SIR ARTUR LEWIS COMMUNITY COLLEGE
DIVISION OF TECHICAL EDUCATION AND MANAGEMENT STUDIES

EXAMINATION SESSION : May 2013 Final Examination

TUTOR : S. E. Yarde

PROGRAMME TITLE : Carpentry and Joinery two

PROGRAMME CODE : 3BD-CAJ-CE

#826

COURSE TITLE : Building Construction 111

COURSE CODE(S) : BLT 118-A

CLASS (ES) : Year Two

DATE : Thursday 9th May, 2013

TIME : 9:00 am

DURATION : 3 Hours

ROOM : CEH-1R-02

INVIGILATORS : **C.Gedeon,** D.P-Alfred; A.Plummer; C.Alexander

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INSTRUCTION:

- This examination comprises **Eight (8)** Question
- Answer any **FIVE (5)** questions.

Question 1:

(a) Identify and write descriptive notes on four (4) different types of construction work. (12 marks)

(b) Identify three (3) types of buildings. (3 marks)

(c) How are buildings categorised? (5 marks)

(20 marks)

Question 2:

(a) Write descriptive notes on the two (2) main parts of a building. (8 marks)

(b) Write descriptive notes on the four (4) different sections that make up the sub-structure and super- structure of a building. (12 marks)

(20 marks)

Question: 3

(a) What is the function of a building? (5 marks)

(b) What are the requirements expected from a building? (7 marks)

(c) What are the basic concepts on which structure are developed? (8 marks)

(20 marks)

Question: 4

(a) Differentiate between a skeleton structure and a solid construction. (6 marks)

(b) Identify three (3) advantages and three (3) disadvantages of skeleton structures over cross wall construction. (9 marks)

(c) What determine the spacing and the layout of frames construction? (5 marks)

(20 marks)

Question: 5

(a) What are the advantages in setting out skeleton structures in a grid framework? (5 marks)

(b) What determines the spacing and layout of wall in cross wall construction? (5 marks)

(c) Identify five (5) methods used to stabilize the structure against lateral forces in cross wall construction. (10 marks)

(20 marks)

Question: 6

(a) Differentiate between the following external finishes. (1) Facing (2) Cladding (3) Infilling panels. (6 marks)

(b) Identify three (3) types of building materials used to construct the following (1) Facing (2) Cladding (3) Infilling panels. (9 marks)

(c) Draw a section showing one of the materials identified to construct an Infilling panels. (5 marks)

(20 marks)

Question: 7

(a) Define the term shoring. (3 marks)
(b) How is shoring classified? (4 marks)
(c) Draw a section through a raking shore. (5 marks)
(d) Identify four (4) methods of utilizing flying shores to building. (8 marks)
(20 marks)

Question: 8

(a) Define the term underpinning. (4 marks)
(b) Give Three (3) reasons, why an existing building should be underpinned? (6 marks)
(c) What steps should be taken before underpinning? (5 marks)
(d) What precautions should be taken when underpinning commences? (5 marks)
(20 marks)