

Examination for (Master Degree Clinical Pathology
(2005)

Course Title: Clinical Chemistry

Date: 17/10/2021

Time Allowed: 3.0 hours

Total marks: 100 marks



Tanta University
Faculty of Medicine
Department of Clinical Pathology

All questions must be answered

I-Discuss:

- a-CSF proteins: clinical significance and methods detection (10)
b-The role of lab studies in the evaluation of primary hyperparathyroidism (15)
c-Chemiluminescence: principle, and its applications (10)

II-Give an account on:

- a-Lab studies performed in diabetic ketoacidosis (DKA) (10)
b-Lab tests which are useful in determining the cause of hypercalcemia (10)
c-Serological markers of hepatitis B virus (15)

III-Describe in brief:

- a-Polyuria: causes and laboratory approach (10)
b-Oncofetal antigens: clinical significance and methods of detection (10)
c-Clinical significance of secreted enzymes and methods of detection (10)

ميعاد امتحان العملي أيام الأحد ٣١ أكتوبر والاثنين ١ نوفمبر ٢٠٢١
ميعاد امتحان الشفوي يوم الأربعاء ٣ نوفمبر ٢٠٢١

رئيس القسم
أ.د/أماني أبو العينين

Examination for MSc in Clinical Pathology

Hematology Exam

Date : 6/11/2021

Time Allowed : 3 hour

Total marks : 100 marks



Tanta University
Faculty of Medicine
Department of Clinical Pathology

All questions must be answered :

Q1 – Give an account on:

- a. Morphological abnormalities of red blood cells and their significance in diagnosis of anemia. (9 marks)
- b. Differential diagnosis of anemia of chronic disease (8 marks)
- c. Pathogenesis and laboratory diagnosis of G6PD (8 marks)

Q2- Give a short notes on:

- a. Laboratory findings in ALL. (9 marks)
- b. How to approach case of polycythemia (8 marks)
- c. Laboratory manifestations in multiple myeloma (8 marks)

Q3 - Give a short notes on:

- a- Role of the platelet in hemostatic process & enumerate qualitative and quantitative factors affecting platelet function. (15marks)
- b. Protein C& protein S (pathophysiology & function) (10 marks)

Q4 - Give a short notes on:

- a. Complement system . (15 marks)
- b. Nonimmunological complications of blood transfusion (10 marks)

Good luck



Give short account on: (7.5 each)

- 1- Enumerate myeloproliferative neoplasms and give the WHO diagnostic criteria of pre fibrotic myelofibrosis?
- 2- Laboratory diagnosis of microcytic hypochromic anemia?
- 3- diagnostic approach for a case of thrombocytopenia?
- 4- Oncofetal antigens as tumor markers
- 5- Laboratory assessment of diabetic nephropathy
- 6- Types and causes of proteinuria

ملحوظة: لجنة الشفوي يوم الاربعاء 2021-8-25

لجنة الممتحنين:

ا.د. محمد عطية

ام.د. رضوي محمود الشرايبي

Examination for (Parasitology MSC)

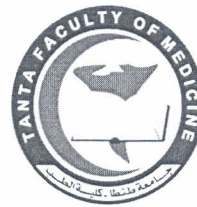
Course Title: Clinical pathology

Term: Second semester

Time Allowed: 3 hour

Date: 19/8/2021

Total marks: 90 marks



Tanta University
Faculty of Medicine
Department of Clinical Pathology

All questions must be answered:

- 1- Give short notes on (18 marks/ 3 marks each)
 - a- Definition of electrophoresis
 - b- Principle of Separation
 - c- Its Components
 - d- Factors Affecting Migration Rates
 - e- Principle of Immunofixation
 - f- Clinical Significance of α_2 -globulin
- 2- Enumerate sequencing techniques and describe in details the principle of pyrosequencing. (20 marks)
- 3- Tabulate the differences between conventional and real time PCR techniques. (12 marks)
- 4- Enumerate chemical mutagens (10 marks)
- 5- Summarize DNA mutation repair mechanisms (15 marks)
- 6- give short account on steps of gene expression in-vivo. (15 marks)

يعقد امتحان الشفوى والعملى بقسم الباثولوجيا الاكلينيكيه بالعياده الشامله يوم السبت الموافق 2021/8/21
الساعة العاشره صباحا

**Final Semester Examination For Master Degree of
Clinical Pathology**
Course Title: Medical Parasitology
Date: 17-8-2021
Time Allowed: 3 hours
Total Assessment Marks: 90 MARKS



Tanta University
Faculty of Medicine
Department of
Parasitology

The following questions must be answered: (Draw whenever possible)

I- Enumerate techniques of direct examination of blood-dwelling parasites.
Discuss in detail one of them. (8 marks)

II- How can you confirm the diagnosis of the following parasitological cases:-

A. 37-year-old male patient, returning from Iraq, presented with multiple ulcers on his leg. About 6 weeks earlier, he noticed several red papules on his legs which then became ulcerated with oozing material. Over time, they reached 2 cm in diameter each with raised borders. On examination, there was no fever, chills, or weight loss.

