Assignment one: 40 pts. Introduction and Importance of parasites. You will earn some points for effort (completing the assignment), and the rest for correct answers or at least, partially correct answers. The teaching assistant will simply indicate whether the answer was partially or totally wrong. It is up to you to correct your errors. For the first assignments, I have asked the teaching assistant to include a few comments to help you find correct answers.

Please use only the material provided on the website and linked resources to answer questions here and on the exam. Be forewarned. Goggling information may generate wrong answers.

Please copy your answers over to a new doc and submit that doc. Only submit answers to the parts of the question that are identified in red as homework.

1. a. Parasitism is estimated to account for over \_\_\_\_\_\_\_of the described symbiotic relationships. b. Define the term, symbiotic.

2. Compare and contrast Chagas disease and Cysticercosis.

|  |  |  |
| --- | --- | --- |
|  | Chagas disease | Cysticercosis |
| Effects on human host |  |  |
| Parasite |  |  |
| **How is the parasite transmitted?**  **Include the life cycle stage of the parasite transmitted to humans.** |  |  |

Please start your cards with information from this table.

**3. Homework question, please submit. 10 points Please read the guide carefully with regard to these two diseases. This is the perfect story of what happens when a parasite makes a mistake and hints at the how evolved the relationship between parasites and primary hosts in most cases can become.**

**a. What is the difference between Cysticercosis and Taeniasis? Please consider the life cycle of the parasite in your answer. Identify which hosts are primary or definitive hosts (hosts for the reproductive adults), and which hosts are intermediary or secondary hosts.**

4. a. Compare

|  |  |  |  |
| --- | --- | --- | --- |
|  | *Toxocariasis* | *Toxoplasmosis* | *Trichomoniasis* |
| Parasite (This time include whether it is a worm or protozoan)  Include where in humans, the parasite resides. |  |  |  |
| Effects on human host. |  |  |  |
| **Are humans the intermediate (secondary) or definitive (primary host)? Defend your answer.** |  |  |  |
| **How is the parasite transmitted? Identify the life cycle stage of the parasite transmitted to humans.** |  |  |  |

(More species and data for those study cards you are constructing.)

**5. Homework question: submit 5b and c only. 15 points. a. What species is the intended primary or definitive host for the *Baylisascaris* nematode, B. procyonis and why do you suppose it is asymptomatic in this host?**

**b. From Fact sheet. What species is potentially a zoonosis for humans? How is this disease diagnosed? 10 points.**

**c. From fact sheet: Which potential human hosts are most at risk of infection by this nematode and why? Five points.**

**6. Homework question: Submit 6 a., b., and c. 15 points.**

**a. Most studies on toxoplasmosis use mice or rats as subjects. Are these intermediary (secondary) hosts or definitive (primary) hosts? How do you know? Five points.**

**b. What are the major routes of transmission for toxoplasmosis? Three points.**

**c. A pregnant woman delivers a child with clinical toxoplasmosis symptoms. What is the relative probability (as opposed to food laced with cysts, etc.) that she was infected through contact with her cats’ feces?**

**A study compared women who had cats or even fed feral cats, with those that did not have any contact with cats during pregnancy. Researchers could not find any differences in the women’s’ probability of developing toxoplasmosis during pregnancy. Are you surprised by this result? Defend your answer, using information available on our websites and linked resources. Seven points.**

7. What is the implied relationship between intelligence (from the supplement), at least as measure by IO tests, and parasites? b. What is the implied relationship (you tube and articles) from the film between human personality and toxoplasmosis? How do these effects compare with effects on experimental animals such as rats or mice?

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8. More questions on this assignment taken from old exams.

a. Complete this statement

A mosquito alights on your skin, it at first amuses you because it looks like it is standing on its head but then you realize………………

b. True or false

Male and female *Anopheles* can transmit malaria

Malaria was once endemic to the southern United States.

c. What is the CDC?

d. Why were soldiers identified as targets for potential malaria infection?

e. Is malaria still considered a threat in the US today?

f. Define the term endemic.

**Now to prepare better for future exams, try to take at least some of the questions you have answered and place them in the form of exam questions. This is essentially what I have done in question eight.**

**Can you construct complete the statement or true or false statements for questions one through seven? Do not turn in your potential exam questions, but save for review before exam one.**

**Remember to construct study cards for all species mentioned in guide one.**