22

Department of Pathology
Azra Naheed Medical College
Short test-5, 25 July 2017
MBBS 3rd Year (MCQ)
(Special Bacteriology-2 & Parasitology)

ARSLAN Bhatti F17-063

Time Allowed: 60 min **Total Marks: 40**

Name: _____

Roll No: _____

Date: _____

Instructions:

1. **All subjective questions are to be attempted on the paper and returned to the invigilator within specified time after you have received the question paper.**
2. **Neat hand writing and use of margins will increase the outlook and presentation of your paper.**

Attempt all Questions. Each question carries 5 marks

1. A 42- year old male presented with a history of productive cough, night sweats, low grade fever and weight loss for the last 3 months. Chest X- ray reveals opacity in the upper zone of the left lung. Histopathology reveals granulomas.
   a) What is the most likely causative agent and the disease? 2
   b) Name the special staining technique used for the diagnosis. 1
   c) Discuss the laboratory diagnosis of this case. 2

2. A 25-year-old woman had a papular rash on her trunk, arms and palms with no itching. Vaginal examination revealed two flat, moist, slightly raised lesions on the labia. Specimen from a labial lesion was examined in a dark field microscope revealing spirochetes.
   a) What is the most likely diagnosis and the causative agent? 1
   b) Explain the term prozone phenomenon. 1
   c) Name the specific and non-specific tests for the diagnosis of the above mentioned case 3

3. A 29-year-old woman and her husband seek your consultation for an inability to conceive. After a thorough workup, you believe the cause to be an undiagnosed infection in the woman. Examination reveals mild cervical motion tenderness; Gram stain of cervical secretions shows neutrophils but no organisms. The causal bacterium is an obligate intracellular parasite?
   a) Enlist the disease associated with different immune types of Chlamydia trachomatis. 3
   b) Diagrammatically explain the life cycle of Chlamydia. 1
   c) Name the bacteria's causing plague and Rocky Mountain spotted fever. 1

4. Your patient is a 75 year old woman with history of cigarette smoking, who now has a history of fever and cough having yellowish sputum, most probably having pneumonia. Gram stain reveals small Gram negative rods having no growth on blood agar. It grows on chocolate gar having X and V factors.
   a) Name the causative agent. 1
   b) Name other diseases caused by this bacterium. 2
   c) Enlist three important causes of meningitis. 1
   d) Name the bacterium causing whooping cough. 1

5. A 20 years old farmer develop periodic bouts of fever with chills and rigor occurring 36-48 hours, he is anemic on appearance and has splenomegaly. His peripheral smear show crescenteric structures.
   a) What is most likely diagnosis? (0.5)
   b) What are its complications? (1)
   c) How do we diagnose the involved pathogen? (2)
   d) Draw and label life cycle of the pathogen. (1.5)

6. A 40 years old shepherd of sheep presents with upper right quadrant pain and appeared slightly jaundiced. A stool exam was negative for ova and parasites but a CT scan reveals a large 14 cm cyst that appears to contain fluid, in the right lobe of the liver.
   a) what is most likely diagnosis? Name the parasite responsible for this lesion. (1)
   b) draw and label its life cycle. (2)
   c) Discuss lab diagnosis. (2)

7. A 37 years old man gets bitten with a desert fly and ends up developing a muco-cutaneous lesion. On aspiration and biopsy of spleen tissue, there were peculiar particles found in large amount within the macrophages.
   a) What is the diagnosis and name of the organism? (1)
   b) What is the species name that causes Visceral counterpart of this disease? (1)
   c) What are LD bodies? (1)
   d) What are the differences between amoebiac and bacilliary dysentery? (2)

8. a. Draw and label life cycle of ascaris lumbricoides. (1.5)
   b. What is cysticercosis. Name the organism causing it. (1.5)
   c. Draw the trophozoite form of Giardia lamblia. (1)
   d. Draw and label the ova of Trichuris and enterobious vermicularis. (1)

1

Department of Pathology
Azra Naheed Medical College
Grand Test-5, 6th April 2020
MBBS 3rd Year SEQ
(Parasitology)

