Unit 12 - Week 10

Assignment 10

DUE ON 2020-09-08, 23:59 IST

1. Select the infrared active molecules: 1 point
   a) CO₂
   b) CO
   c) H₂O
   d) O₂
   e) N₂
   No, the answer is incorrect. Answer: a, b, c

2. Arrange the correct order with respect to SAD instrumentation: 1 point
   a) Electron microscope
   b) Hollow cathode lamp
   c) Diodorizer
   d) Attnator
   No, the answer is incorrect. Answer: a, b, c

3. Match the type of electromagnetic radiation with the order of their wavelengths: 1 point
   Type of Radiation: Wavelength scale
   a) Gamma rays
   b) Uv & visible
   c) Microwave
   d) Flox waves
   e) Infrared
   f) Nنظرية
   g) Td noising
   No, the answer is incorrect. Answer: a, b, c

4. ----- spectrum is formed when atoms or molecules are detected from higher energy levels to lower energy level: 1 point
   a) Ultraviolet
   b) Visible
   c) Infrared
   d) Red
   No, the answer is incorrect. Answer: b, c

5. In Atomic Absorption Spectroscopy, which of the following is the generally used radiation source? 1 point
   a) Tungsten lamp
   b) Xenon arc lamp
   c) Hydrogen or deuterium discharge lamp
   d) Hollow cathode lamp
   No, the answer is incorrect. Answer: b, c

6. NIR spectrometry is used for determining structure in which of the following materials? 1 point
   a) Radiocarbon materials
   b) Inorganic elemental compounds
   c) Usils
   d) None
   No, the answer is incorrect. Answer: a, b

7. Raman Lambert law gives the relation between which of the following? 1 point
   a) Reflected radiation and transmission
   b) Refracted radiation and concentration
   c) Absorbed radiation and concentration
   d) Uv, dls
   No, the answer is incorrect. Answer: a, b

8. Which of the following is taken about the wavelengths of electromagnetic radiation? 1 point
   a) Radiation with short wavelengths has more energy
   b) Radiation with long wavelengths has less energy
   c) Energy depends on wavelength
   d) Energy does not depend on wavelength
   No, the answer is incorrect. Answer: a, b

9. Which of the following are the advantage of Fourier Transform Spectrometers? 1 point
   a) Signal to noise ratio is high
   b) Information could be obtained at all frequencies
   c) Removal of water is possible
   d) Easy to maintain
   No, the answer is incorrect. Answer: a, b, c

10. Spectroscopic techniques in cement research can be used for (select all that apply): 1 point
    a) Determination of cement composition
    b) Determination of cement content
    c) Determination of the type of cement
    d) Determination of type of superplasticizer
    No, the answer is incorrect. Answer: a, b, c