



UTHM

Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION SEMESTER II SESSION 2021/2022

- COURSE NAME : FIRE PROTECTION & SECURITY SYSTEM
- COURSE CODE : BNB 31603
- PROGRAMME CODE : BNB
- EXAMINATION DATE : JULY 2022
- DURATION : 2 HOURS 30 MINUTES
- INSTRUCTION : 1. ANSWER **ALL** QUESTIONS.
2. THIS FINAL EXAMINATION IS CONDUCTED VIA **CLOSED BOOK**.
3. STUDENTS ARE **PROHIBITED** TO CONSULT THEIR OWN MATERIAL OR ANY EXTERNAL RESOURCES DURING THE EXAMINATION VIA CLOSED BOOK.

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

- Q1** (a) Explain **THREE (3)** fire safety standards in Malaysia. (6 marks)
- (b) For effective fire protection, building constructions must be able to support their structural loads during a fire, contain the spread of smoke and fire gases, and prevent excessive heat flow for a reasonable time. With the aid of illustrations, select **THREE (3)** suitable fire protection techniques for steel columns. (12 marks)
- (c) Explain in detail the procedure of the fire drill. (7 marks)
- Q2** (a) Differentiate between Fire Safety Audit and Fire Risk Assessment. (6 marks)
- (b) List **FOUR (4)** criteria that should be considered in Fire Risk Assessment. (4 marks)
- (c) Briefly write the process of Fire Risk Assessment. (15 marks)
- Q3** (a) Define the function of security alarm. (5 marks)
- (b) The component of an alarm system that detects activity is called a sensor. Differentiate between Passive Infrared (PIR) and Microwave (MW) sensor. (8 marks)
- (c) Technology has changed the face of the security industry. In your opinion, justify whether the changes are good or not. (12 marks)

- Q4** (a) Explain briefly about network. (5 marks)
- (b) Telecommunications are a means of electronic transmission of information over a distance. Explain **FIVE (5)** elements in the communication process. (15 marks)
- (c) Identify **FIVE (5)** technology that used satellite application. (5 marks)

- END OF QUESTIONS -

