(ヒト生II２００３年度)

ヒト生物学Ⅱ　試験問題 (2004/2/2)

(4) 下記の1～7の問題に対して、問題1～4にはa,b,c,dのいずれかを、また問題5～7にはTかFを記入すること。

In questions 1–4, match the region of the body to the muscles.

a. head and neck
b. trunk
c. arm
d. leg

_____ 1. hamstring group

_____ 2. trapezius

_____ 3. rectus abdominis

_____ 4. triceps brachii

In questions 5–7, indicate whether the statement is true (T) or false (F).

_____ 5. Myosin breaks down ATP and pulls actin filaments.

_____ 6. Slow-twitch muscle fibers are associated with weight lifting.

_____ 7. Muscle cramping appears to be due to a depletion of oxygen and a buildup of lactic acid.

(5) Choose the correct answer

1. a. Rods perceive color vision.
   b. Cones are as sensitive as to perceive a single photon when a person is fully dark adapted.
   c. Optic nerve head explains the blind spot.
   d. Rhodopsin is a photopigment.

   1. (a, b) 2. (b, c) 3. (c, d) 4. (a, d)

2. a. The muscle spindle sends sensory impulses to the spinal cord.
   b. Merkel disks are a touch receptor.
   c. Pain is perceived by the Paccinian corpuscles.
   d. Pain receptor is a type of chemoreceptor.

   1. (a, b) 2. (b, c) 3. (c, d) 4. (a, d)

<解答欄>　1. (　　)　2. (　　)