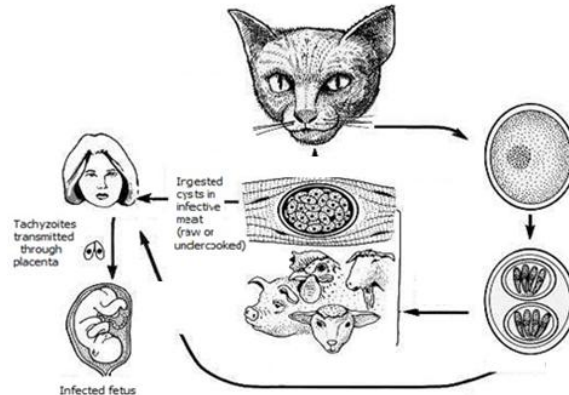
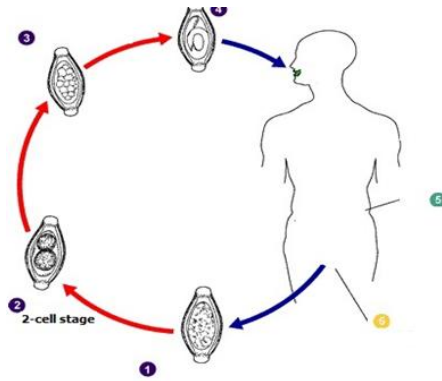


- Describe and draw the cyst of *Balantidium coli*
- *Leishmania* is able to exist in two forms, Write 3 differences between them
- Write the symptoms of *Entamoeba histolytica* infection
- Mention the symptoms of whipworm infection and how can be controlled ?
- Complete the pointed numbers of life cycle, with showing:
- Diagnostic stag , Infective stage , transmission in animal



- Draw the differences between cyst and trophozoite of *Balantidium coli*
- Write the symptoms of the followings:
 1. *Balantidium coli* infection
 2. Final stage of *Trypanosoma brucei* infection
- All cestodes are hermaphrodite that means
- If the infection with *Wuchereria bancrofti* is left untreated, ...
- Mention the symptoms of whipworm infection and how can be controlled?
- Classify helminthes.
- *Leishmania* is able to exist in two forms Write 3 differences between them
- The symptoms of chancre stage are
- Describe the cyst of *Giardia lamblia*
- The bloodstream slender trypomastigote has
- Adult worm of Cestodes composed of
- Write about the following:
 1. Treatment of Filariasis
 2. Control of whipworm
- What are the symptoms of kala azar
- Describe the egg of *Ascaris lumbricoides*
- Complete the pointed numbers of life cycle, with showing:

- Diagnostic stage , Infective stage , Disease cause



- At what stage or form is

1- *Trypanosomes* present in the blood?

2- *Balantidium coli* infects human?

3- *Leishmania* exists in the vector?

4- *Entamoeba histolytica* exists in the host

5- *Giardia lamblia* infects human

- What are the differences between:
 1. Final host & Paratenic host
 2. Homospecific association & Heterospecific association
 3. Mortality and Morbidity
- What happens at the final stage of African trypanosomiasis? What are the symptoms shown in this stage?
- What does Kala azar mean? Write 3 symptoms of it.
- How is these diseases transmitted?

Sleeping sickness - Leishmaniasis

What are the causes of the followings ? mention the infective stage of them:

1. Guinea worm disease
2. Filariasis

Describe the adult worm of Cestodes.

- a. What are the symptoms of heavy infection with *T. saginata*

Q3. Write briefly about :

1. Treatment of guinea worm disease.
2. Risk factors of hookworm infections
3. Differences between the male and female of whipworm

- Pinworm diagnosis

Complete the pointed numbers of life cycle, with showing:

1. Parasite scientific name
2. Diagnostic stage
3. Infectious stage

- Choose the correct answer:

- is number of hosts infected divided by the number of hosts examined at a point in time.

Morbidity - Incidence - Prevalence - Mortality

- is more problematic for pregnant women and people who have weakened immune systems.