Time Allowed: 35 min M. Rizwan **Total Marks: 20**

(a 76 Page to UHS)

A 20 years old farmer develops periodic bouts of fever with chills and rigors occurring every 36-48 hours. He is anemic on appearance and has splenomegaly. His peripheral smear shows cresenteric structures. Banana like bodies

a) What is the most likely diagnosis? - Malaria - Plas modium falciparum. (0.5)
b) Give its life cycle and pathogenesis. (1.5)
c) How will u diagnose this case in laboratory? (2)
d) What are its complications? Cerebral Malaria, Black water fever, Anemia (1) Hypoglycemia

Headache, myalgias, Jaundice, Pulmonary edema

2. A 40 years old shepherd of sheep presents with upper right quadrant pain and appeared slightly jaundiced. A stool exam was negative for ova and parasite but a CT scan reveals a large 14 cm cyst that appears to contain fluid in the right lobe of the liver.

282 page key to UHS

a) What is the most likely diagnosis? - Unilocular hydatid cyst disease (0.5)
b) Name the parasite responsible for this lesion. Echinococcus granulosus (0.5)
c) Draw and label its life cycle. → 447 (2)
d) Give its laboratory diagnosis. 446 Radiological and ultrasound of cysts (2)

3. A 4 years old boy is presented to pediatric OPD with anal itching. His mother says that he is unable to sleep at night because of scratching of perianal area for past few days. On local examination, perianal area reveals erythema and excoriation. A microscopic examination of the sample collected by touching the perianal region with piece of clear scotch tape is performed.

281 page key to UHS)

a) What diagnostic findings are likely to be seen on microscopic examination of the sample? - Embryonated egg seen on scotch tape (1) → Thin shell and one cell is slides flattened.
b) Name the parasite responsible for this infection. (0.5) - Enterobius vermicularis
c) Briefly give its life cycle. SGD (?) St. Books
d) Draw a flow chart showing the classification of metazoa/ helminthes. (1.5) SGD 409

4. A 19-year-old man complained of several episodes of blood in his urine. He has no dysuria or urethral discharge. He is not sexually active. He is a college student but was born and raised in Egypt. Physical examination revealed no penile lesions. Urinalysis shows many red cells, no white cells and several large eggs with terminal spines.

