



كشفاً - تالمة



Assiut University
Department of Medical Parasitology
Date: 5/1/2015

Faculty of Medicine
Total marks: 50
Time: 2 hours

Parasitology Examination for Third- year Veterinary Medicine Students (Protozoology & Entomology)

Answer the following questions, and illustrate your answers with diagrams whenever possible:

Cases

- 1. An owner of equine stable complained that one of his newly imported horses suffered from muscular paralysis of the hind limb. On clinical examination other equines showed Oedema of the genitalia, impotence and mucous discharge from the urethra and vagina. Some of the animals had circumscribed depigmented areas of the mucosa of the vulva or penis. (7 marks)**
 - a) What is the name of the disease?
 - b) Mention the causative parasite.
 - c) How do you confirm the diagnosis?
 - d) How did these animals get the infection?
- 2. An owner of a cattle complained that his animal is anaemic and passing a red colored urine. On clinical examination, fever $> 41^{\circ}\text{C}$, jaundice and splenomegaly were observed. (7marks)**
 - a) Mention the causative parasite.
 - b) How can you confirm your diagnosis?
 - c) Describe the diagnostic stages.
 - d) Mention the vector of this disease and mode of transmission.
- 3. A sheep presented with profuse mucopurulent nasal discharge which is frequently tinged with fine streaks of blood. During examination, the sheep went in paroxysms of sneezing accompanied by dropping of large larvae. (6 marks)**
 - a) What is your possible diagnosis?
 - b) How did the animal get the infection?
 - c) How could you confirm your diagnosis?

مع تحيات

وحدة خدمات تكنولوجيا المعلومات
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4. Compare between: (15 marks , 3 for each)

1. Transovarian and transtadial (stage to stage) transmission with examples.
2. *Tetratrichomonas gallinae* and *Tetratrichomonas gallinarum* (habitat, mode of infection and pathogenesis).
3. Sucking lice and biting lice. (4 differences).
4. Veterinary importance of *Tabanus* and *Chrysops*.
5. *Argas* and *Ornithodoros* (host, morphology and veterinary importance).

5. Multiple Choice :(10 marks)

Identify the choice that best completes the statement or answers the question.

1. **One of the characters of Class Arachnida (Octapoda) is:**
a) Body consists of head, thorax and abdomen. c) Has two pairs of antennae.
b) Has four pairs of legs. d) Has five pairs of biramous legs.
2. **In malaria, the form of plasmodia that is transmitted from mosquito to animal is the:**
a) Sporozoite. c) Merozoite.
b) Gametocyte. d) Hypnozoite.
3. **Foamy watery diarrhea in turkeys is caused by:**
a) *Histomonas meleagridis*. c) *Giardia lamblia*.
b) *Plasmodium gallinaceum*. d) *Hexamita meleagridis*.
4. **Dogs acquire infection with *Hepatozoon spp.* upon:**
a) Bite of infected Ticks. c) Bite of infected Fleas.
b) Ingestion of infected Ticks. d) Bite of infected mosquitoes.
5. **Stick tight flea is:**
a) *Echidnophaga gallinacea*. c) *Pulex irritans*.
b) *Xenopsylla cheopis*. d) *Trichodectes canis*.
6. **Posterior station transmission occurs in the following disease:**
a) Avian malaria. c) Nagana disease.
b) Chaga's disease. d) Babesiosis.

مع تحيات

7. **Complete metamorphosis (holometabolus) includes:**
- | | |
|---------------------------|--------------------------------|
| a) Egg, larva, and adult. | c) Egg, larva, pupa and adult. |
| b) Egg, pupa and adult. | d) Egg, nymph and adult. |
8. **Class Crustacea characterized by the presence of:**
- | | |
|-------------------------|---|
| a) One pair of antenna. | c) Three pairs of legs. |
| b) One pair of wings. | d) Four to five pairs of biramous legs. |
9. **Clusters of larvae around the pylorus of infected horse is caused by:**
- | | |
|--------------------------------|---------------------------------------|
| a) <i>Hypoderma lineatum</i> . | c) <i>Gastrophilus intestinalis</i> . |
| b) Genus <i>Oestrus</i> . | d) <i>Wohlfahrtia spp.</i> |
10. **"Spectacles" is a characteristic lesions in dogs transmitted by:**
- | | |
|---------------------------|----------------------------------|
| a) <i>Hippobosca spp.</i> | c) <i>Phlebotomus papatasi</i> . |
| b) <i>Simulium</i> . | d) <i>Tabanus sp.</i> |

True/False: (5 marks)

Indicate whether the statement is true or false.

1. *Cryptosporidium* oocysts are infective when passed from the host.
2. *Trypanosoma cruzi* is transmitted by *Tabanid* flies.
3. Koch's blue bodies refers to schizont in the lymphocytes of invertebrate host.
4. Black head disease is caused by *Haemoproteus columbae*.
5. Cyst of *Toxoplasma* may be found in skeletal muscle of sheep.
6. *Culex* transmits malaria of birds and filaria of dogs.
7. Depluming itch causes intense irritation where the birds pull out body feathers is caused by Genus *Sarcoptes*.
8. *Babesia gibsoni* is oval in shape and infects dogs.
9. Both *Trichomonas foetus* and *Trypanosoma equinum* are sexually transmitted infections.
10. Cyclopropagation means the multiplication and development of the causative organisms inside the arthropod.