

**Questions from the “Anatomy and Embryology of Bovine Palpation”  
presented on 10-20-05  
10-27-05**

**All questions refer to the ox (cow or bull)**

1. The openings of the canals of Gartner (Longitudinal ducts of Epoophoron) in the cow should be just lateral to the cranial level of the \_\_\_\_\_.
  - a. Clitoral fossa
  - b. External urethral orifice
  - c. Vaginal fornix
  - d. Middle of the vestibule
  - e. Middle of the vagina
  
2. The ligament of the uterus usually used to pull the enlarged uterus back into the pelvic cavity for palpation is the \_\_\_\_\_.
  - a. Broad ligament
  - b. Dorsal intercornual ligament
  - c. Ventral intercornual ligament
  - d. Round ligament of the uterus
  - e. Proper ligament of the ovary
  
3. The uterine artery (middle uterine artery) takes origin from the \_\_\_\_\_ artery which is a branch of the \_\_\_\_\_ artery.
  - a. Umbilical, internal iliac
  - b. Internal iliac, umbilical
  - c. Umbilical, external iliac
  - d. External iliac, umbilical
  - e. Umbilical, internal pudendal
  - f. Internal pudendal, umbilical
  
4. The uterine branch (caudal uterine artery) takes origin from the \_\_\_\_\_ artery which is a branch of the \_\_\_\_\_ artery.
  - a. Vaginal, internal iliac
  - b. Internal iliac, vaginal
  - c. Vaginal, internal pudendal
  - d. Internal pudendal, vaginal
  - e. External iliac, aorta
  
5. The uterine artery has a rectally palpable fremitus by about \_\_\_\_\_ days, and the uterine branch has a fremitus late/early in pregnancy that can be palpated through the lateral wall of the vagina True/False
  - a. 40, late, true
  - b. 70, late, true
  - c. 40, early, true
  - d. 70, early, true
  - e. 40, late, false
  - f. 70, late, false
  - g. 40, early, false
  - h. 70, early, false

6. The ovarian artery and vein have extensive branching and intimate contact with each other that allows prostaglandins produced in the uterus to diffuse from the veins to the arteries that if not pregnant produces \_\_\_\_\_ of the corpus luteum. This phenomenon is consistent with the fact that the uterine vein (middle uterine vein) is relatively small or even absent and the main venous drainage of the uterine horns is via the ovarian veins. True/False
- Development, True
  - Development, False
  - Regression, True
  - Regression, False
7. Comparing the Graafian follicle and a mature corpus luteum the one which is about 1-2 cm is the \_\_\_\_\_ and the one that is about 1.9 to 3.2 cm is the \_\_\_\_\_. Considering the CL of pregnancy and the CL of the estrous cycle they can/can't be differentiate on the basis of size or weight.
- Graafian follicle, CL, can
  - Graafian follicle, CL, can't
  - CL, Graafian follicle, can
  - CL, Graafian follicle, can't
8. Considering the granulosa lutein cells of the corpus luteum, these cells originate from the \_\_\_\_\_, and produce progesterone and/but not estrogen, and are/are not the major cells of the corpus luteum.
- Membrana granulosa, but not, are not
  - Theca externa, but not, are not
  - Theca interna, but not, are not
  - Membrana granulosa, and, are
  - Theca externa, and, are
  - Theca interna, and, are
9. The stigma is the portion of the \_\_\_\_\_ that \_\_\_\_\_ blood vessels.
- Corpus luteum, has
  - Graafian follicle, has
  - Corpus luteum, does not have
  - Graafian follicle, does not have
10. The most common neoplasm of the cow ovary is the \_\_\_\_\_ neoplasm that is of \_\_\_\_\_ origin, and typically produces a uterine wall that is \_\_\_\_\_.
- Theca externa cell, sex cord stromal, flaccid
  - Granulosa cell, sex cord stromal, flaccid
  - Theca externa cell, primordial cell, flaccid
  - Granulosa cell, primordial cell, turgid
  - Theca externa cell, primordial cell, turgid
  - Granulosa cell, sex cord stromal, turgid

11. In order from ovary to uterine horn the uterine tube (fallopian tube, salpinx) can be divided into 3 segments. The \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ with the \_\_\_\_\_ being the longest of the 3 segments.
- Infundibulum, ampulla, isthmus, ampulla
  - Infundibulum, isthmus, ampulla, ampulla
  - Ampulla, isthmus, infundibulum, ampulla
  - Infundibulum, ampulla, isthmus, isthmus
  - Infundibulum, isthmus, ampulla, isthmus
  - Ampulla, isthmus, infundibulum, isthmus
12. By definition the conjugate diameter is longer/shorter that the vertical diameter of the pelvic inlet and by anatomy the pelvic inlet is larger/smaller than the pelvic outlet with the totally osseous opening being the outlet/inlet.
- Longer, larger, inlet
  - Longer, larger, outlet
  - Longer, smaller, inlet
  - Longer, smaller, outlet
  - Shorter, larger, inlet
  - Shorter, larger, outlet
  - Shorter, smaller, inlet
  - Shorter, smaller, outlet
13. In a medium sized non-pregnant cow and with a medium sized palpator the ovaries should be at about the level of your finger tips when your \_\_\_\_\_ is at the level of the vulvular cleft.
- Wrist
  - Elbow
  - Shoulder
14. The placenta of the cow is a \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ placenta.
- Syndesmochorial, Cotyledonary, partially (delayed) deciduate
  - Epitheliochorial, Cotyledonary, partially (delayed) deciduate
  - Syndesmochorial, Cotyledonary, non-deciduate
  - Epitheliochorial, Cotyledonary, non-deciduate
  - Syndesmochorial, diffuse, partially (delayed) deciduate
  - Epitheliochorial, diffuse, partially (delayed) deciduate
  - Syndesmochorial, diffuse, non-deciduate
  - Epitheliochorial, diffuse, non-deciduate
15. In the cow the uterine tubes, uterine horns, cervix and at least the cranial part of the vagina develop from the \_\_\_\_\_ (Pick the two correct answers)
- Wolffian ducts
  - Mullerian ducts
  - Mesonephric ducts
  - Paramesonephric ducts
  - Gartner's canals
  - Longitudinal Duct of Epoophoron
  - Pronephric ducts
  - Metanephric ducts