



NATIONAL OPEN UNIVERSITY OF NIGERIA

Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja

Faculty of Sciences

2024_2 EXAMINATION

Course Code: ESM 392

Course Title: REMOTE SENSING AND RADIATION PRINCIPLES

Course Unit: 2 Credit Units

Time Allowed: 2½ Hours

Total Score: 70 Marks

Instruction: Answer question ONE and any other TWO questions

1.
 - a. Describe atmospheric scattering
 - b Describe the characteristics of the following form of scattering:
 - i. Rayleigh scatter
 - ii. Mie scatter
 - iii. Nonselective scatter
2.
 - a. Outline the component part of electromagnetic spectrum
 - b. Discuss the visible wavelength band of the spectrum
3. Write explanatory notes on the following:
 - i. Panchromatic Imaging System
 - ii. Multispectral Imaging System
4. Write explanatory notes on any two of the following:
 - i. Line striping
 - ii. Noise
 - iii. Geometric distortions
5. Describe the outcome of energy interaction with the earth surface features.