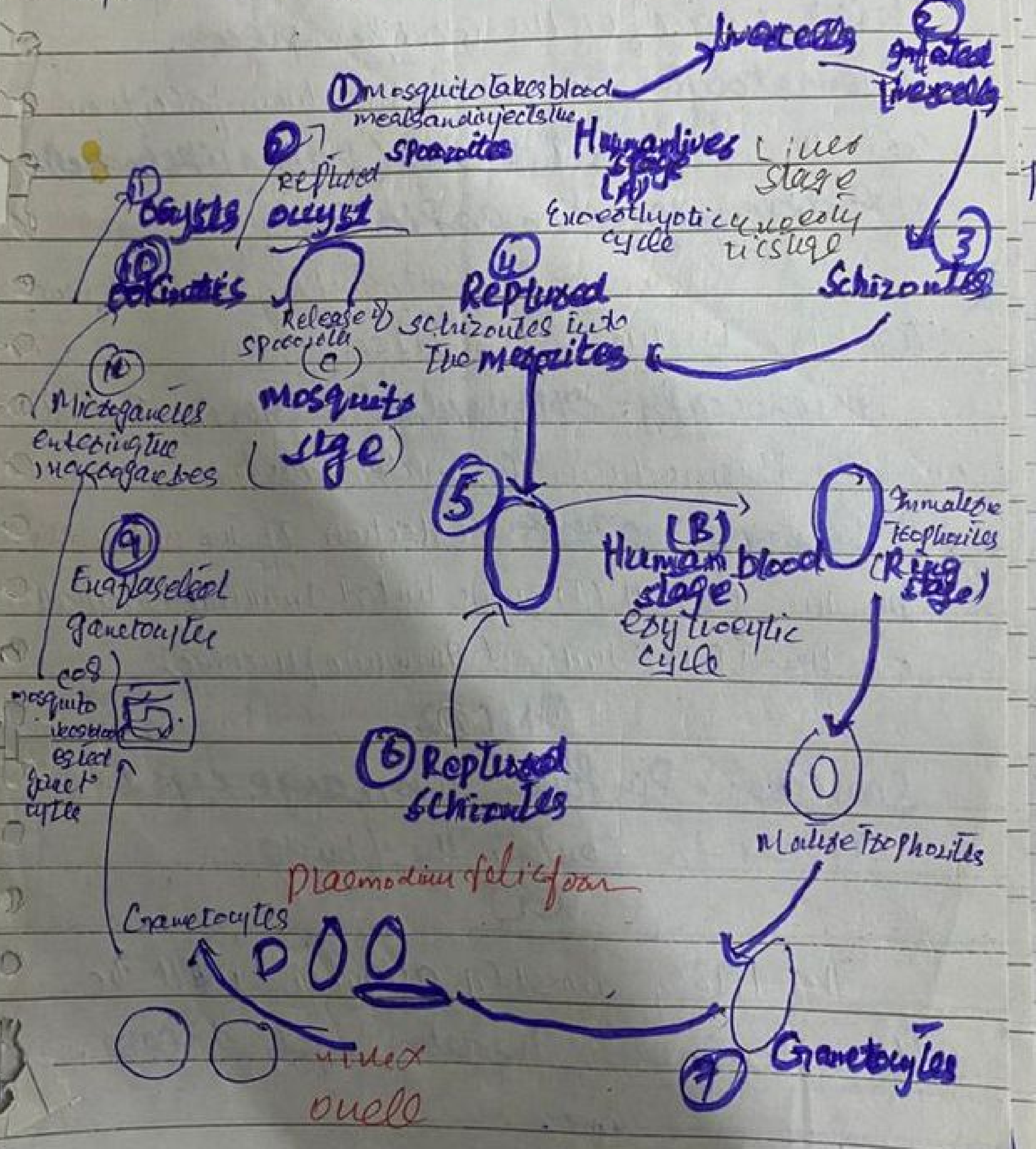
a) Name the causative agent of the disease. (0.5) Schistosoma Haematobium (452)
b) Name the other two species of this organism draw the ova of three species. (1.5) S. mansoni S. Japonicum
c) Classify Protozoa. (1.5) 409 Book Clinson
d) Draw and label the life cycle. (1.5) → SGD

(450 Books)

Parasitology
Test 2024

Q No: 1

The diagnosis is The Malarie and The caustic agent is The Plasmodium falciforam.



Laboratory Diagnosis:-

The malarie Parasites are exam on the giemsa stain under the microscope show The smears.

Thick smears for the identification organisms

Thin smears for the identification spieces.

Gematocytes of the Plasmodium falciform are the Cresent shaped (banna like bodies).

(b) Antigen detection Rapid Test:.

Immunochromatographic tests Provide results in the 2-15 minutes.

Microscopy: or Molecules Diagnosis:-Based on the Plasmodium PCR nucleosides.

Serological Tests detection of the antibodies by the ELISA (Enzyme linked Immunoabsorbent or the IFA (Indirect Immunofluorence).

QNo 02

Sanieso:. Pin Point 14cm Large cyst appear to Contain the fluid?

(a)

The likely mostly dignosis will be the unioculer hydated cyst disease.

QNO:02

(b)

Parasite responsible for this is the Echinococcus granulosus.

