

FEDERAL UNIVERSITY OF TECHNOLOGY MINNA  
SCHOOL OF ENVIRONMENTAL TECHNOLOGY,

DEPARTMENT OF ARCHITECTURE

Second Semester Examination 2018/2019

Course Title: Construction Tech III

Course Code: Arc 323

Lecturer: Arc Isah, A. Mann

HOD: Dr. P. Ayuba

Time allowed: 2 Hours

INSTRUCTIONS: 1. Answer Question 1 and Any other two (2) Question, each question carry equal marks.

Question 1

- i. What is a roof cover in construction technology?
- ii. Enumerate five (5) basic functions of roof cover in building structures.
- iii. Enumerate the types of material used as thermal comfort when constructing a sloped roof in Tropic Regions:
- iv. What is the function of common rafters in a pitched roof?
- v. What are the characteristics of a flat roof?

(20) marks

Question 2

- i. Using a sketch, describe the characteristics of wooden lattice portal frame.
- ii. What type of portal frames can be used if the span is 60 meters.
- iii. Using sketches, describe three (3) different types of portal frames you know.
- iv. You are to design a bus terminus in your locality, what type of material are your going to specify?  
Use a sketch to support your design

20 marks

Question 3

- i. Describe the basic parts of a door
- ii. What are the suitable positions to install doors?
- iii. Enumerate five (5) types of doors
- iv. Sketch and describe the frame of a door

20 marks

Question 4

- i. There are five considerations that determine the choice of providing windows generally. Name such considerations>
- ii. Sketch any pivoted window you know.
- iii. There are different classes of windows. Name five out of the ones you know.
- iv. You have been assigned to design a residential building, specify the sizes of the doors of Garage, bedroom, storage room and Kitchen.

20 marks