Assignment for Week-11

Q1. Partially folded states of proteins can be characterized by using:

a. Thioflavin-T
b. 8-anilino-1-naphthalene sulfonic acid
c. Phenophthalein
d. Methyl red

Q2. Concanavalin A is a dimer at pH …… and tetramer at pH ……, respectively

a. 6 and 7.4
b. 6 and 2
c. 6 and 14
d. 2 and 7.4

Q3. Molten globule state of a protein is characterized by

a. Intact tertiary structure
b. Intact secondary and tertiary structures
c. Disrupted secondary and tertiary structures
d. Intact secondary structure but disrupted tertiary structure.

Q4. ANS binds more favorably to the partially folded state due to more availability of

a. clusters of nonpolar residues on the protein
b. clusters of polar residues on protein
c. structural modifications in ANS
d. electrostatic interactions amongst protein and ANS

Q5. The compounds/conditions that generate partially folded states in a protein are

a. Guanidine hydrochloride
b. Urea
c. Alcohols
d. heat

Q6. The wavelength range (in nm) for Far UV-CD measurements is

a. 400-700
b. 400-4000
c. 250-350
d. 180-250

Q7. The Near UV-CD is dominated by the presence of

a. Tyrosine, tryptophan, phenylalanine
b. Tryptophan, lysine, phenol
c. Phenylalanine, serine, methionine
d. Glycine, Tyrosine, Glutamine

Q8. The negative band in CD for an α-helix in a protein is observed mainly at:

a. 222 nm and 208 nm
b. 210 nm and 195 nm
c. 250 nm and 230 nm
d. 190 nm and 290 nm

Q9. CD measures the difference between the absorption of left and right handed

a. circularly-polarized light
b. Plane polarized light
c. Monochromatic light source
d. Unpolarised light

Q10. The molten globule state of a protein may not show an endotherm in a DSC experiment because of

a. Absence of tryptophan residues
b. Disruption of hydrogen bonds
c. Absence of tertiary structure
d. Enhanced secondary structure