Geomatics Engineering Department

Remote Sensing Question Bank

1- Explain in detail, how the variation of distance between EM wave crest is influencing the number of produced crests. Support your answer graphically.
2- "Examination of any image acquired by remote sensing ultimately depends on detection of radiometric differences and spectral differences of objects and features". Identify how? Then, which differentiation is observed first and why?
3- What is the emissivity fundamental of black and grey bodies?
4- Explain in detail the following phrase:
"The color of an object is defined by the color of light that it reflects"
5- What is scattering form in remote sensing? And what are the factors that scattering light depended upon? Then state types of scattering.
6- Explain Wien's displacement law concept. Support your answer with a proper graph.
7- Outline the main feature of the Plank blackbody energy distribution. How it is differ from grey body. You should use a figure to demonstrate your understanding.
8- Explain in detail, how the variation of distance between EM wave crest is influencing the number of produced crests. Support your answer graphically.
9- What does "subtractive primaries" define? Explain the relationship that describes the absorption process of these primaries of the visible light.
10- List ways in which remotely sensed images differ from maps. Also list advantages and disadvantages of each. List some of the tasks for each which might be more useful.
11- What is the physical concept behind high emissivities and low emissivites objects? How the relationship between emissivity and temperature does have been defined?
12- "Examination of any image acquired by remote sensing ultimately depends on detection of radiometric differences and spectral differences of objects and features". Identify how? Then, which differentiation is observed first and why?
13- Outline the main feature of the Plank blackbody energy distribution. How it is differ from grey body. You should use a figure to demonstrate your understanding.

14- Explain in detail, how the variation of distance between EM wave crest is influencing the number of produced crests. Support your answer graphically.

15- How does the intensity of the energy scattering in the atmosphere differentiate from a pollen particular to a Nitrogen molecule? And why? Support your answer graphically.

16- You lay two cold slabs of materials out in the midday sun. One of them has emissivity of (0.9) while the other has an emissivity of (0.1). Which slab will heat up faster and why?

17- What is the physical concept behind high emissivities and low emissivites objects? How the relationship between emissivity and temperature does have been defined?

18- What does “subtractive primaries” define? Explain the relationship that describes the absorption process of these primaries of the visible light.

19- How can remote sensing be used to differentiate atmospheric components?

20- What is the physical concept behind high emissivities and low emissivites objects? How the relationship between emissivity and temperature does have been defined?