

The Exercise Topics

Subject: MEDICAL PARASITOLOGY
for MEDICINE ENGLISH DIVISION Students,
IInd year
2013/2014

Exercise No. 1 (21.02.2014)

Subject: **Parasitic Protozoa - part I**

1. Morphology, biology, life cycle, pathogenesis, diagnostic.

2. Protozoa of the digestive system:

- *Trichomonas tenax* – photo - drawing
- *Entamoeba histolytica*
 - cysts, trophozoites, haematophag -microscopic slide-drawing
- *Giardia intestinalis*
 - cysts, trophozoites -microscopic slide-drawing
- *Cryptosporidium parvum*
 - oocysts-microscopic slide-drawing

- *Balantidium coli*

- cysts – microscopic slide – drawing

- trophozoites – microscopic slide – drawing

Exercise No. 2 (28.02.2014)

Subject: **Parasitic Protozoa - part II**

1. Morphology, biology, life cycle, pathogenesis, diagnostic.

2. Protozoa of the circulatory system:

- *Trypanosoma brucei gambiense*
- trypomastigota-microscopic slide-drawing
- *Trypanosoma cruzi*
- trypomastigota-microscopic slide-drawing

- amastigota in the myocardium – photo - drawing

- *Plasmodium vivax* - demonstration

- *Plasmodium falciparum*

- thin-blood smear microscopic slide-drawing

3. Protozoa of parenchymal organs:

- *Toxoplasma gondii*

- trophozoites-microscopic slide - drawing

4. Protozoa of the nervous system:

- *Naegleria fowleri*-

- trophozoites-microscopic slide-drawing

- *Acanthamoeba castellanii*

- cysts, trophozoites – photo - drawing

5. Protozoa of the urogenital system:

- *Trichomonas vaginalis*

- trophozoites- microscopic slide -drawing

6. Protozoa of the skin:

- *Leishmania tropica*

- amastigota- microscopic slide-drawing

- protomastigota- microscopic slide-drawing

Exercise No. 3 (07.03.2014) □□□□□□□□□□

Subject: **Trematodes – digenetic flukes**

1. Morphology, biology, life cycle, pathogenesis, diagnostic.
2. Trematodes of the respiratory system:
- *Paragonimus westermani* (lung fluke)

- adult – photo – drawing

- eggs – microscopic slide - drawing

3. Trematodes of the digestive system:
- *Fasciola hepatica* (liver fluke)

- adult- microscopic slide - drawing (digestive and reproductive systems)
- eggs-microscopic slide-drawing
- cercariae-microscopic slide-drawing

- *Dicrocoelium dendriticum*

- adult – microscopic slide – drawing

4. Cardiovascular flukes:

- *Schistosoma mansoni*

- adult (male, female)-microscopic slide - drawing
- eggs-microscopic slide-drawing
- miracidium-microscopic slide-drawing

Subject: **Cestoda - tapeworms**

1. Morphology, biology, life cycle, pathogenesis, diagnostic.
2. Tapeworms of the digestive system:
- *Diphyllobothrium latum* (fish tapeworm)
• gravid proglottids - microscopic slide-drawing

- eggs – microscopic slide - drawing
- *Taenia saginata* (beef tapeworm)
- gravid proglottids-microscopic slide-drawing
- eggs-microscopic slide-drawing

- scolex – microscopic slide - drawing
- *Taenia solium* (pork tapeworm)
- gravid proglottids-microscopic slide-drawing

- scolex – microscopic slide – drawing

-*Dipylidium caninum*

- gravid proglottids- microscopic slide – drawing

- scolex - photo – drawing

3. Cestodes of organs and tissues:

-*Echinococcus granulosus*

- adult – microscopic slide - drawing
- protoscolices-microscopic slide-drawing
- section through the tissue-hydatoids with protoscolices-microscopic slide-drawing

