



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

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

COURSE NAME : CONSTRUCTION SITE
TECHNOLOGY

COURSE CODE : BNC 31403

PROGRAMME CODE : BNC

EXAMINATION DATE : DECEMBER 2019/ JANUARY 2020

DURATION : 3 HOURS

INSTRUCTION : ANSWER **FOUR (4)** QUESTIONS
ONLY

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THIS QUESTION PAPER CONSISTS OF **FOUR (4)** PAGES

- Q1** The construction industry is the largest industry in the world. Growth in this industry in fact is an indicator of the economic conditions of a country.
- (a) What differentiate the construction industry from other industries?
(3 marks)
 - (b) A project is defined in construction by 4 characteristics. Explain briefly **ALL** characteristics of the project.
(6 marks)
 - (c) Carry out in detail **FOUR (4)** major types of construction projects.
(8 marks)
 - (d) In summary the project phases can be summarized as preconstruction phase, procurement phase, construction phase and closeout phase. Differentiate procurement phase and closeout phase.
(8 marks)
- Q2** A project is an endeavor that is undertaken to produce the results that are expected from the requesting party. To ensure the success of a project implementation team member should be set up to achieve these requirements.
- (a) Describe briefly **FIVE (5)** important of project team in construction industry.
(5 marks)
 - (b) The project team is the group responsible for planning and executing the project. It consists of a Project Manager and a variable number of project team members, who are brought in to deliver their tasks according to the project schedule. Differentiate between design teams and team management in term of their objective and expertise.
(10 marks)
 - (c) Several groups generally make up a construction team, such as the architect and engineering team, the owners and investors, and the contractors. All team members share the common goal to complete the project, but they may also have conflicting priorities. Owners may want value for money, while the architect and engineers are concerned with aesthetics and safety. Propose your project team to ensure the project can achieve its objectives and mission.
(10 marks)
- Q3** Documentation is important to ensure coordination of care between providers. However, the importance of documentation and record keeping may be overlooked by the focus on direct services to clients.
- (a) List **THREE (3)** reasons important of document and maintain proper records.
(3 marks)

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- (b) All filing is retained on site, generally in the Quantity Surveyors (QS) office, unless otherwise agreed. The responsibility for maintaining a complete filing system lies with the Project QS. Discuss the general post-in procedure. (7 marks)
- (c) The design of building facilities will be determined by economic, engineering, and environmental studies. The purpose of these studies is to determine the optimum combination of an effective facility design at the most economical cost and the least adverse environmental impact. Prepare how to determine the optimum combination of effective facility of design. (6 marks)
- (d) A record is a document of data in an organization which acts as evidence or a guideline. A project record management is a systematic process, which allows people to retain records for future use. In the project record management process, there are 3 distinct stages. Compare the **THREE (3)** distinct stages in the project record management process. (9 marks)

Q4 Projects begin with a stated goal established by the owner and accomplished by the project team. As the team begins to design, estimate, and plan out the project.

- (a) What is WBS? With the aid of sketch, illustrate the WBS of project. (6 marks)
- (b) Kick off meeting it is one of the most important meetings in project management and is held prior to starting any work. What are **FOUR (4)** differences between kick off meeting and project meetings? (9 marks)
- (c) As a project manager plan **TEN (10)** check list of kick off meeting. (10 marks)

Q5 In construction, materials account for about 35-40% of the cost of the project. It is a very considerable portion of the total cost of the project.

- (a) Illustrate the material cost and contractors profit (3 marks)
- (b) Material management is a process how building is designed and how materials are estimated. As in other aspects of project management material management requires an integrated and very coordinated approach. Recommend and discuss **SIX (6)** integrated and coordination approach. (12 marks)

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- (c) Knowledge management from a construction industry perspective is a principal aim to provide practitioners, academics, students and those interested in the construction industry with an improved awareness and understanding of knowledge management principles and practice. Compare the difference between knowledge economy and knowledge production in construction.

(10 marks)

- END OF QUESTION -

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