ANS 3319C Reproductive Physiology and Endocrinology Lab #1
Take Home Message: Female Reproductive Anatomy (20 pts: Spring 2014)

Name: _________________________________

1) Please fill in the table with the most appropriate term or circle the correct term (4 pts).

<table>
<thead>
<tr>
<th>Species</th>
<th>Length of estrous cycle (days or months)</th>
<th>Duration of estrus (hours or days)</th>
<th>Type of offspring production (Circle the correct choice)</th>
<th>Site of semen deposition natural mating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cow</td>
<td>Monotocous / Polytocous</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sow</td>
<td>Monotocous / Polytocous</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mare</td>
<td>Monotocous / Polytocous</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cat (Domestic)</td>
<td>Monotocous / Polytocous</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dog (Domestic)</td>
<td>Monotocous / Polytocous</td>
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</tbody>
</table>

2) Please answer the following questions as they relate to the functions of the ovary (3.5 pts).
   a) What are the two major functions of the ovary? _____________________________________________
   b) Structures located within ovary that house oocytes and secrete hormones? __________________
   c) Name of primary steroid hormone produced by structure in previous question (2b)? ________________
   d) Behavioral event that hormone in previous question (2c) induces? __________________________
   e) Hormone secreting structure formed after ovulation of structure in question 2b? ________________
   f) Name of primary steroid hormone produced by structure listed in previous question? ________________

3) The cervix has multiple functions, which are dependent on the physiological status of the animal.
   a) During estrus (time of mating and semen deposition), what are the functions of the cervix in most animals and what ovarian hormone would assist in stimulating these actions (1 pt)?

   b) During pregnancy, what is the primary function of the cervix and what ovarian hormone would assist in maintaining this action (1 pt)?

4) Please answer the following questions relating to epithelial cell types associated with female anatomy (4.5 pts).
   a) Type of epithelial cells that comprise caudal vaginal wall? ________________________________
      What are the physical functions of this type of cell arrangement in the caudal vaginal? Hint: see question 3

Continued on the back!!!!!
b) Type of epithelial cell arrangement that would be found in **uterine wall**? ____________________
   Why would this type of cell arrangement be necessary in the uterus? Hint: see question 3

c) Type of epithelial cells that line the **secretory glands** of uterus? ____________________
d) Type of epithelial cells of **oviduct**, which may have **cilia** projecting from them? ____________________
e) What do you think the primary function of the cilia are for the epithelial cell type in question 4d?

5) Please **describe four major and distinctly different functions** of the uterus in most mammals (4 pts)

a) _______________________________________________________________________________________

b) _______________________________________________________________________________________

c) _______________________________________________________________________________________

d) _______________________________________________________________________________________ 

6) Please **identify** the **gross anatomical structures** of the sow tract in the figure below. Spell out the structure’s name in the line corresponding to the identifying letter in the figure. **Please circle the letter of the structure where fertilization would occur** (2 pts).

   A) __________________________
   B) ______________ (Hint: external structure)
   C) __________________________ (Hint: bone)
   D) __________________________
   E) __________________________
   F) __________________________
   G) __________________________
   H) __________________________