1.) (4pts) Label the 4 layers of the ovary indicated by arrows, and list one function for each layer.

- Medial layer: provides lymph, blood to ovary
- Cortex: houses (Follicles and Corpus Luteum)

2.) (10 pts) Label the structures indicated by the lines.
- Ovum
- Ruptured Follicle
- Primary Follicle
- Tertiary Follicle
- Corpus Hemorrhagic
- Corpus Luteum
- Secondary Follicle
- Atretic Follicle
- Germinal Epithelium (provides protection)
- Tunica Albuginea (provides structure)

3.) (3 pts) Label the structures or cell types in this primary follicle indicated by the arrows.
- Zona Pellucida
- Follicular cells
- Granulosa cells
4.) (6 pts) Label the structures or cell types indicated by the lines.

- Theca externa
- Theca interna
- Cumulus oophorus
- Zona pellucida
- Oocyte
- Granulosa cells

5.) (10 pts) Label structures indicated by lines and list one characteristic or function of each.

- Uterine horn (allows transport of sperm from uterine body to oviduct)
- Isthmus (muscular)
- Utero tubal junction (blocks more sperm)
- Ampulla (wide diameter)
- Filumbria (catches ovum)
- Ruptured follicle sends to corpus hemorrhagic (turns into stalk to produce progesterone)

6.) (6 pts) Label the layers of the uterus and a function of each layer.

- Perimetrium
  - Joins uterus to body wall or other organs
- Myometrium
  - Contains muscles
  - Contraction through circular and longitudinal muscle layers
- Endometrium
  - Secreases nutrients for the embryo through glands
7.) (10 pts) Label each uterus by type and give an example of a species that has that type of uterus. The first one is done for you as an example.

Advanced Duplex (Opossum)    Duplex (Rabbit)    Bicornuate (Pig)

Bipartite (Cow)    Modified Bipartite (Horse)    Duplex (Humans)

8.) (11pts) Label the structures indicated by the lines.
9.) (11 pts) Label the structures indicated by the lines.

10.) (6 pts) The Broad Ligament suspends the female reproductive tract. List the three subsections of the broad ligament and the part of the reproductive tract each supports.

   1) Mesovarium (ovary)
   2) Mesosalpinx (oviduct)
   3) Mesometrium (uterus)

11.) (2 pts) The **ampullary-isthmic junction** is the site of fertilization, whereas the **uterotubal junction** is the site where the uterus and oviduct connect.

12.) (3 pts) The cell type that immediately surrounds the oocyte is the **corona radiata**. These cells are further surrounded by the **cumulus cells**, and the entire group of cells is released from the follicle on the ovary at **ovulation** or **estrus**.

13.) (2 pts) The term **estrus** refers to the point in the cycle when the female accepts the male for mating, while the term **estrus** refers to the entire cycle from one ovulation to the next.
14.) (5 pts) Circle one and correct the statement if it is false

True or False. The germinal epithelium of the ovary contains the female germ cells or oocytes.

False. The cortex does.

True or False. In the cow, ovulation only occurs at the ovulation fossa.

True. Spallanzani was.

True or False. Leonardo da Vinci was the first to practice artificial insemination.

False. Anton von Leeuwenhoek developed the magnifying lens and used it to see sperm cells.

True or False. Biotechnology and Genetic engineering are recent developments in the field of science.

False. Been used for hundreds of years.

True or False. de Graaf discovered and named the oviduct.

False. de Graaf named Graffian Follicle. Fallopian named oviduct.

15.) (5 pts) List 5 functions of the uterus.

1. Transport sperm
2. Absorption and phagocytosis of sperm
3. Capacitation of sperm
4. Provide housing for developing embryo and fetus
5. Cause parturition through peristaltic muscle contractions

16.) (4 pts) List 2 steroid hormones produced by the ovary and the structure which produces them.

Progestosterone. Corpus Luteum.

Estrogen. Follicle (granulosa cells).

17.) (2 pts) The uterus is responsible for producing the luteolytic agent.

RESERVED

Bonus (2 pts):
What is the name of the ducts which are found on the floor of the vestibule and are remnants of the Wolffian ducts.

98
96.5/100 Good Job! Plevetoo
Van Derwel