

Study Guide for Biology 1413: Zoology

Exam II

This is a guide to HELP you prepare for the Exam. It is not the exam. It does't include all the material that might be on the exam. It is only a guide to help you assess how well you have prepared for the upcoming exam. Do not waste the majority of your study time "looking up the answers" to these questions and then studying only them - you might do good if any of these questions happen to appear on the test, but you will miss everything else that we might also have talked about.

The best way to study for any exam is to take good lecture notes and then study the heck out of them; make your own outlines, make up your own questions, etc. Once you feel you know the material then see if you can answer these questions. If you can't answer them all then put these away and go back and study some more - you don't know the material well enough yet. If you can answer them all, then you probably also know most of the *other* material that will be in the exam as well.

1. What exactly are "placozoa" and why are they significant in animal taxonomy?
2. Describe the general and distinctive characteristics of the Porifera (Sponges).
3. Name and describe an animal phylum at the cellular level, the tissue level and the organ level of organization and explain what each of these "levels" indicate.
4. Describe three different examples of sponges including their habitat, their feeding method and their ecological or economic importance
5. Define the following terms: **spicules, choanocytes, sessile, filter feeder, colonial, ostia, osculum.**
5. Describe the general and distinctive characteristics of the Cnidaria.
6. Name and describe the three layers of the Cnidarian body wall
7. Explain "alternation of generations" in Cnidaria.
8. Describe and distinguish between three of the classes of Cnidaria and give an example of each.
9. Describe some of the significant ecological and human impacts of the Cnidaria
10. Define the following terms: **polyp, medusae, polymorphic, hydrostatic skeleton, cnidocyte, nerve net.**
11. How are coral reefs formed, what are the most important environmental requirements for their growth, and what is their ecological significance.
12. What are the economic values of coral reefs and how, specifically, are they being threatened.
13. Describe the three types of body organization based on body cavity and its relationship to embryonic tissue layers; what are the advantages and disadvantages of each type?
14. List and describe the general and the distinctive characteristics of Platyhelminthes (Flatworms).
15. Describe and distinguish between the three main classes of the phylum Platyhelminthes
16. What are the advantages and the disadvantages of being an endoparasite? Describe the adaptations to parasitism common in endoparasites.
17. Describe your favorite fluke including its life cycle, effects on its host and its medical impact on world health.

18. Describe your favorite tapeworm including its life cycle, effects on its host and its medical impact on world health.
19. Define the following terms: **helminth, triploblastic, acoelomate, incomplete digestive tract, pharynx, protonephridia (flame cells), ocelli, ganglia, auricle, regeneration, polyembryony, scolex, proglottid, cercaria, cysticercus**
20. Describe the general and distinctive characteristics of the phylum Nematoda (roundworms).
21. Describe the ecological importance of the roundworms, use specific examples.
22. Describe your favorite roundworm parasite including its life cycle, effects on host and its medical impact on world health.
23. Define the following terms: **pseudocoelom, eutely, cuticle, stylet, sexual dimorphism, cryptobiosis, hydrostatic skeleton, internal fertilization, microfilariae.**
24. Describe the general and distinctive characteristics of the phylum Rotifera (rotifers).
- 25.. Define the following terms: **corona, interstitial fauna, foot, mastax, cyclomorphan, cyclomorphan, anhydrobiosis.**
26. Compare and contrast the major phyla discussed in this section (Porifera, Cnidaria, Platyhelminthes, Nematoda) in terms of each major organ system: **skin** (body wall) **support, muscular, digestive, respiratory, nervous, excretory** and **reproductive** systems.