



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER II
SESSION 2013/2014**

COURSE NAME : OCCUPATIONAL SAFETY AND HEALTH
COURSE CODE : DAY 10102
PROGRAMME : 1 DAJ
EXAMINATION DATE : JUNE 2014
DURATION : 1 HOUR 30 MINUTES
INSTRUCTION : (A) ANSWER ALL THE QUESTIONS ON PROVIDED ANSWER FORM
(B) DO NOT BRING OUT THE EXAMINATION QUESTION PAPER FROM THIS EXAMINATION HALL

THIS QUESTION PAPER CONSISTS OF ELEVEN (11) PAGES

1. Which of these best describes "the likelihood of an incident occurs"?
 - A. Risk
 - B. Hazard
 - C. An event
 - D. An episode

2. The relative exposure to hazard is known as:
 - A. risk
 - B. danger
 - C. hazard
 - D. accident

3. Source or a situation with a potential for harm is known as:
 - A. risk
 - B. danger
 - C. hazard
 - D. accident

4. What is risk in occupational and safety health?
 - A. Risk is the likelihood of a specified hazardous event occurring.
 - B. Risk is the severity of a specified hazardous event occurring.
 - C. Risk is the combination of the likelihood and severity of a specified hazardous event occurring.
 - D. Risk is the specified hazardous event occurring with a potential for harm in terms of human injury.

5. Why need to carry out risk assessment in the workplace?
 - A. Assessing the risk and putting in place control measures.
 - B. Cost-effective management of occupational safety and health (OSH).
 - C. Control measures and reviewing the outcomes.
 - D. Implementing measures to reduce the risk associated with a hazard.

6. When to carry out risk assessment?
 - A. Before and after operation
 - B. Before, during and after operation
 - C. During and after operation
 - D. After operation

7. What is an external change in review risk assessment?
 - A. Risk analysis that uses likelihood and severity in qualitative method.
 - B. Presenting result is a very effective way of communicating the distribution of the risk throughout a plant and area in a workplace.
 - C. Amendments of standard of procedure and development in the workplace.
 - D. Amendments of national law and regulations, development of new knowledge.

8. Who will carry out the risk assessment?
- A. Any person or persons in the workplace.
 - B. Person or persons trained to identify hazard and risk assessment.
 - C. Officer from Department of Safety and Health.
 - D. Person from top management.
9. Give the right sequential order of the basic components of risk management.
- A. Hazard Identification - Risk Assessment - Review Control Measure - Risk Control
 - B. Risk Control Hazard Identification - Risk Assessment - Review Control Measure
 - C. Review Control Measure - Hazard Identification - Risk Assessment - Risk Control
 - D. Hazard Identification - Risk Assessment - Risk Control - Review Control Measure
10. Job Safety Analysis (JSA) is a tool used to improve job safety through:
- A. Avoid potential hazards associated with each step of a job
 - B. Control the hazards or potential hazards in the workplace
 - C. Finding effective control measures to prevent or eliminate exposure
 - D. Breaking the job down into a sequence of task
11. Risk assessment techniques use in the workplace EXCEPT:
- A. Identify hazard
 - B. Integrate risk management
 - C. Risk control action plan
 - D. Review adequacy of risk control
12. The purpose of Hazard Identification, Risk Assessment and Risk Control (HIRARC):
- A. To investigate the accident cause in the workplace
 - B. To discuss a particular case and the possible severity that could come from the risks
 - C. To identify all the factors that may cause harm to employees and others (the hazards)
 - D. To enable employee to plan, introduce and monitor preventive measures to ensure that the risks are adequately controlled at all times
13. The physical classification of hazard is:
- A. Biological
 - B. Chemical
 - C. Electrical
 - D. Psychosocial
14. Which is not related to HIRARC?
- A. Risk assessment
 - B. Hazard identification
 - C. Risk control
 - D. Risk centre

