

# University of Ottawa ANP 1105A Midterm #2

Date: November 14, 2019 at 4:00 pm Duration: 80 min  
Instructors: Stephen Gee and Michael Downey

## Instructions:

1. Complete all 57 multiple-choice questions (1 mark/correct answer).
2. Please answer all questions on the computer (scantron) sheet that is provided.
3. Please put your name and student number at the top of this page, and on the scantron sheet. Hand in your scantron sheet when you have finished. You may keep the rest of the exam; correct answers will be posted on BrightSpace.
4. Make sure this exam is complete. This exam contains 8 pages and is printed double-sided. The excuse of missing a page will not be accepted after the examination.

**MULTIPLE CHOICE.** Choose the one alternative that best completes the statement or answers the question.

- 1) Virtually all amino acid-based hormones exert their signaling effects through intracellular \_\_\_\_\_ 1) C
- A) second messengers  
 C) nucleotides  
 B) deactivating ions  
 D) calcium
- 2) Some of the nerve endings in the skin are sensitive to changes in temperature. They are part of a negative feedback mechanism regulating body temperature. These nerve endings represent a(n) \_\_\_\_\_ in the negative feedback mechanism. 2) A
- A) receptor  
 C) homeostatic balance or "ideal" value  
 B) control center  
 D) effector
- 3) The ability of a specific tissue or organ to respond to the presence of a hormone is dependent on \_\_\_\_\_ 3) B
- A) the membrane potential of the cells of the target organ  
 B) the presence of the appropriate receptors on the cells of the target tissue or organ  
 C) nothing—all hormones of the human body are able to stimulate any and all cell types because hormones are powerful and nonspecific  
 D) the location of the tissue or organ with respect to the circulatory path
- 4) A mismatch of blood types during a transfusion is dangerous because \_\_\_\_\_ 4) D
- A) white blood cells from the donor's blood cause inflammation  
 B) antibodies in the donor's plasma will attack and kill the recipient's healthy blood cells  
 C) clotting factors in the donor's blood will cause unwanted clots known as thrombus  
 D) preformed antibodies in the recipient's blood will bind and clump (agglutinate) the donated cells