



**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

**FINAL EXAMINATION  
SEMESTER II  
SESSION 2011/2012**

**COURSE NAME** : OCCUPATIONAL SAFETY AND  
HEALTH MANAGEMENT

**COURSE CODE** : BPC 32503

**PROGRAMME** : 3 BPB

**EXAMINATION DATE** : JUNE 2012

**DURATION** : 3 HOURS

**INSTRUCTION** : ANSWER ALL QUESTIONS.

**THIS QUESTION PAPER CONSISTS OF FOUR (4) PAGES**

**Q1** In a local paint manufacturing plant, a work unit ABC is exposed to chemical Y with hazard rating of 5 and exposure rating of 1. Another work unit DEF is exposed to chemical Z with hazard rating of 4 and exposure rating of 5.

**Table Q1: Risk Matrix**

		EXPOSURE RATING (ER)				
		1	2	3	4	5
HAZARD RATING (HR)	1	RR 1	RR 2	RR 2	RR 2	RR 3
	2	RR 2	RR 2	RR 3	RR 3	RR 4
	3	RR 2	RR 3	RR 3	RR 4	RR 4
	4	RR 2	RR 3	RR 4	RR 4	
	5	RR 3	RR 4	RR 4		

Legend :

	RR	Risk Rating
		Risk Not Significant
		Risk Significant (Category 1)
		Risk Significant (Category 2)

- (a) Prepare the separated risk matrix with the risk rating for both chemicals Y and Z based on Table Q1. (10 marks)
  
- (b) Propose the prevention strategies based on the hierarchy of control for the hazardous chemical by considering an excessive time exposure among workers. (10 marks)

- Q2** An employee slipped on a patch of oil on a warehouse floor and was admitted to hospital where he remained for several days. The oil was found close to a stack of pallets that had been left abandoned on the pedestrian walkway in the warehouse.
- (a) Develop a plan of accident investigation based on the situation in Q2.  
(15 marks)
- (b) Suggesting and implementing for corrective action are the crucial part in accident investigation.  
Explain the principle of implementing the preventive measures.  
(5 marks)
- Q3** Work related stress reported to have doubled since the early 1990s. In 2008, it is estimated that nearly half a million people reported suffering from work related stress, depression or anxiety.
- (a) Describe **FIVE (5)** categories of human reaction to workplace stress.  
(10 marks)
- (b) The improvement in safety and health could reduce workers' stress at the workplace.  
Discuss the above statement.  
(10 marks)
- Q4** Emergencies do happen, including personal injuries, fires, explosions, chemical spills, toxic gas releases, and natural disasters such as tornadoes and floods. Anticipating emergencies and planning your response can greatly lessen the extent of injuries and limit equipment, material and property damage.
- (b) State **SIX (6)** basic elements of emergency response preparedness management.  
(6 marks)
- (c) Describe **THREE (3)** levels of emergencies.  
(3 marks)
- (d) Determine the importance of developing emergency response preparedness to enable the safety of employees during an emergency.  
(11 marks)

**Q5** A risk assessment is a process that is used to evaluate the likelihood of harm occurring and the severity of that harm. The results of the risk assessment can then be used to determine if the work can be performed safely.

- (a) Define
  - (i) Hazard (2 marks)
  - (ii) Risk (2 marks)
  - (iii) Risk assessment (2 marks)
- (b) List **FOUR (4)** basic components of risk management. (4 marks)
- (c) Describe **THREE (3)** types of risk assessment approaches. (6 marks)
- (d) Other than initial and periodic review, risk assessment need to be reviewed whenever there are changes due to internal and external circumstances. Explain the above statement. (4 marks)

**END OF QUESTION PAPER**