15. The hazard analysis of Failure Mode and Effect Analysis (FMEA):
- A. To select the problems that could arise from production systems
 - B. Identifying potential hazards associated with sequence of tasks
 - C. Is a procedure by which each potential failure and the kinds of failures that could happen
 - D. Breaking the job down into a sequence of task
16. Determine the likelihood categories.
- A. Highly unlikely
 - B. Fatalities
 - C. Major injuries
 - D. First aid injuries
17. The conclusion of hazard identification should contain:
- A. accident probabilities
 - B. summary of control measures
 - C. summary of possible severity
 - D. list of hazard sources
18. The most effective control measure in hazard control is:
- A. substitution
 - B. elimination
 - C. isolation
 - D. engineering control
19. Control by engineering design would not include:
- A. interlocking
 - B. installing safety device
 - C. supervision
 - D. limitation
20. All of the following are examples of engineering controls EXCEPT
- A. Adjustable workstation to accommodate various employee sizes.
 - B. Elimination of lead-based paint.
 - C. Installation of welding curtains during hot work.
 - D. Installation of sound-dampening shields on noisy equipment
21. Which of the following is physical injury?
- A. Poisoning
 - B. Choking
 - C. Amputation
 - D. All of the above
22. The best phrase to describe the entanglement hazard is:
- A. Involves being caught in machine
 - B. Body being pulled and trapped by rotating and tangentially moving parts
 - C. When body is being caught between fixed and moving part of machine
 - D. Body contact with machine parts

23. According to New York Panel Law, physical injury can be defined as:
- A. wounds, lacerations and contusions
 - B. damage to a person's body in a physical sense
 - C. impairment of physical condition and substantial pain.
 - D. work related gradual process injury
24. Construction phases include pre-tender, contract management and ...
- A. sub-structure
 - B. design
 - C. drawing
 - D. completion
25. Poorly maintained scaffold can cause hazard.
- A. falling from height
 - B. falling from same level
 - C. electrocution
 - D. suffocation
26. Preliminary appraisal or HIRARC exercise should be conduct in to identify issues related to safety and health.
- A. pre-tender stage
 - B. contract management stage – pre-construction
 - C. contract management stage – construction
 - D. completion of work
27. What is the effect of mechanical hazard risks to safety and health?
- A. Resulting in minor injuries (such as scratches and sprains) or dire consequences (such as loss of limbs and death).
 - B. The body loses its ability to cool itself
 - C. Increased body temperature, a rapid pulse, loss of orientation, confusion, decreased blood pressure, not conscious and coma
 - D. Loss of self-control and insane
28. Execution of work during sub-structure, super-structure and finishing is done during ...
- A. Pre-Tender phase
 - B. Contract management phase
 - C. Completion phase
 - D. Hand over phase
29. In construction phase, mechanical and electrical installation is done during ...
- A. Pre-Tender phase
 - B. Contract management phase
 - C. Completion phase
 - D. Hand over phase

30. Testing and commissioning is done during ...
- | | |
|------------------------------|---------------------|
| A. Pre-Tender phase | C. Completion phase |
| B. Contract management phase | D. Hand over phase |
31. Neck tie may cause risk of
- | | |
|-------------|-----------------|
| A. trapping | C. abrasion |
| B. cutting | D. entanglement |
32. Type of safety guarding which allow flexibility in accommodating various size stocks is:
- | | |
|--------------|-------------------|
| A. fixed | C. adjustable |
| B. interlock | D. self-adjusting |
33. Following are the major causes of electrical shock EXCEPT
- | | |
|---------------------------|------------------|
| A. Electrostatic hazard | C. High voltage |
| B. Arcs and sparks hazard | D. Short circuit |
34. There is one of the most important methods in reducing electrical hazards where it should be executed in any kind of electrical equipment there is:
- | | |
|---------------------|----------------------------|
| A. Discharge method | C. Safety Training Methods |
| B. Earthing method | D. Method Key System |
35. The greatest danger to humans suffering from electrical shock results from
- | | |
|-----------------|-----------------------------------|
| A. current flow | C. defective electrical equipment |
| B. voltage flow | D. multimeter |
36. The primary routes of entry of harmful substances into the body are:
- eyes, skin, ingestion and inhalation
 - inhalation, absorption through the liver and kidneys, ingestion
 - skin absorption, ingestion, inhalation, injection
 - none of the above
37. Personal hearing protection should be used ...
- as the first measure adopted to control a noise hazard or to increase protection
 - as a temporary measure or as a last resort
 - only when you hear ringing in the ears after a noisy activity
 - to allow you to concentrate on a work task without interruption

