BRAINWARE UNIVERSITY

Term End Examination 2023-2024
Programme – DMLT-2022
Course Name – Parasitology & Animal Care
Course Code - DMLT402
(Semester IV)

Full Marks : 60 **Time : 2:30 Hours**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A
(Multiple Choice Type Question) 1 x 15=15

1. *Choose the correct alternative from the following :*

(i) Select the parasite which causes malaria in humans
a) Schistosoma mansoni b) Taenia solium
c) Plasmodium falciparum d) Enterobius vermicularis

(ii) Select the type of host where parasite passes its sexual life cycle
a) Definite host b) Indefinite host
c) Intermediate host d) Neutral host

(iii) Select the organism which transmit parasite from one host to another host
a) Pathogen b) Vector
c) Commensal d) Non-pathogen

(iv) Select Number of flagella present in giardia lambia
a) One pair b) Two pair
c) Three pair d) Four pair

(v) Choose the most common organ involved in extraintestinal amoebiasis
a) Liver b) Lung
c) Spleen d) Brain

(vi) Select the color of the cytoplasm of malaria parasite after staining with Giemsa
a) Dark red colour b) Dark purple
c) Blue colour d) White red

(vii) Select the procedure where Nuclei of amoeboic cysts is well seen
a) Wet mount b) Iodine
c) Saline preparation d) By using fixatives

(viii) Choose the stain used for nuclear stain in Entamoeba histolytica
a) Buffered methylene blue b) Eosin
c) methylene d) All of these

(ix) Select the stage of the malaria life cycle occurs in the liver

a) Sporozoite
b) Merozoite
c) Trophozoite
d) Gametocyte

(x) In which part of the Anopheles mosquito does the sexual reproduction of the malaria parasite occur

a) Gut
b) Salivary glands
c) Wings
d) Legs

(xi) After adding the saline solution to the blood sample for malaria detection Select the next step

a) Centrifugation
b) Incubation
c) Microscopic examination
d) Filtration

(xii) Choose the diagnostic test typically used to detect Fasciola hepatica infection in humans

a) Stool examination
b) Blood test
c) Urine test
d) Imaging studies

(xiii) Identify the stage of Ascaris lumbricoides that is responsible for causing the most severe symptoms in humans

a) Adult male
b) Adult female
c) Larva
d) Egg

(xiv) Indicate the step that is not part of the saline preparation technique for microscopic examination of stool samples

a) Mixing a small amount of stool with normal s
b) Filtering the mixture through a gauze pad
c) Placing a drop of the filtrate on a microscope slide
d) Heating the filtrate to a high temperature

(xv) Which organ does Ascaris migrate through during its life cycle?

a) Liver
b) Lungs
c) Heart
d) Kidneys

Group-B

(Short Answer Type Questions) 3 x 5=15

2. Compare and contrast between excystation and encystation stages in the life cycle of Entamoeba (3)
3. Define the importance of medical parasitology (3)
4. Define the ectoparasite and endoparasite (3)
5. Mention the name of sources of exposure to parasitic infection (3)
6. Explain the Nocturnal periodicity of wuchereria and analyze its role in the spread of filariae (3)

OR

Explain the importance of in vivo conditions in a rat model for drug development (3)

Group-C

(Long Answer Type Questions) 5 x 6=30

7. Compare and contrast the parasite and helminths on the basis of the detection method (5)
8. Compare and contrast the life cycle of plasmodium and entamoeba on the basis of their effectiveness and different stages form (5)
9. Illustrate the life cycle of Entamoeba histolytica (5)
10. How do staining techniques evaluate the quantification of blood parasites in clinical samples (5)
11. Illustrate the process and principles behind the centrifugation technique for diagnosing parasitic infections, including the types of samples used, the speed and duration of centrifugation. (5)

12. Compare and contrast between the trophozoite and cyst stages of Giardia lamblia in terms of their morphology, metabolism, infectivity, and susceptibility to disinfectants (5)

OR

Explain the advantages and limitations of the saline preparation technique for diagnosing parasitic infections (5)

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