B. A 6-year-old boy suffered from bouts of moderate fever associated with abdominal pains. Physical examination revealed mild hepatomegaly. Complete blood count show marked eosinophilia (35%) and mild anaemia.

(10 marks)

III- **Write short notes on:**

(20 marks)

- 1) PCR technique (principle and applications in parasitology).
- 2) Laboratory diagnosis of strongyloidiasis.
- 3) External myiasis.
- 4) Life cycle of *Clonorchis sinensis* (diagram only).

IV- **Give the reason(s) for:**

(15 marks)

- 1) The need for immunodiagnosis for schistosomiasis.
- 2) Hydatid cysts should be handled very carefully during surgery.
- 3) Renal impairment in case of malaria.
- 4) Life-threatening conditions may supervene during *Ascaris* infection.
- 5) Untreated kala-azar is frequently fatal.

((TURN OVER THE PAPER))

Head of department:

V- Compare between the following:

(12 marks)

- 1) Stool smear in amoebiasis and cryptosporidiosis.
- 2) Blood film in lymphatic filariasis and falciparum malaria.
- 3) *Taenia solium* and *Taenia saginata* (morphology of gravid segments and scolices).
- 4) Anaemia in hookworm disease and visceral leishmaniasis.

VI- Mention the indication(s) of the usage of the following in parasitology:

(10 marks)

- 1) Coproantigen detection.
- 2) *Toxoplasma* IgG avidity test.
- 3) CSF examination.
- 4) Diethylcarbamazine.
- 5) Ziehl-Neelsen stain.

VII- Choose the correct answer:

(15 marks)

1. A patient complained of recurrent fever every 72 hours. His blood film revealed a schizont with 8 merozoites. Which of the following is the suspected parasite?

- a. *Leishmania donovani*
- b. *Plasmodium malariae*
- c. *Plasmodium ovale*
- d. *Plasmodium vivax*

2. Which of the following parasites are associated with high risk of infection for lab technicians?

- a. *Hymenolepis diminuta*
- b. *Ascaris lumbricoides*
- c. *Fasciola hepatica*
- d. *Taenia solium*

Muhammad Saleh

3. Which of the following is most likely detected by muscle biopsy examination?

- a. *Trichuris trichiura*
- b. *Ascaris lumbricoides*
- c. *Clonorchis sinensis*
- d. *Trichinella spiralis*

4. External autoinfection occurs in all the following infections EXCEPT:

- a. Cryptosporidiosis
- b. Intestinal capillariasis
- c. Enterobiasis
- d. Hymenolepiasis nana

5. Entero-Test is useful for diagnosis of which of the following?

- a. *Trichuris trichiura*
- b. *Enterobius vermicularis*
- c. *Clonorchis sinensis*
- d. *Balantidium coli*

6. The diagnostic stage of which parasite of the following is disporocystic tetrazoic?

- a. *Cryptosporidium* spp.
- b. *Cyclospora cayatenensis*
- c. *Isospora belli*
- d. None of the above

7. Which of the following statements is True regarding *Acanthamoeba*?

- a. It is a common cause of chorioretinitis
- b. It only exists as a trophozoite stage
- c. Affection of the brain is always manifested as acute meningoencephalitis
- d. Its trophozoites and/or cysts can be detected in infected tissues

3
موسم الصيف

8. All the following parasites cause meningitis EXCEPT:

- a. *Ancylostoma duodenale*
- b. *Strongyloides stercoralis*
- c. *Trichinella spiralis*
- d. *Trypanosoma gambiense*

9. Fever, diarrhea, and eosinophilia in a returned traveller may be due to each of the following as a single causative agent EXCEPT:

- a. *Strongyloides stercoralis*
- b. *Plasmodium falciparum*
- c. *Capillaria philippinensis*
- d. *Schistosoma mansoni*

