

## UNIVERSITI TUN HUSSEIN ONN MALAYSIA

# FINAL EXAMINATION (ONLINE) SEMESTER II SESSION 2020/2021

**COURSE NAME** 

: OCCUPATIONAL SAFETY AND HEALTH

COURSE CODE

: BFR 33002

PROGRAMME CODE :

BFR

EXAMINATION DATE:

JULY 2021

**DURATION** 

3 HOURS

INSTRUCTION

: ANSWER ALL QUESTIONS

THIS QUESTION PAPER CONSISTS OF SIX (6) PAGES



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**SECTION A** 

#### BFR 33002

Two	(2) marks each questions (Total = $3$	0 marks)
Q1	Section 35(1) of Factories and Machinery Act 1967 requires every person who undertakes any building operation or works engineering construction to notify DOSH by using Form within days from the commencement of the work.	
	A. JKJ 101, 14	C. JKJ 105, 21
	B. JKJ 103, 7	D. JKJ 106, 30
Q2	Which organisation is responsible for the enforcement of the Building Operations and Works of Engineering Construction (BOWEC) Regulation 1986?	
	A. DOSH	C. SOCSO
	B. NIOSH	D. CIDB
Q3	Which of the statement(s) below is/are accurate about the goals of OSHA?	
	<ul> <li>I. To set out the duties of Employers, Supervisors and Workers in the workplace</li> <li>II. To set standards for health and safety in the workplace</li> <li>III. To provide a checklist for safe and unsafe work conditions</li> <li>IV. To protect workers from hazards on the job</li> </ul>	
	A. I, II and III	C. I, III and IV
	B. I, II and IV	D. All of above
Q4	Section 30 of OSHA 1994 requires all employers who employ workers to form a Safety and Health Committee at the place of work.	
	A. 5 or more	C. 30 or more
	B. 20 or more	D. 40 or more
Q5	Which of the following is <b>NOT</b> the duty of an employee prescribed under Section 24 of Occupational Safety and Health Act 1994?	
	A. To have a reasonably care for safety of himself and others	
	B. To be a member of Trade Union	
	C. To wear and use PPE provided to him	
	D. Do not interfere or misused anything provided for safety and health	
Q6	Exposed to airborne and blood borne viruses, bacteria and fungus are some examples of hazards.	
	A. electrical	C. psychosocial
	B. mechanical	D. biological
	B. mechanical	D. biological



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- Q7 A contractor of a 4-storey (approximately 3 meter high each level) apartment construction project has utilized/installed the followings:
  - I. frame scaffold (metal tube) to perform external works up to 4 storey of the building
  - II. loading and catch platform to prevent falling materials to the ground
  - III. rubbish chute at the upper floor

Based on the information above, which of the following required design and drawing by a Professional Engineer according to BOWEC 1986?

A. I only

C. II only

B. I and III

- D. All of the above
- Q8 Which of the followings describe the sources of potential hazards:
  - I. Exposed to bacteria and fungus
  - II. Sharp point and edges
  - III. Sexual harassment
  - IV. Wrong design of workstation, tool and task

A. I and II

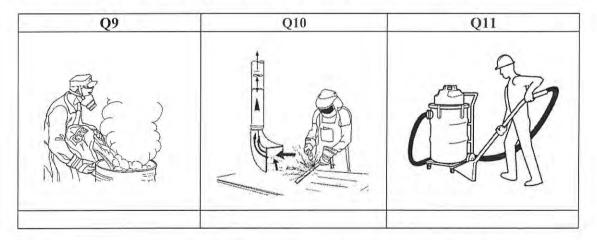
C. III only

B. I, II and III

D. All of the above

#### Q9 to Q11

Based on the 'hierarchy of risk controls', state the type of risk control below:



- Q12 The establishment of a safety and health committee in a workplace is required when ...
  - I. Instructed by Director General
  - II. There are elder workers that are more than 55 years old
  - III. Over time is required at workplace
  - IV. There are 40 or more workers
  - A. I and II

