Unit 1 - How to access the portal

week_0_assignment

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment. Due on 2019-02-04, 23:59 IST.

1) In the electromagnetic spectrum, which of the following have the highest frequency?  
   - X-ray  
   - Radio waves  
   - Gamma Rays  
   - Ultra-violet waves

No, the answer is incorrect.
Score: 0
Accepted Answers: Gamma Rays

2) Which of the following nuclei is not NMR active?  
   - $^{12}{C}$  
   - $^{1}{H}$  
   - $^{19}{F}$  
   - $^{15}{N}$

No, the answer is incorrect.
Score: 0
Accepted Answers: $^{12}{C}$

3) A nucleus has a NMR frequency of ~ 200 MHz in an 18.8 Tesla magnetic field. Identify the nucleus  
   - $^{12}{C}$  
   - $^{1}{H}$
4) Sensitivity of NMR experiments is affected by
- Sample concentration
- Temperature
- The magnetic field strength
- All of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
All of the above

5) Which of the following experiment will not give a diagonal peak?
- TOCSY
- HSQC
- COSY
- NOESY

No, the answer is incorrect.
Score: 0
Accepted Answers:
HSQC

6) Which amino acid is involved in disulfide bond formation?
- Alanine
- Cysteine
- Threonine
- Isoleucine

No, the answer is incorrect.
Score: 0
Accepted Answers:
Cysteine

7) Which of the following methods are used in NMR for characterizing ligand-protein interactions
- 2D TOCSY
- STD-NMR
- 3D HNCACB
- WATERGATE

No, the answer is incorrect.
Score: 0
Accepted Answers:
STD-NMR

8) Which of the following amino acids is hydrophobic in nature?
- Alanine
- Aspartic Acid
- Histidine
- Arginine
9) If 10 mg of a 5 kDa protein is dissolved in 1 mL of water, what will be the resulting concentration?

- 5 mM
- 2 mM
- 10 mM
- 7 mM

No, the answer is incorrect. Accepted Answers: Alanine

10) Typically, what kind of interaction do we expect between a ligand (drug molecule) and a protein?

- Covalent
- Electrostatic only
- Hydrophobic only
- Electrostatic or hydrophobic

No, the answer is incorrect. Accepted Answers: Electrostatic or hydrophobic