Week 11 Assessment

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

1. The flexible substrate used to fabricate the Electromechanical sensor for understanding tissue properties was: (7 points)
   - PET
   - PTFE
   - PDMS
   - Others
   No, the answer is incorrect.
   Accepted Answer: PET

2. Evaluate which of the following statements are true with respect to the Electromechanical Sensor that was discussed for understanding the tissue properties:
   - The polycrystalline layer was made using P2DES2R28S2
   - P2DES2R28S2 is a conducting polymer
   - Only A is correct
   - Only B is correct
   - Both A and B
   - Neither A nor B
   No, the answer is incorrect.
   Accepted Answer: Only A is correct

3. The electromechanical sensor discussed used several materials such as P2DES2R28S2, PDMS, Cu-Au, P2DES2R28S2, SiO2/ITO, Which of the following statements regarding the processes flow for making the sensor are correct:
   - The P2DES2R28S2 layer was deposited on the silicon substrate using spin coating
   - The P2DES2R28S2 layer was deposited on the silicon substrate using SiO2/ITO evaporation
   - The P2DES2R28S2 layer was deposited on the silicon substrate using SiO2/ITO evaporation using ITO evaporation
   - None of the above
   No, the answer is incorrect.
   Accepted Answer: None of the above

4. With respect to the fabrication process of an Electro Mechanical Sensor, which of the following statements are correct regarding the process flow for making the sensor:
   - Silicon substrates are forced in the Electro Mechanical Sensor to act as a base substrate structure. Which of the following statements are correct regarding the process flow for making the sensor:
   - SiO2 needs to be patterned using a special type of photolithography
   - SiO2 needs to be patterned using a special type of photolithography
   - The process flow for patternning and developing SiO2 is the same as that of a photolithography
   - The only difference of SiO2 is fixed irrespective of the thickness
   No, the answer is incorrect.
   Accepted Answer: None of the above

5. Evaluate which of the following statements are true regarding the electro mechanical sensor to measure the tissue properties:
   - SiO2 layers are coated with gold and polyimide using a low-temperature plasma
   - The contact pads from the contact pads to the sensing layer to be made very close to each other or slightly more than close to each other.
   No, the answer is incorrect.
   Accepted Answer: None of the above

6. What is the name of the tool/technique in Autodesk Inventor to make a 3D model from a 2D drawing?
   - Profilometer
   - Extrude
   - Contouring
   - CamGen
   No, the answer is incorrect.
   Accepted Answer: Contouring

7. What is the name of the file extension for the part file in Autodesk Inventor?
   - .ipt
   - .ipt
   - .ipt
   - .ipt
   No, the answer is incorrect.
   Accepted Answer: .ipt

8. Name of the tool to create a mirrored feature with respect to a plane or surface is called:
   - Mirror
   - Copy
   - Pattern
   - Import
   No, the answer is incorrect.
   Accepted Answer: Mirror

9. How many dimensions are needed to construct a rectangle which is created using a rectangle tool, starting at the origin in Autodesk Inventor?
   - 4
   - 3
   - 2
   - 1
   No, the answer is incorrect.
   Accepted Answer: 2

10. What is the file extension of the assembly file in Autodesk Inventor?
    - .ipt
    - .ipt
    - .ipt
    - .ipt
    No, the answer is incorrect.
    Accepted Answer: .ipt