38. Noise levels are measured in:
- | | |
|-------------------|---------------------------|
| A. decimals or dB | C. millimeters per second |
| B. decibel or dB | D. dBs per second |
39. Health surveillance can be described as:
- the measurement of a hazardous substance, its metabolite or other substances like enzymes in body tissues, fluids or exhaled air.
 - the monitoring of individuals in order to identify changes in health due to exposure to hazardous substances.
 - medical treatment which assist recovery
 - management of the process which helps people stay at or return to work.
40. Vibration usually transferred when in contact with the feet or buttocks:
- | | |
|-------------------------|-------------------|
| A. Whole body vibration | C. Hand vibration |
| B. Hand arm vibration | D. Feet vibration |
41. Hand arm vibration may cause:
- | | |
|-----------------|---------------------------|
| A. Blurring eye | C. Heart malfunction |
| B. Vomiting | D. Carpal tunnel syndrome |
42. Following are the basic type of accidents EXCEPT:
- | | |
|--------------|---------------------|
| A. near miss | C. minor accident |
| B. long term | D. first aid injury |
43. Following are the basic accident causes EXCEPT:
- | | |
|------------------------|---------------------|
| A. basic causes | C. immediate causes |
| B. intermediate causes | D. direct causes |
44. The person those are responsible to investigate and report accidents under the Occupational Safety and Health Act (OSHA) if a serious accident or injury at work site happen
- | | |
|------------------------------|-----------------|
| A. An OSH officer | C. Victim |
| B. Everyone at the work site | D. The employer |
45. Below are some accidents needs to be investigated:
- | | |
|-----------------------|----------------------------------|
| A. Lost time accident | C. Material and equipment damage |
| B. Injury accident | D. All of the above |

46. In Occupational Safety and Health (OSH) the employer have to do the following things when an accident happens that resulting in a serious injury at his or her work site.
- A. Carry out an investigation into the circumstances surrounding the accident
 - B. Notify a Director of Inspection as to the time, place and nature of the accident
 - C. Prepare a report in accordance with the regulations
 - D. All of the above
47. Below are unsafe actions that led to the cause of the 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
48. Employers are responsible to complete the following form, if there are workers injured in a workplace
- A. Employer's Report of Accident
 - B. Employee's Report of Accident
 - C. Insurance Claim
 - D. All of the above
49. Following are guide to be followed when conducting an accident investigation EXCEPT
- A. Carry out an investigation a week after the incident
 - B. Obtain information from individuals involved during the incident
 - C. Protect the evidence derived
 - D. Record all information with photo, date and time completely
50. One of the causes of accidents is caused by the problems in the administration. Following are some of the problems commonly associated with the administration EXCEPT
- A. Policies / procedures that are not standardized
 - B. Communication between supervisors and employee are not clear
 - C. Personal protective equipment is not available
 - D. Lack of awareness about the importance of safety and health at work
51. Some of the technique used in hazard analysis EXCEPT
- I. Just In Time (JIT)
 - II. Job safety analysis (JSA)
 - III. Failure Mode and Effect Analysis (FMEA)
 - IV. Hazard and Operability Studies (HAZOP)
- A. I only
 - B. I and II only
 - C. I, II and III only
 - D. All of the above

52. Risk assessment in the workplace should be carried out for
- I. Routine activities i.e maintenance, shutdowns abnormal operation
 - II. Activities of all personal having access to the workplace (including subcontractors and visitors)
 - III. Facilities at the workplace, whether provided by the organization or others such as contractors
 - IV. non-routine activities
- A. I only
B. I and II only
C. I, II and III only
D. All of the above
53. The basic principle of risk management.
- I. Accept no unnecessary risks
 - II. Make risk decision appropriately
 - III. Not accept risk when benefit outweigh costs
 - IV. Control the risk
- A. I only
B. I and II only
C. I, II and III only
D. All of the above
54. The fault tree analysis focus on:
- I. To analyze how and why accident could occur
 - II. Graphic technique
 - III. To calculate probability of end event
 - IV. Select a component for analysis
- A. I only
B. I and II only
C. I, II and III only
D. All of the above
55. The types of physical injury can happened in the workplace:
- I. Wounds, lacerations, contusions
 - II. Burns
 - III. Impact
 - IV. Ejection
- A. I only
B. I and II only
C. I, II and III only
D. All of the above

60. Internal investigation team include:

- | | |
|--------------------------|-----------------------|
| I. Safety officer | III. DOSH officer |
| II. External consultants | IV. Police officer |
| A. I only | C. I, II and III only |
| B. I and II only | D. All of the above |

END OF QUESTION