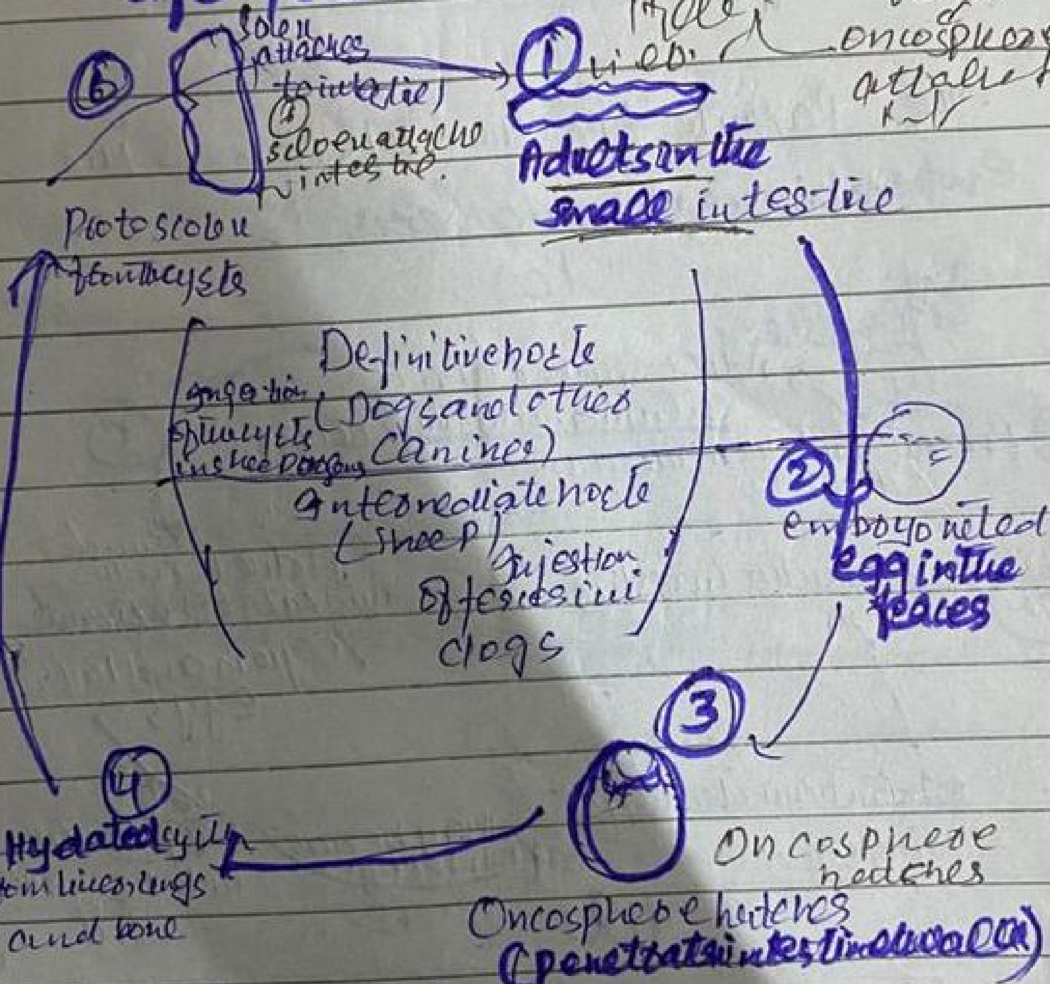
(C)

Adult intestine

embryonated egg in the faeces

oncosphere attached

Lifecycle:-



(d)

Labatory Diagnosis:-

1) Radiological and ultrasound detects

2) The hydate cysts in the biopsy of lungs, liver.

3) Presence of the **brood capsule** (Presence of protoscoleces)

Serological Test (indirect hemagglutination)

Answers

Scotch tape is performed.

