

CONFIDENTIAL



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER II
SESSION 2015/2016**

COURSE NAME : CONSTRUCTION ENGINEERING
COURSE CODE : BNC 30202
PROGRAMME CODE : BNC
EXAMINATION DATE : JUNE / JULY 2016
DURATION : 2 HOURS
INSTRUCTION : ANSWER ALL QUESTIONS

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

CONFIDENTIAL

Q1 All development are directly funding by client or government.

(a) Explain role of item below in construction

- (i) Architechcs
- (ii) Quantity Surveyors

(6 marks)

(b) Differentiate **THREE (3)** differences of the Modular Construction and Conventional Construction.

(10 marks)

(c) Discuss what is project lifecycle and its component.

(9 marks)

Q2 Superstructure was the structure on the ground

(a) Define the definition of item below.

- (i) Beam
- (ii) Staircase

(5marks)

(b) Sketch and explain the construction process for the Super Structure below

- (i) Column
- (ii) Beam

(10 marks)

(c) Classify **FIVE (5)** type of Mortar Joint in joining the brickwall.

(10 marks)

Q3 Unit House Requirement is one of the guideline in *Manual Perancangan Jabatan Perancang Bandar & Desa*.

(a) Explain in detail the definition of Formwork. (3marks)

(b) Explain and illustrate the Building Formwork for type of structure below
(i) Slab and Beam
(ii) Staircase
(iii) Column (15 marks)

(c) Discuss the rationale of having Steel Formwork in building development project. (7 marks)

Q4 Scaffolding are type of supporting structure in construction.

(a) Identify in detail item below
(i) Single Scaffolds
(ii) Double Scaffolds
(ii) Cantilever Scaffolds (12marks)

(b) Explain **THREE (3)** Safety Requirement should be taken when handling scaffolding (6 marks)

(c) Assess in detail what is Shoring and explain **TWO (2)** type of Shoring . (7 marks)

- END OF QUESTION -