltage differences
 - B. input voltage
 - C. current flow
 - D. vibration
- Q46.** Construction phases include pre-tender, contract management and _____
- A. tender
 - B. design
 - C. construction
 - D. completion
- Q47.** Why some accidents at workplace are not reported?
- I. To keep a safety record, such as accident-free days worked
 - II. Embarrassment of department or company that accident occurs at their workplace.
 - III. Workers feel it waste time to fill the form since no action will be taken.
 - IV. Some people see paperwork involved in accident reporting as red tape, to be avoided.
- A. I, II and III
 - B. I, II and IV
 - C. II, III and IV
 - D. All of the above.
- Q48.** When considering control measures, the risk control techniques should be used.
- I. Elimination - Getting rid of a hazardous job, tool, process, machine or substance is perhaps the best way of protecting workers.
 - II. Substitution – replacing the hazard with one that presents lower risk.
 - III. Isolation – isolating or separating the hazard from the person, or the person from the hazards.
 - IV. Engineering control – requires thinking about ways work could be done differently to make the world safer such as rearranging aspects of workplace, modifying equipment, combining tasks, changing procedures to eliminate hazardous step.

- A. I,II and III
- B. I,II and IV
- C. II,III and IV
- D. All of the above

Q49. Most construction sites require at least this personnel protection equipment (PPE):

- I. Hard hat
- II. Safety Boots
- III. Highly-visual jacket
- IV. Harnesses and lanyards.

- A. I,II and III
- B. I,II and IV
- C. II,III and IV
- D. All of the above

Q50. Which of the following statement is true regarding interlock guards attached to mechanical equipment?

- A. Can be removed if they get in the way while you are working, if you can still work safely.
- B. Can be removed to clean the equipment but must be replaced by an authorized person.
- C. When removed, the tripping mechanism and power manually shut down.
- D. As a temporary measure or as a last resort

Q51. What is the reason of 'The Workers' Compensation Board is established?

- I. provide no-fault accident insurance for employees
- II. protect employers from injury-related law suits
- III. refer questions relative to workplace injuries to a board rather than to the courts
- IV. refer questions relative to workplace injuries to a courts rather than to the board

- A. I, II and III
- B. I, II and IV
- C. II, III and IV
- D. All of the above.

Q52. Which of the following operation(s) requires a code of practice?

- A. Work that by regulation requires a safe work procedure.
- B. Work that requires a worker who is competent under the regulation.
- C. Work undertaken in confined spaces.
- D. Work that related with high technology machine or equipment.



- Q53.** The primary routes of entry of harmful substances into the body are
- A. eyes, skin, ingestion and inhalation
 - B. inhalation, absorption through the liver and kidneys, ingestion
 - C. skin absorption, ingestion, inhalation, injection
 - D. none of the above
- Q54.** Which of the following is the risk control options for work in enclosed areas?
- A. wearing earmuffs or ear plugs
 - B. working alone so there is more room to move
 - C. only working at times when the weather is cool outside
 - D. wearing a respirator to prevent inhalation of paint fumes.
- Q55.** Why ladders must be visually inspected before can be used?
- A. there are enough to go around
 - B. they will support the weight of 2 or 3 people at once
 - C. no damage or wear has occurred that could make them unsafe
 - D. they are clean and have no paint marks on them.
- Q56.** Which of the following action can be cause of accident?
- I. Keep using defective equipment even though know it
 - II. Insufficient lighting at workshop
 - III. Unauthorized usage of tools or equipment
 - IV. Awkward postures from poor workstation or tool design
- A. I, II and III
 - B. I, II and IV
 - C. II, III and IV
 - D. All of the above.
- Q57.** Construction phases include pre-tender, contract management and _____
- A. tender
 - B. design
 - C. construction
 - D. completion

- Q58.** In which year was the Occupational, Safety and Health Act (OSHA) enacted?
- A. 1947
 - B. 1994
 - C. 1957
 - D. 1975
- Q59.** The term “duty of care” in the Environmental Quality Act 1974 refers to
- A. Responsibilities of health and safety representatives
 - B. Tasks that employees must undertake
 - C. Responsibilities of employers to employees’ families
 - D. Health and safety responsibilities of employers and employees and others
- Q60.** Which of the following ACT is used to establish of Department of Environmental?
- A. Occupational Safety and Health Act 1994
 - B. Environmental Quality Act 1974
 - C. Employment Act 1955
 - D. Factory and Machine Act 1967

-END OF QUESTIONS –

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