NATIONAL OPEN UNIVERSITY OF NIGERIA
FACULTY OF SCIENCES
DEPARTMENT OF ENVIRONMENTAL SCIENCE AND RESOURCE MANAGEMENT
Plot 91, Cadastral Zone, Nnamdi Azikwe Expressway, Jabi, Abuja
2020_2 EXAMINATIONS 1234

COURSE CODE: ESM 311
COURSE TITLE: NOISE AND AIR POLLUTION
CREDIT: 2 Units
TIME ALLOWED: 2 Hours
Instruction: Attempt question number ONE (1) and any other THREE (3) questions. Question number one (1) carries 25 marks, while the other questions carry (15) marks each.

QUESTION 1a. Explain the term "sound".
        b. Define noise.
        c. State the difference between sound and noise.
        d. Using the table provided below, complete the typical noise level in the environment.

Typical Noise Levels in the Environment

Activity	Sound level
Pain	
Aircraft taking off	
Loud Rock Music	
Semi Truck (short term hazard)	
Jack Hammer	
Traffic (occupational limit)	
Conversation	
Background office noise	
Quiet bedroom	
Threshold of hearing	

QUESTION 2 a. With appropriate examples describe how noise is measured.
        b. Mention six (6) negative implications of noise on human health.
        c. Enumerate six (6) effect of noise on environment.

QUESTION 3 a. Explain noise pollution.
           b. List types of noise.
           c. Explain any three (3) mentioned in (a) above.

QUESTION 4 a. List two (2) criteria for determining noise-induced hearing loss (NIHL).
           b. Categorize noise exposure activities capable of noise induced hearing loss(NIHL)
           c. Explain five (5) strategies for the prevention of noise induced hearing loss(NIHL)

QUESTION 5   a. List five (5) measures to mitigating road traffic noise.
           b. State the steps involve in learning to be protected from noise pollution.
           c. Enumerate three (3) example each of primary and secondary Pollutants