

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
INDUSTRIAL AND TECHNOLOGY EDUCATION DEPARTMENT
2021/2022 SECOND SEMESTER EXAMINATION
COURSE TITLE: BUILDING ENVIRONMENT AND MAN

COURSE CODE: ITE 348

Time Allowed: 2 Hours

Attempt Only 3 Questions

- 1a. Write short note on the 3 major categories of ventilation in buildings.
- b. Ventilation system in the building is essential for the occupants. Mention 5 factors that influences this system.

- 2a. Write a short note on acoustics with emphasis on the definition, scope and application in man's building and environment.
- b. With a diagram show, sound transmission from cause to effect process that converts energy from one form to another.
- c. With the aid of diagram, clearly indicate Wavelength, Frequency, Amplitude and Velocity in soundwave. Briefly explain the 4 terminologies.

- 3a. Identify 5 factors that effects the performance of A C.
- b. Sketch the diagram of an air conditioning system, identify 5 components and briefly explain each.
- c. Briefly explain the working principles of A C from the moment you on the switch to the point you off it.

- 4a. Sketch and label an electric fan and briefly explain 5 components of the fan.
- b. Itemize 4 different types of fans used in both residential and industrial buildings.
- c. Mention 3 ways, maintenance can be carried out on fans.