Assignment 2

Due on 2019-09-11, 23:59 IST.

1. Functional motif present in cell culture plates which assist in cell adhesion.
   - No, the answer is incorrect. Score: 0
   - Accepted Answers: (Type: String RID)

2. Neografting of ECM components is achieved by _______ enzymes.
   - No, the answer is incorrect. Score: 0
   - Accepted Answers: (Type: String MMP)

3. Chitosan is derived from chitin by _______ process.
   - No, the answer is incorrect. Score: 0
   - Accepted Answers: (Type: String Depolymerization)

4. Why biocompatibility of chitosan is higher when the degree of deacetylation is close to 50%?
   - Why does enzyme can access the active site when deacetylation is close to 50%? (1 point)
   - Chitosan is soluble in aqueous solution when deacetylation is close to 50% (1 point)
   - Molecular weight is optimum for enzymatic degradation (1 point)
   - None of the above (1 point)

5. Why biocompatibility of chitosan is higher when the degree of deacetylation is close to 50%?
   - Chitosan is widely used polymer in tissue engineering. However, its usage in bone tissue engineering is limited because it degrades with 1 point
   - Another polymer its biocompatibility.
   - Chitosan has poor mechanical strength
   - Chitosan based polymer does not have required porosity
   - Chitosan lacks osteoconductivity property
   - Both a and c
   - Both b and c

6. Why degree of swelling is important in case of hydrogels?
   - Why does it increases due to enhanced osmosis? (1 point)
   - Surface property and surface mobility (1 point)
   - Mechanical property (1 point)
   - All of the above (1 point)

7. Which is the natural crosslinking agent that involves ring opening mechanism for crosslinking?
   - Glutaraldehyde
   - Glycyrrol
   - Formicamide
   - Cellulose
     - No, the answer is incorrect. Score: 0
     - Accepted Answers: (Type: String CMC)

8. Why hygroscopicity of xerogels, water is converted from _______ state to _______ state at _______ conditions.
   - Solid, Vapour: Low temperature and pressure (1 point)
   - Liquid, Vapour: Low temperature and high pressure
   - Solid, Liquid: Low temperature and high pressure
     - No, the answer is incorrect. Score: 0
     - Accepted Answers: (Type: String TDD)

9. Sponge is not a hydrogel because _______.
   - It doesn’t swell beyond 10%
   - It doesn’t hold water
   - Its structure gets distorted once water is absorbed
   - None of the above
     - No, the answer is incorrect. Score: 0
     - Accepted Answers: (Type: String TDD)

10. Metal is not a hydrogel because _______.
    - It doesn’t swell beyond 10%
    - It doesn’t hold water