C. I and IV

B. I and III

D. All of the above

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- Q13 What is the difference between Statutory and Common Laws?
  - A. Statutory law is enforced by DOSH while common law is enforced by Department of Justice
  - B. Statutory law should be handled by high court while common law can be issued by district court
  - C. Statutory law requires penalty for a breach regardless of the occurrence of damage or loss, while actions are decided only if there is damage or loss for common law
  - D. The nature of statutory law is instructive while common law is prescriptive
- Q14 'Repeated exposure to unnatural postures and unnatural movement, and wrong design of workstation, tools and task' are the examples of potential sources of hazards.
  - A. Ergonomic

C. Mechanical

B. Psychological

D. Electrical

- Q15 As the main contractor for a new township development project, you were requested to execute risk management in order to evaluate the risks to safety and health from hazards at work. Arrange the following activities in correct sequence to carry out the risk management process.
  - I. Determine risk
  - II. Classify activities (work, product, services, activities)
  - III. Risk control action plan
  - IV. Identify hazards
  - V. Review adequacy of risk control
  - VI. Decide if risk is tolerable
  - A.  $II \rightarrow I \rightarrow III \rightarrow IV \rightarrow VI \rightarrow V$
  - B.  $II \rightarrow IV \rightarrow I \rightarrow VI \rightarrow III \rightarrow V$
  - C.  $IV \rightarrow II \rightarrow I \rightarrow VI \rightarrow III \rightarrow V$
  - D.  $IV \rightarrow I \rightarrow II \rightarrow III \rightarrow V \rightarrow VI$

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#### SECTION B

(Total = 70 marks)

Q16 (a) Based on Section 15(2) (b) of Occupational Safety and Health Act (OSHA) 1994, the general duties of employers and self-employed persons to their employees to ensure that as far as practicable, 'making arrangements for the use, handling, storage and transportation of the plant and substances'.

Explain **FOUR** (4) measures to be carried out to ensure the compliance to this requirement. (10 marks)

(b) Differentiate the safety **hazard** and **risk** and give an example of each to support the answer.

(15 marks)

Q17 (a) Figure Q17 shows a scenario that happened in a construction site. You are required to identify FIVE (5) occupational hazards involved in work area and propose at least TWO (2) control measures to avoid or minimize the risks, based on the hierarchy of control.

(15 marks)

- (b) In the building construction works, workers are easy to expose to hazards that may cause fatal injury. Discuss the safety action to be taken by the employer to prevent potential hazard for the following works: -
  - 1. Excavation
  - 2. Roof work

(10 marks)

Q18 (a) Points out FOUR (4) types of health hazard that often occur in building construction industry and give examples of each hazards.

(8 marks)

(b) The occupational health hazards in the construction industry can be broken down into six categories: asbestos-related diseases, silica-related diseases, noise-induced hearing loss, hand-arm vibration syndrome, musculoskeletal disorders and dermatitis. By choosing THREE (3) of the listed health hazard categories, evaluate the necessity of the prevention action that need to be taken to reduce the level of risks in the workplace.

(12 marks)

- END OF QUESTIONS -

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#### **FINAL EXAMINATION**

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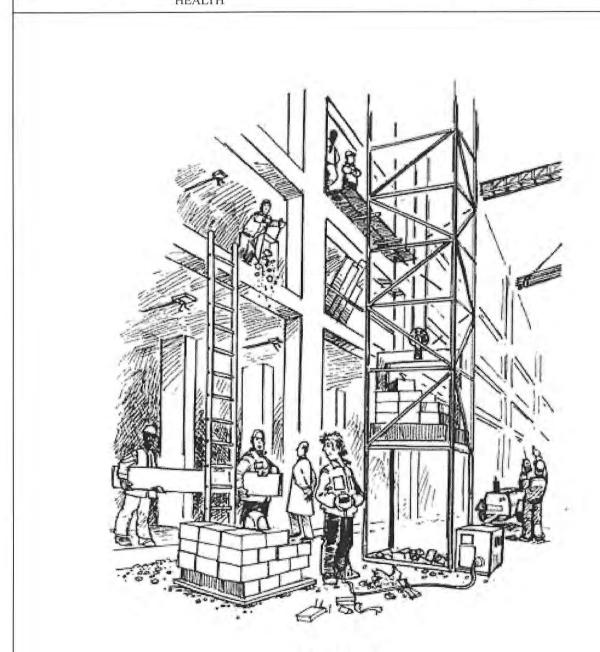


FIGURE Q17

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All More with the Lotter Committee