Week1_Assignment1

The due date for submitting this assignment has passed. Due on 2019-08-14, 23:59 IST. As per our records you have not submitted this assignment.

1) The ________ provides a firm substrate and support for cell adhesion.  
   - Plasma membrane
   - Extracellular Matrix
   - Cytoskeleton
   - Focal adhesions
   No, the answer is incorrect. Score: 0
   Accepted Answers: Extracellular Matrix

2) Cell A responds to a stimulus through ECM proteins and cytoskeletal network while Cell B responds to the same stimulus via secondary messenger, cyclic AMP. Which cell would respond first to the same stimulus?
   - Cell A
   - Cell B
   No, the answer is incorrect. Score: 0
   Accepted Answers: Cell A

3) In muscular dystrophy, apoptosis occurs in gsg (Limb girdle MD) cells but not in mdx (Duchene MD) cells due to
   - Low contractility of gsg cells and high contractility of mdx cells
   - High contractility of gsg cells and low contractility of mdx cells
   - High contractility of gsg cells and balance between contractility and adhesion in mdx cells
- Low contractility of mdx cells and balance between contractility and adhesion in gsg cells
  No, the answer is incorrect.
  Score: 0
  Accepted Answers:
  High contractility of gsg cells and balance between contractility and adhesion in mdx cells

4) In the absence of any external factors, fibroblasts will migrate more persistently on
   - An aligned matrix
   - A non-aligned matrix
   - A random matrix
   - They will migrate similarly on both the matrices
  No, the answer is incorrect.
  Score: 0
  Accepted Answers:
  An aligned matrix

5) ECM degradation by MMPs in cancer cells aids in
   - assembly of cells into tissues
   - invasion from one part of the body to another
   - membrane synthesis
   - nuclear re-organization
  No, the answer is incorrect.
  Score: 0
  Accepted Answers:
  Invasion from one part of the body to another

6) RBCs lack which of the following?
   - Plasma membrane
   - Mitochondria
   - Focal adhesions
   - Cytoskeleton
  No, the answer is incorrect.
  Score: 0
  Accepted Answers:
  Focal adhesions

7) Cells breach the basal lamina under which of the following conditions?
   - Immune surveillance
   - Cancer invasion
   - Both a and b
   - None of the above
  No, the answer is incorrect.
  Score: 0
  Accepted Answers:
  Both a and b

8) Cell spreading is higher on soft polyacrylamide gel of lesser thickness than on gels of higher thickness of the same stiffness because
   - Cells sense the aggregate stiffness of the soft gel and the stiff glass beneath the gel
   - Cells sense only the stiff glass underneath the soft gel
   - Cells lose their properties of sensing the substrate stiffness on soft gels
9) ________ provides tensile strength to the tissues and it is secreted by ________ cells.  
- Vinculin, epithelial
- Collagen, immune
- Talin, immune
- Collagen, fibroblast

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

10) The major structural component of basement membrane  
- Collagen type I
- Collagen type II
- Collagen type III
- Collagen type IV

No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
Collagen type IV