



SNS COLLEGE OF TECHNOLOGY



(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai

Accredited by NAAC-UGC with 'A++' Grade (Cycle III) &

Accredited by NBA (B.E CSE, EEE, ECE, Mech & B.Tech.IT)

COIMBATORE-641 035, TAMIL NADU

QUESTIONS & ANSWERS

Question: What is remote sensing?

Answer: Remote sensing is the acquisition of information about objects or areas from a distance, typically using sensors on satellites, aircraft, or drones, without making physical contact with the target.

Question: Name one advantage of remote sensing.

Answer: One advantage of remote sensing is that it allows for the monitoring of large and inaccessible areas without the need for physical presence or direct contact.

Question: What are the two main types of remote sensing sensors?

Answer: The two main types of remote sensing sensors are passive sensors, which detect natural radiation (e.g., sunlight reflected off surfaces), and active sensors, which emit their own radiation and measure the reflected signal (e.g., radar).

Question: What does the Stefan-Boltzmann Law describe?

Answer: The Stefan-Boltzmann Law describes the relationship between the total energy radiated per unit surface area of a black body and the fourth power of its absolute temperature.

Question: What is Rayleigh scattering?

Answer: Rayleigh scattering occurs when electromagnetic radiation interacts with particles much smaller than the wavelength of the radiation, such as atmospheric molecules, and is responsible for the blue color of the sky.

Question: Define an atmospheric window.

Answer: An atmospheric window is a range of wavelengths in the electromagnetic spectrum where the Earth's atmosphere is relatively transparent, allowing radiation to pass through with minimal absorption or scattering.



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Question: How does the spectral reflectance of vegetation differ from that of water?

Answer: Vegetation typically reflects strongly in the near-infrared spectrum and appears green in the visible spectrum due to chlorophyll, while water absorbs most visible light and reflects more in the near-infrared spectrum.