Exercise No. 4 (14.03.2014) □ □ □ □ □ □ □ □ □ □

Subject: **Nematodes - part I**

1. Morphology, biology, life cycle, pathogenesis, diagnostic.

2. Gastrointestinal nematodes:

-*Ancylostoma duodenale* (hookworm)

- adult - microscopic slide - drawing

-*Necator americanus*

- adult- microscopic slide - demonstration

-*Enterobius vermicularis* (pinworm)

- adult- microscopic slide - drawing
- eggs- microscopic slide - drawing

-*Ascaris lumbricoides* (human roundworm)

- adult (male, female)- macroscopic - drawing

- eggs-microscopic slide - drawing

-*Trichuris trichiura* (whipworm)

- adult (male, female) - microscopic slide-drawing

- eggs-microscopic slide - drawing

- *Anisakis simplex*

- L3 larva stage - microscopic slide - drawing

Subject: **Nematodes - part II**

1. Morphology, biology, life cycle, pathogenesis, diagnostic.

2. Nematodes of circulatory system:

-*Loa loa*

- microfilariae-microscopic slide - drawing

-*Mansonella ozzardi*

- microfilariae - photo - drawing

-*Wuchereria bancrofti*

- microfilariae - microscopic slide - drawing

3. Nematodes of parenchymal organs:

-*Trichinella spiralis* (trichina worm)

- larvae in the striated human muscle - microscopic slide - drawing

-*Toxocara canis* (canine roundworm)

- adult-macroscopic - drawing
- eggs - microscopic slide - drawing

Exercise No. 5 (21.03.2014) □□□□□□□□□□

Subject: **Parasitic Arachnida - Arachnids**

1. Morphology, biology, life cycle, pathogenesis, diagnostic.

-*Argas reflexus* (pigeon tick)

•adult – photo - drawing

•larva – microscopic slide - drawing

-*Ixodes ricinus* (tick)

• adult (male, female) - microscopic slide - drawing

• larva -microscopic slide – drawing

-*Dermacentor reticulatus*

•adult – microscopic slide - drawing

-*Sarcoptes scabiei* (itch mite)

• adult -microscopic slide-drawing

-*Demodex folliculorum* (hair follicle mite)

• adult -microscopic slide-drawing

- *Pyroglyphidae* - dust mites

• microscopic slide - drawing

Subject: **Parasitic Insects - Insecta part I**

1. Morphology, biology, life cycle, pathogenesis, diagnostic.

-*Pediculus humanus* (human lice)

• adult - microscopic slide - drawing

• eggs - microscopic slide - drawing

-*Pthirus pubis* (pubic lice)

• adult -microscopic slide - drawing

-*Anopheles macullipennis* (mosquitoe)

• proboscis-microscopic slide - drawing

-*Culex pipiens*

- adult (male, female) - macroscopic- drawing
- proboscis - microscopic slide – drawing

-*Rhodnius prolixus*

- adult – microscopic slide – drawing

-*Glossina* sp.

- adult – microscopic slide – drawing

Exercise No. 6 (28.03.2014) □ □ □ □ □ □ □ □ □ □

Subject: **Parasitic Insects - Insecta part II**

-*Musca domestica*- house fly

- adult -macroscopic- drawing
- leg-microscopic slide - drawing

-*Lucilla sericata*-green fly

- adult -macroscopic- drawing

-*Stomoxys calcitrans*

- adult – photo - drawing
 - proboscis - microscopic slide - demonstration
- Pulex irritans*-human flea

- adult – photo - drawing
-*Ctenocephalides canis*-dog flea
- adult -microscopic slide-drawing
-*Cimex lectularius*- bed bug
- adult -microscopic slide – drawing

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1. Colloquium - theoretical test

2. Practical exam – parasitological slides. On the practical test each of the students should know: the Latin name of observed species, invasive stage of parasite, kind of material used to recognize the species, location in human body, name of disease caused by the parasite.