10. Which of the following parasites is carcinogenic?

- a. *Paragonimus westermani*
- b. *Schistosoma haematobium*
- c. *Trichuris trichiura*
- d. *Schistosoma japonicum*

11. Which of the following mechanisms are used by African trypanosomes for immune evasion?

- a. Intracellular location
- b. Acquiring a coat of host proteins
- c. Antigenic variation
- d. Hiding inside macrophages

12. Which of the following is associated with serpiginous track-like skin lesion?

- a. *Ancylostoma braziliense*
- b. *Ancylostoma duodenale*
- c. *Toxocara canis*
- d. *Trichuris trichiura*

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13. Sputum examination is useful for the diagnosis of which of the following?

- a. Giardiasis
- b. Visceral larva migrans
- c. Paragonimiasis
- d. Trichuriasis

14. Which of the following parasites induces solid immunity?

- a. *Giardia lamblia*
- b. *Cryptosporidium parvum*
- c. *Leishmania tropica*
- d. *Plasmodium vivax*

15. Tropical pulmonary eosinophilia is a manifestation of which of the following?

- a. Paragonimiasis
- b. Lymphatic filariasis
- c. Schistosomiasis haematobium
- d. Strongyloidiasis

Best Wishes

سيتم تحديد مواعيد الإمتحانات الشفوى و العملى بمعرفة القسم

Chairman of Department
Prof. Dr.

عبد الله محمد
13.12.14

Examination of Master Clinical Pathology

Course Title: Clinical Microbiology

Date: August 2021

Time Allowed: 3 hours

Total Assessment Marks: 90



Tanta University
Faculty of Medicine
Department of Clinical Pathology

I- Discuss causes, lab diagnosis and prevention of the following

- a) Food poisoning. (10 marks)
- b) Actinomycosis. (10 marks)
- c) Nosocomial Infections: causes and diagnosis. (10 marks)

II- Answer the following questions:

- a) Sterilization: definition, and types. (10 marks)
- b) Smallpox: pathogenesis, diagnosis, and prophylaxis. (10 marks)
- c) Corona viruses. (10 marks)

III- Give an account on the following:

- d) Humoral immunity. (10 marks)
- e) Immunoprophylaxis. (10 marks)
- f) Pathogenesis of autoimmune diseases. (10 marks)

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- Practical examination will be held in clinical pathology department on 31 August & 1 September 2021.
 - Oral examination will be held in clinical pathology department on 1 September 2021.

Department Chairman
Prof. Amany Abo Elenien

Examiners
Prof. Amany Abo Elenien
Prof. Wesam Salah

Faculty of Medicine
Clinical Pathology Department
MSc Hematology
23/10/2021.
Total Marks 40
Time allowed 3 hours



All questions must be answered:

I Discuss differential diagnosis of macrocytic normochromic anemia and laboratory diagnosis of megaloblastic anemia. (8 marks)

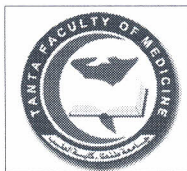
II Discuss principles and application of cytochemistry in acute leukemia. (8 marks)

III Give an account on

1. Paroxysmal nocturnal hemoglobinuria. (4 marks)
2. Diagnosis of hairy cell leukemia. (4 marks)
3. Idiopathic thrombocytopenic purpura. (4 marks)

IV Write short notes on

1. Monocytosis. (4 marks)
2. Causes of prolonged APTT. (4 marks)
3. Diagnostic criteria of hypersplenism. (4 marks)



All questions must be answered:

Q1	Give an account on: a. Polyuria: definition causes and laboratory investigation required to confirm diagnosis. b. Immunoelectrophoresis : principle, applications, and types . c. Role of Lab in diagnosis of acute hepatitis.	8 20 10
Q2	Mention: a. Reye's syndrome: definition, etiology and laboratory finding. b. Role of the kidney in maintaining normal PH. c. Oncogenes and tumor suppressor gene	7 10 10
Q3	Draw An algorism for the following: a. Differential diagnosis of hyperkalemia. b. Male infertility.	10 10
Q4	Write short note on clinical significance and method of detection for the following: a. C reactive protein. b. Rheumatoid factor. c. Carcinoemberonic antigen	5 5 5

Department Chairmen
Prof. Amany Abo-Elaneen

Prof. Ekhlas Elshehk
Prof. Hala Nagy
Prof. Gehan Atea