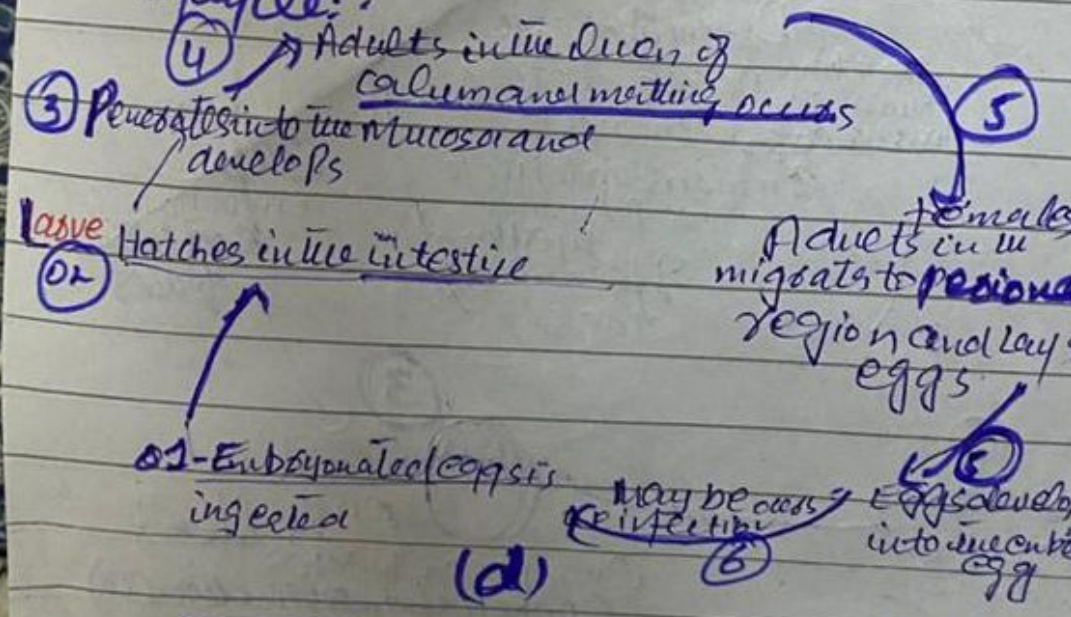
(a)

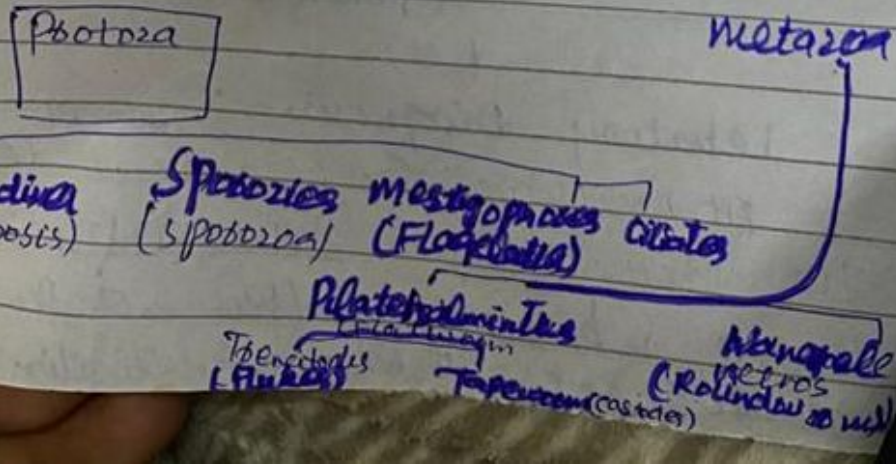
Embryonated eggs seen on the scotch tape and Thin shell and one of its tissues is flattened.

The Parasite for the infection is the Enterobiasis vermicularis,

(c)

Lifecycle:





QNO: 04

episodes of blood in the urine.

dysuria or urethral discharge.

no penile lesion

Several large eggs with the terminal spines:..

(a)

Causative agent:.

The causative agent is the Schistosoma Hematobium.

