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UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
(ONLINE)
SEMESTER I
SESSION 2020/2021**

COURSE NAME : FACILITIES MANAGEMENT
COURSE CODE : BPE 35003 / 42003
PROGRAMME CODE : BPD
EXAMINATION DATE : JANUARY / FEBRUARY 2021
DURATION : 3 HOURS
INSTRUCTION : ANSWER ALL QUESTIONS

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

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Q1 Making decisions play an important role in management. Selection of an effective strategy, as well as having impartiality in decision-making, depends on the analyzed criteria. Due to the increasing complexity in management, integrating experts' knowledge and experiences to make appropriate decisions is a commonly used method. A team of experts and project managers are essential parts of problem solving models. Also, an effective group decision model is necessary to aggregate experts' knowledge and judgments. The selection of a management strategy is always a complicated task because the future direction to take is uncertain. Predicted values cannot be crisp. Experts determine the values and weights of criteria based upon their experience (facts, similar examples, etc.).

(a) Identify **THREE (3)** stages in the development and achievement of a workable strategy for facilities management.

(3 marks)

(b) Formulate strategy considerations for facilities management.

(10 marks)

(c) Illustrate strategies for the facilities management development process.

(17 marks)

Q2 Facilities Management has become an essential element of hospital management due to epidemiology issues requiring building and services performance, advancement in healthcare and antecedent changes in hospital building design, and to the rising facilities maintenance and operational costs. Considering the fact that poor FM practices related to building maintenance and environmental services constitute the main non-clinical causes of Hospital Acquired Infections (HAIs) in public hospitals in most developing countries, the performance of FM services has become an important step towards minimizing HAIs and also improving the healthcare environment for better health outcomes.

(Source: Daniel, A., Peng, A. Y. C., & Nisham, M. Z. (2020). The Mediating Effects of Finance on the Performance of Hospital Facilities Management Services. Journal of Building Engineering, 101899)

(a) Outline Key Performance Indicators (KPIs) for facilities performance assessment in healthcare service.

(25 marks)

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- Q3** Facility managers are tasked with operating and maintaining the built environment. Technology plays a significant role in this function, and often facility managers are asked to install, implement, and work with a variety of information technologies such as Building Information Modelling (BIM).
- (a) Illustrate the advantages of the application of information technology to the facility management in an organization. (10 marks)
- (b) Classify **THREE (3)** types of support services that can be used from Building Information Modelling (BIM) system with an example case study. (15 marks)
- Q4** Life Cycle Costing (LCC) and the facility management costs are essential knowledge in all the phases of the life cycle of a building since this knowledge leads to relevant managerial decisions related to the investment.
- (a) Relate the overall concept of LCC within the context of financial planning and management. (10 marks)
- (b) Evaluate **THREE (3)** advantages of cost-benefit planning to the corporate and FM department, respectively. (15 marks)

- END OF QUESTIONS

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