Assignment 4

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

1. Amphiphilic molecules, when suspended in water, can form a ________
   - Bicelle
   - Monolayer
   - Micelle
   - Phase separation
   Accepted Answer: Micelle
   Score: 1
   No, the answer is incorrect.

2. The surface free energy of a material can be detected using a ________
   - Atomic force microscopy
   - Scanning electron microscopy
   - Transmission electron microscopy
   - Goniometer
   Accepted Answer: Goniometer
   Score: 1
   No, the answer is incorrect.

3. The topography of a surface can be determined using which of the following methods
   - Atomic force microscopy
   - Scanning electron microscopy
   - Fourier Transform Infrared Spectroscopy (FTIR)
   - Auger electron microscopy
   Accepted Answer: Atomic force microscopy
   Score: 1
   No, the answer is incorrect.

4. Fibroblast is
   - the process by which smooth muscle cells are replaced by muscle cells
   - the process by which smooth muscle cells are replaced by stroma cells
   - the process by which smooth muscle cells are replaced by stroma fibres
   - the process by which smooth muscle cells are replaced by stress fibres
   Accepted Answer: the process by which smooth muscle cells are replaced by stress fibres
   Score: 1
   No, the answer is incorrect.

5. Porosity of a scaffold plays an important role in ________, and ________
   - Nutrient supply
   - Cell attachment
   - Vascularisation
   - All of the above
   Accepted Answer: All of the above
   Score: 1
   No, the answer is incorrect.

6. Characterisation of a material can be determined by which of these tests
   - Tensile test
   - Adhesion test
   - MTT assay
   - Protein adsorption study
   Accepted Answer: MTT assay
   Score: 1
   No, the answer is incorrect.

7. Making, crystallisation and phase transition temperatures of a material can be determined using
   - Atomic force microscopy
   - Scanning electron microscopy
   - Fourier Transform Infrared Spectroscopy (FTIR)
   - Differential scanning calorimetry
   Accepted Answer: Differential scanning calorimetry
   Score: 1
   No, the answer is incorrect.

8. Identification of novel changes in a sample as a function of temperature can be determined using
   - Atomic force microscopy
   - Thermography analysis
   - Scanning electron microscopy
   - Gasotransmitter analysis
   Accepted Answer: Thermography analysis
   Score: 1
   No, the answer is incorrect.

9. Universal testing machines is used to determine ________
   - Fracture
   - Tension
   - Compression
   - All of the above
   Accepted Answer: All of the above
   Score: 1
   No, the answer is incorrect.

10. Surface characterization of a material can be done using which of the following techniques
    - Thermography analysis
    - Universal testing machine
    - Optical microscopy
    - Scanning electron microscopy
    Accepted Answer: Scanning electron microscopy
    Score: 1
    No, the answer is incorrect.