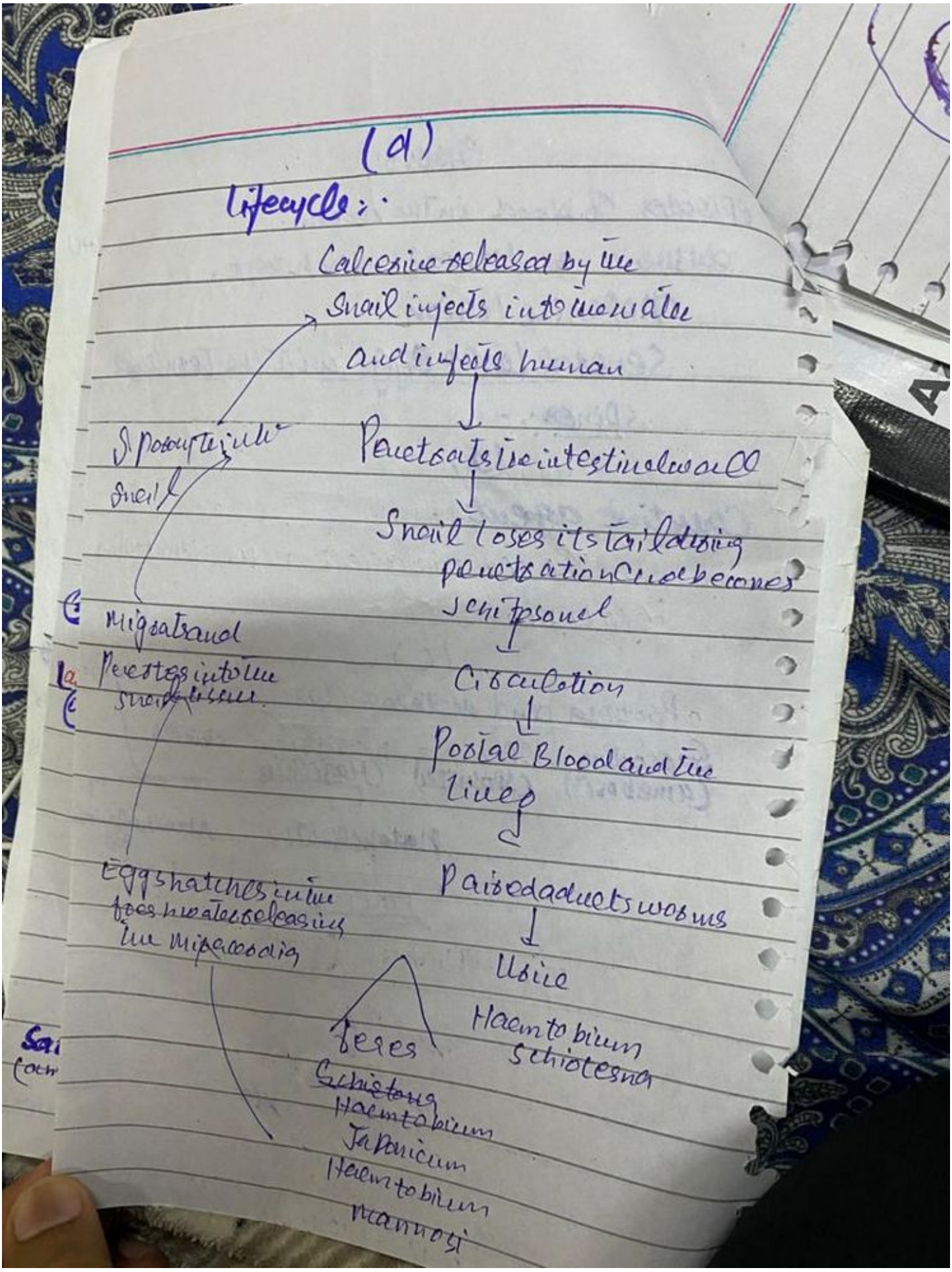
(c)

Protozoa and metazoa Classification.

- Protozoa
  - Sarcodina (amebosis)
  - Sporozoa (Sporozites)
  - Mastigophores (Flagellates)
  - ciliates
- Metazoa.
  - Platyhelminths
    - Flat worm
      - (Trematode) Flukes
      - Cestode (Tapeworm)
  - Nemathelminthes
    - Round worm

(d)

Lifecycle:


Cercariae released by the snail injects into mammalian and infects human
S. haematobium
Snail
Penetrates the intestinal wall
Snail loses its tail during penetration & becomes schistosomula
Migrated and Penetrates into the snail tissue
Circulation
Portal Blood and the liver
Eggs hatches in the fresh water releasing the Miracidia
Paired adults worms
Ureter
Haematobium
Schistosoma
Feces
Schistosoma
Haematobium
Japonicum
Haematobium
mansoni

Mannosi mili
calval spine

Schistosoma haematobium mili
(terminal spine)