

Biology 483 - Exam III Fall 2022

Name: _____

1. Briefly define or give the significance of the following (2 pts. each).

Plantigrade -

Endotheliochorial -

Iteroparous -

Frictional drag -

Propatagium -

Angle of attack -

Baculum -

Antechinus -

Meckel's cartilage-

Camber-

2. What is the chain of transmission of sound waves in **early synapsids** (6 pts.)?

3. Please explain the how styliiform cartilage functions during gliding in flying squirrels (8 pts.)?

4. Please resolve force vectors operating during a bite in **cynodonts** (10 pts.).

5. Please illustrate the development of the **choriovitelline** placentas of metatherians. Include the early stage (that is shared with eutherians - 5 pts) and the later stage, just at attachment (5 pts.).

6. Please illustrate a eutherian **epitheliochorial** placenta. Indicate the tissue layers separating maternal from fetal circulation (12 pts).

7. What is a cannon bone (4 pts)? Please describe two ways that it serves to increase running speed of a cervid (10 pts.).

9. Briefly describe each type of eutherian uterus (4 pts.).

Simplex -

Duplex -

Bipartite –

Bicornate –

9 Using the front limb as an example, please indicate the trade-off between maximizing out force and our velocity (16 pts.).