

COURSE MEDICINE – English division

MEDICAL PARASITOLOGY

2nd year (2016/2017)

Exercise No. 1 (23.03.2017)

Subject: **Parasitic Protozoa**

Morphology, biology, life cycle, pathogenesis, diagnostic.

1. Protozoa of the digestive system:

-*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

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 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

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. 2 (30.03.2017)

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. 3 (06.04.2017)

Subject: **Nematodes**

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

2. Gastrointestinal nematodes:

-*Ancylostoma duodenale* (hookworm)

- adult - microscopic slide - drawing

-*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

2. Nematodes of circulatory system:

-*Loa loa*

- microfilariae-microscopic slide - 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. 4 (20.04.2017)

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

-*Cimex lectularius*- bed bug

- adult -microscopic slide – drawing

Exercise No. 5 (27.04.2017)

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

-*Anopheles macullipennis* (mosquitoe)

- proboscis-microscopic slide - drawing

-*Culex pipiens*

- adult (male, female) - macroscopic- drawing
- proboscis - microscopic slide – drawing
- Pulex irritans*-human flea
- adult – photo - drawing
- Ctenocephalides canis*-dog flea
- adult -microscopic slide-drawing
- Rhodnius prolixus*
- adult – microscopic slide – drawing
- Glossina* sp.
- adult – microscopic slide – drawing

Exercise No. 6 (11.05.2017)

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.

Literature - obligatory:

1. A. Buczek „Parasitology for medical students”, Koliber, Lublin 2007, 2011

Additional:

L. Sh. Garcia „Diagnostic medical parasitology”, Washington, D.C. ASM Press 2007

<http://www.cdc.gov/>

http://www.dpd.cdc.gov/dpdx/HTML/Para_Health.htm

<http://www.who.int/tdr/>