

Spectroscopy of biomolecules and biomembranes complex exam

- 1) Gamma-spectroscopy: emission spectroscopy, gamma radiation associated with nuclear transitions
- 2) Gamma-spectroscopy: Mössbauer spectroscopy, recoil-free (resonance) absorption of gamma rays
- 3) Röntgen-spectroscopy
- 4) Optical spectroscopy: transitions among electronic states, UV and visible spectroscopy
- 5) Optical spectroscopy: transitions of molecular vibrations, infrared spectroscopy, Fourier-transform (FTIR) and Raman spectroscopies
- 6) Microwave spectroscopy, rotation of molecules
- 7) Electron spin (electron paramagnetic) resonance (EPR) spectroscopy
- 8) Nuclear magnetic resonance (NMR) spectroscopy, nuclear magnetic resonance imaging (tomography) (MRI)
- 9) Dielectric spectroscopy, transitions among molecular conformational states