## Federal University of Technology Minna Industrial and Technology Education Department First Semester Examination 2022/2023 Session 500 Level Building Services ITE 531 Attempt 3 Questions only. Time Allowed 2 Hours

- **1a.** Write a short note on the operations of an elevator in multistorey buildings. Also, list 4 types of elevators and 5 basic components of a standard lift.
- **b.** Mention 3 advantages and 3 disadvantages of using lifts in a highrise commercial building located in Lagos, Nigeria.
- **2a.** Electricity is generated from different sources, list 3 main sources of power generation in Nigeria.
- **b.** Household electrical appliances consumes current, briefly explain the processes involved in sourcing power for the functioning of the appliances.
- **3a.** In Nigeria today, security threats to lives and property in and around the building is a challenging issue. As a builder identify 4 major categories of these threats and briefly describe 3 main approaches to solving this problem.
- **b.** Water supply system to buildings is majorly 2. Briefly describe each noting 2 advantages and 2 disadvantages.
- **4a.** the drainage system functions effectively when certain principles are adhered to at the design and construction stages. State 5 of these principles.
- **b.** with the aid of a neat sketch [Line diagram] show the difference between 2 major drainage systems and describe how they operate.