



UTHM
Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER I
SESSION 2019/2020**

COURSE NAME : SAFETY IN HVAC ENVIRONMENT
COURSE CODE : BBZ 10204
PROGRAMME CODE : BBZ
EXAMINATION DATE : DECEMBER 2019/JANUARY 2020
DURATION : 3 HOURS
INSTRUCTION : ANSWER ALL QUESTIONS

THIS QUESTION PAPER CONSISTS OF **THREE (3)** PAGES

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TERBUKA

- S1** (a) Brief the scope of each of the following acts:
(i) OSHA 1994
(ii) FMA 1967
(iii) EQA 1974
(3 marks)
- (b) Describe a full description of the main functions of three (3) agencies related to Occupational Safety and Health in Malaysia.
(6 marks)
- (c) You have just been appointed a Technologist in XYZ Sdn Bhd Services Company. One of the tasks is to manage matters related to occupational safety and health in the field related to the installation and maintenance of air conditioning systems. Discuss strategies to inculcate safety culture with related to installation and maintenance of conditioning systems.
(16 marks)
- S2** (a) Describe the purpose of the Emergency Medical First Aid.
(5 marks)
- (b) Explain the steps of CPR in dealing with breathing problems in work environment.
(8 marks)
- (c) As an officer on the site of a new hospital construction project, you need to be constantly aware of the hazards and risks involved. Clarify emergency measures that need to be taken in the event of an accident involving a worker with gas exposure to the eye and hand injuries.
(12 markah)
- S3** (a) Define the hazard noise and give three (3) examples of noise hazards in the oil and gas Environment.
(5 marks)
- (b) Describe two (2) types of chemical hazard in oil and gas industry
(6 marks)
- (c) In Oil and gas industry, chemical hazard assessments need to consider the overall safety of the process design as well as the manner in which project activities are managed. At the planner's level, the recommended methodology has seven (7) steps. Explain all the steps with detail.
(14 marks)

- S4 (a) Installation and maintenance of air conditioning at high buildings is a must in the HVAC work environment. List five (5) of the correct methods for using the ladder for the job.
(5 marks)
- (b) The purpose of HIRARC is to identify all factors of hazard, need to consider the probability of harm happening in any circumstances and to enable employers to plan, introduce & monitor preventive measures. Based on this three (3) purpose, customize each one based on the HVAC work environment.
(6 marks)
- (c) HIRARC activities shall be plan and conducted for situation where hazard appear to pose significant threat, uncertain whether existing controls are adequate or/and before implementing corrective or preventive measures. As one of worker that involve in HVAC environment, evaluate a risk assessment that related to HVAC construction hazards with HIRARC prosedures in detail.
(14 marks)

- END OF QUESTIONS -