Trichuriasis - Ascariasis - Toxoplasmosis - Giardiasis

- The infective stage of *Ascaris lumbricoides* is

Unembryonated

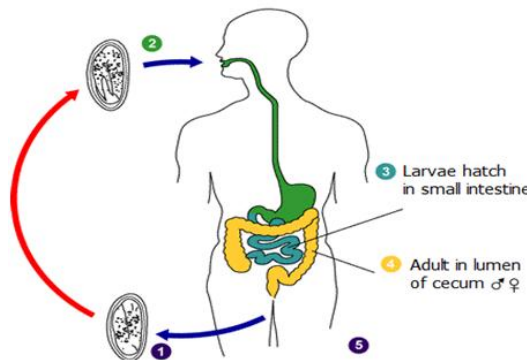
in soil -

- is the way two

relationship in which

Commensalism -

- Phoresis



eggs passed in feces - Egg embryonated

sporulated oocyst - cyst

organisms of different species exist in a

each organism benefits.

Mutualism - Predation

- Each cyst of produces two trophozoites upon excystation.

Giardia lamblia - *Balantidium coli* - *Trypanosoma brucei* - *Trichuris trichiura*

- The cysts of are killed by heat and by freezing temperatures.

Entamoeba - *Balantidium* - *Giardia* - *Trypanosoma*

- To control the whole family should be treated

- Filariasis - Enterobiasis - trichuriasis - toxoplasmosis

- The first sign of infection with is a sore at the bite site.

Trypanosoma - *Leishmania* - *Toxoplasma* - *Entamoeba*

- In the parasites stay in the host but do not grow and develop.

Definitive Host - Mechanical vector - Incidental Host - Biological vector

- The Intermediate host of *Taenia saginata* is

- mosquito - cattle - cat - man

- consist of long thin worms called roundworms.

Nematoda - Cestodes - Flatworms - Flukes

- Infection with whipworm causes a disease called

Kala azar - Baghdad boil - trichuriasis - dysentery

- The number of hosts infected divided by the number of hosts examined at a point in time is called
Morbidity - Incidence - Mortality - Prevalence
- Which of the following about *Enterobius vermicularis* is correct ?
Rectal prolapse is possible in severe cases - Intermediate host is cattle
Diagnosed by finding the adult worm or egg in the perianal area - They are hermaphrodite
- Kala azar means
enlargement of spleen - black fever - Irregular fever for long period - swelling of the lymphatics.
- Whipworm infection is diagnosed by
detection of a lemon shaped egg in stool examination - finding the adult worm or egg in the perianal area
- recovery of segment or scolex - live lice or empty egg in stool examination
- To control..... infection, cattle should not be allowed to graze on ground contaminated by human feces.
toxoplasmosis - filariasis - dysentery - beef tapeworm
- Each cyst of produces two trophozoites upon excystation.
Giardia lamblia - *Balantidium coli* - *Trypanosoma brucei* - *Trichuris trichiura*
- Which of the followings are incorrect about Kala azar ?
The amastigotes are localized and multiply in brain - Causes swelling of the liver and spleen - leaves a disfiguring scar - Causes cardiac dysfunction
- 1. In one organism benefits while the other organism is harmed.
Phoresis - Commensalism - Mutualism - Parasitism
- To control the whole family should be treated
- Filariasis - Enterobiasis - trichuriasis - toxoplasmosis
- The first sign of infection with is a sore at the bite site.
1. *Trypanosoma* - *Leishmania* - *Toxoplasma* - *Entamoeba*
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 - recovery of segment or scolex - live lice or empty egg in stool examination

Draw and label the bloodstream trypomastigote.

Q3. A. The clinical signs of human giardiasis depend on various factors such as.....

B. Draw and label the trophozoites and cyst of *Balantidium coli*.

Write 3 differences between Amastigote and Promastigote :

1. What Happens at final stage of sleeping sickness.
2. Write about toxoplasmosis transmission in human
3. *Giardia lamblia* has two morphological stages, describe the difference between.

- How is the following diagnosed (only 2)?

1. *Trichuriasis*
2. Sleeping sickness
3. Pinworm infection

- Write the symptoms of the following:

1. Acute infection with *Toxoplasma gondii*
2. African trypanosomiasis (first stage)

- How does hookworm infection transmit ?
- How can guinea worm disease be diagnosed ?
- What are the symptoms of :

- a. Beef tapeworm infection
- b. Filariasis (only 3)

- What is the infective stage of :

- a. *Necator americanus*
- b. Whipworm
- c. Pinworm

- Classify helminthes.