

FEDERAL UNIVERSITY OF TECHNOLOGY MINNA,
SCHOOL OF TECHNOLOGY EDUCATION INDUSTRIAL AND TECHNOLOGY
EDUCATION DEPARTMENT

BUILDING MATERIALS BUD 312

INSTRUCTIONS: ANSWER FOUR (4) QUESTIONS

1a. Several materials are used in Building a house. The use of some of these materials depends largely on local condition and practices. List ten (10) of such materials and state five (5) conditions that affects the choice and use of such materials {7.5 marks}

b. List and explain three (3) components of concrete. {6 marks}

c. Give three (3) reasons why stone as walling materials is not traditionally a popular material for the construction of walls. {3 marks}

2a. List five (5) of the most common types of timber used for general building constructions and state one (1) characteristic of each timber. {5 marks}

b. Enumerate four (4) methods of Quarrying and state four (4) operations that are involved in blasting. {4 marks}

c. Define the following properties of metal

- i. Malleability
- ii. Ductility
- iii. Toughness {2 marks each}

3a. Distinguished between a thermoplastic and a thermosetting resin. {4 marks}

b. Define polystyrene and list four properties of polystyrene {6 marks}

c. Outline five advantages of stone wall over a sandcrete block {5 marks}

4a. Define the following

- i. Conversion of timber
- ii. Seasoning of timber {4 marks}

b. Enumerates five (5) properties of wood {5 marks}

c. Show with good sketches only the following methods of conversion

- i. Plain sawing
- ii. Back sawing
- iii. quarter sawing {2 marks each}

5a. Describe terrazzo and give two (2) reasons why ebonite stirrups are used to divide the terrazzo into bays. {5 marks}

b. List five (5) properties of cement. {5 marks}

c. List five (5) uses of timber in building constructions {5 marks}

6a. With the aid of good sketches briefly describe Air seasoning and Kiln seasoning. {8 marks}

b. List five (5) properties of stones. {5 marks}

c. Outline four (4) reasons why Bamboo has become very popular to its use in most part of the country {2 marks}