Week 10 - Assignment 1

The due date for submitting this assignment has passed. **Due on 2018-04-04, 23:59 IST.**

Submitted assignment

1) If we are giving a static compression over the finger pad, which of the following receptors get activated?  
   i. Pacinian   ii. Ruffini   iii. Merkel   iv. Meissner
   - ii and iii only
   - iii only
   - iii and iv only
   - i and iv only

   **No, the answer is incorrect.**
   **Score: 0**
   **Accepted Answers:**
   - ii and iii only

2) Pick the correct answer(s) about Golgi Tendon Organ (GTO)
   i. It is a force sensor
   ii. It does not deal with safety mechanism
   iii. It inhibits muscle contraction
   - i and iii only
   - iii only
   - i, ii and iii
   - i only

   **No, the answer is incorrect.**
   **Score: 0**
   **Accepted Answers:**
   - i and iii only

3) Pick the correct answer(s)
   i. Alpha motor neuron has high conduction velocity and gamma motor neuron has lower.
   ii. Alpha motor neuron innervate intrafusal muscle fibers.
   iii. Gamma motor neuron is responsible for muscle readiness in motor action.
   - i only
   - i and iii only
   - iii only
   - i, ii and iii are correct

   **No, the answer is incorrect.**
   **Score: 0**
   **Accepted Answers:**
   - i and iii only
4) When you are manipulating an object, the fine details of texture can be sensed precisely by ____________?  
   i. Pacinian  ii. Ruffini  iii. Merkel  iv. Meissner  
   - ii and iii only  - iii and iv only  - iv only  - i and iv only  
   No, the answer is incorrect.  
   Score: 0  
   Accepted Answers:  
   i and iv only

5) What is the maximum frequency of vibration in touch that the human sensation can perceive?  
   - 100 Hz  - 1 kHz  - 500 Hz  - 250 Hz  
   No, the answer is incorrect.  
   Score: 0  
   Accepted Answers:  
   1 kHz

6) What is the minimum position change that the human finger pad can perceive?  
   Hint: Two Point Discrimination  
   - 1 micron  - 0.1 mm  - about a cm  - none of the above  
   No, the answer is incorrect.  
   Score: 0  
   Accepted Answers:  
   0.1 mm

7) Smaller muscles rely on rate coding and larger muscles rely on recruitment  
   - true  - false  
   No, the answer is incorrect.  
   Score: 0  
   Accepted Answers:  
   true

8) Fast twitch motor unit (MU) recruited first and slow twitch MU recruited last  
   - false  - true  
   No, the answer is incorrect.  
   Score: 0  
   Accepted Answers:  
   false

9) Arrange the following regions of human body in terms of increasing order of Two-point threshold –  
   - back, calf, fingers, forehead  - forehead, fingers, back, calf  - fingers, forehead, back, calf  
   No, the answer is incorrect.  
   Score: 0  
   Accepted Answers:  
   forehead, fingers, back, calf
Which of the following is being controlled in our hand movements mechanism?

- Force, displacement
- Force alone
- Displacement alone
- Velocity alone

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