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UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER II
SESSION 2017/2018**

COURSE NAME : BUILDING TECHNOLOGY FOR
HEALTH AND COMFORT

COURSE CODE : BPF 32303

PROGRAMME CODE : BPD

EXAMINATION DATE : JUNE / JULY 2018

DURATION : 2 HOURS 30 MINUTES

INSTRUCTION : ANSWER ALL QUESTIONS

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

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- Q1** Sick Building Syndrome (SBS) is closely related to the level of indoor air quality.
- (a) List **FIVE (5)** effects of SBS. (5 marks)
 - (b) Explain **FIVE (5)** common Volatile Organic Compounds (VOCs) and their sources. (15 marks)
- Q2** The rate of heat transfer have the tendency to flow from higher temperature region to the lower temperature region.
- (a) Explain **TWO (2)** elements that affect the heat transfer. (10 marks)
 - (b) Assuming you are a property manager for a private university in Putrajaya. Propose **TWO (2)** strategies to control indoor temperature in the campus. (10 marks)
- Q3** Noise when exceeds the recommended level becomes pollution. It has physiological and psychological effects that contribute to health and comfort of the occupants.
- (a) Explain;
 - (i) Physiological effects (5 marks)
 - (ii) Psychological effects (5 marks)
 - (b) Suggest methods to control the noise by assuming you are appointed as a property manager for an office building. (10 marks)

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- Q4** Study shows people spend 90 percent of their time indoors. Most of the exposure to environmental pollutants occurs from breathing indoor air. The air at home, schools and offices can be 5 times more polluted than outdoor air.
- (a) Discuss sources of pollutant that contributes to poor indoor air quality. (10 marks)
 - (b) Explain **TWO (2)** ways to improve air ventilation in a building. (10 marks)
- Q5** A strong safety culture boosts productivity, employee morale and employee retention. A strong ergonomics integration prevents injuries and increases productivity.
- (a) List **TEN (10)** tips for good ergonomics practice in the office. (10 marks)
 - (b) Explain **FIVE (5)** benefits of having proper ergonomics at the workplace. (10 marks)

- END OF QUESTIONS -

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