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Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER II
SESSION 2016/2017**

COURSE NAME : FIRE SERVICES
COURSE CODE : BNB 40303
PROGRAMME : BNB
EXAMINATION DATE : JUNE 2017
DURATION : 2 HOURS 30 MINUTES
INSTRUCTION : ANSWER ALL QUESTIONS

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

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- Q1** (a) With the aid of a well-labelled diagram, outline the main features of an upright fire sprinkler. (5 marks)
- (b) In a simple diagram, how does a fire sprinkler work? (8 marks)
- (c) With appropriate examples, differentiate the following terms:
 (i) maintained emergency escape lighting
 (ii) non-maintained emergency escape lighting (12 marks)
- Q2** (a) List **FOUR (4)** methods to extinguish fire. (4 marks)
- (b) Fire Services Act 1988 (Act 341) emphasizes the importance of prevention and control of fires in buildings that need to be complied with by building owners to ensure there were no injuries and the difficulty of escape in case of fire. Discuss the objectives of the Fire Services Act 1988 (Act 341). (6 marks)
- (c) Part VII and VIII of the Uniform Building by Law 1984 describe the needs of passive and active fire protection system in a building. Explain what is meant by passive fire protection systems and active fire protection systems. For each system, state **THREE (3)** appropriate examples. (15 marks)
- Q3** People responsible for fire safety in buildings must consider the safety of everyone on the premises including those with disabilities.
- (a) List **FIVE (5)** conditions that may hinder a person's escape from fire. (5 marks)
- (c) Briefly describe **FOUR (4)** features of a personal emergency escape plan. (8 marks)
- (c) Identify and explain **SIX (6)** factors to be taken into account when preparing an evacuation plan for an adult with mobility impairment. (12 marks)

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- Q4** (a) With the aid of a well-labelled diagram, explain the stages involved in wired connection.
(10 marks)
- (b) Enumerate **FIVE (5)** security systems for a jewellery shop which located inside the shopping mall and for each system justify why it is a must.
(10 marks)
- (c) A security system designed to detect intrusion unauthorized entry into a building or area. As a professional building services technologist in future, explain why the security system is needed.
(5 marks)

- END OF QUESTION -

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