



All the questions should be answered :

Q1: Compare between . (5 marks each)

- Class I and II MHC antigen presentation
- Plasmid and transposons
- Flagella and pilli
- Exotoxins and endotoxins

Q2: Explain the mechanisms of bacterial resistance to antimicrobial drugs and the role of genetic control. (10 marks)

Q3: Give an account on: (5 marks each)

- Monoclonal antibodies.
- Cord factor.
- Mycotoxicosis
- cultures in cultivation of viruses

Q4: How can you diagnose a case with : (5 marks each)

- Latent T.B.
- Primary stage of Syphilis
- Whooping cough

Q5: A 3- years old boy was brought to the hospital by his mother , who said that he is not well, the baby is irritable , is listless & feverish . 4 hours later, he showed neck stiffness with purpuric rash . (15 marks)

- What infection may the child have ?
- What diagnostic microbiology test were performed ?
- What are the most likely bacterial pathogen(s)?
- Which antibiotics should have been given?

Q6: Define the measures used to control hospital acquired infections. (10 marks)

Examination for Master Degree in clinical pathology :
Course Title: Microbiology and Immunology
Date: 15 / 04 / 2017
Term: 1st part
Time Allowed: 3 hours
Total Assessment Marks: 100 marks
Number of the questions:8



Tanta University
Faculty of Medicine
Department of Microbiology &
Immunology

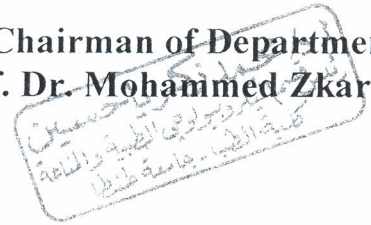
Q7: Enumerate the orally transmitted hepatitis and discuss the laboratory diagnosis and vaccine used against one of them (5 marks)

Q8: Anti-fungal therapy. (5 marks)

Oral exam will be held on 24 /4/2017 at 10:30 am in the Microbiology Depart

Practical exam. is on 30/04 – 2/5 /2017.

**Chairman of Department
Prof. Dr. Mohammed Zkaria**



Tanta University
Faculty of Medicine
Clinical pathology Department
Date: 9-4-2017
Hematology M.D.
Paper 1
Number of Questions: 3
Time allowed: 3 hours



All questions should be answered

Q1 Write on each of the followings:

- a) Indications and laboratory assessment of renal dialysis. (20 marks)
- b) Pathogenesis ,laboratory diagnosis and differential diagnosis of PCO (15 marks)
- c) Causes of hypoglycaemia in neonates, infants and adults and its laboratory diagnosis. (15marks)

Q2) Give an account on:

- a) Complement activation pathways. (15 marks)
- b) B cell functions. (10 marks)

Q3) Discuss each of the following:

- a) Causes and laboratory diagnosis of bacterial food poisoning. (15 marks)
- b) Infectious diseases transmitted from mother to fetus. (10 marks)

Good luck

رئيس اللجنة
11/4/2017

د/ ايمان
د/ عاتق
د/ انيس
د/ احمد

Tanta University

Faculty of Medicine

Clinical Pathology Department

April, 2017



SECOOND PAPER Hematology

Hematology for M.D

Total Marks: 100

Time Allowed: 3 hours

All questions must be answered

1-1a Discuss role of vascular endothelium in hemostasis. (12 marks)

1b- Write short account on Paroxysmal nocturnal hemoglobinuria. (10 marks)

2-2a- Discuss sickle cell diseases and sickle cell syndromes. (12 marks)

2-b Write short account on basic concepts in hematological malignancies. (10 marks)

3-3-a Discuss nature and consequences of acquired genetic abnormalities in hematological malignancies. (12 marks)

3-b Write short account on thrombophilic screening. (10 marks)

4-4-a Discuss morphological variants of CLL, laboratory diagnosis and prognosis. (12 marks)

4-b Write short account on bone marrow biopsy, indications and clinical significances. (10 marks)

5- Case :Male patient 55 years old complained of increasing fatigue , weakness and pain in lower back and arms.

Lab Findings : CBC revealed anemia normal and Differential leucocytic count except for rouleaux appearance of the RBCs, ESR 50mm/Hr, Normal

Kidney profile and normal liver profile except for increases globular protein.
The skeletal survey indicated bone lesions in various sites.



- 1- What follow-up laboratory test might be ordered to assist in establishing a definitive diagnosis?
- 2- What is the final diagnosis?
- 3- What is the nature of protein found in urine?
- 4- What is the most significant laboratory findings in this disorder?

(12 marks)

Good Luck

Department Chairman

Prof. Desoky AboAmmo



د. دسوقي
ابو اممو

Examination for (MD Clinical Pathology)
Course Title : Paper 2 (Clinical Chemistry)
Date : 18 /4/ 2017
Time Allowed : 3.0 hours
Total marks : 100 marks



Tanta University
Faculty of Medicine
Department of Clinical Pathology

All questions must be answered

- | | marks |
|--|-------|
| I- Discuss: | |
| a- Hirsutism, most common causes and their laboratory assessment | (15) |
| b- Micro-RNA, functions and possible applications in molecular medicine | (20) |
| II- Write an account on: | |
| a- Chemiluminescence, the theoretical background and its laboratory applications | (10) |
| a- How to introduce a new test in the lab ? | (10) |
| b- Gastrointestinal hormones and its clinical significance | (10) |
| III- Give an account on: | |
| a- Follow up of renal transplantation: laboratory assessment | (10) |
| b- Genetic bases of metabolic syndrome | (15) |
| c- Clinical relevance of plasma and urine osmolality | (10) |

رئيس القسم

أ.د/ دسوقي عزت أبو عمو

أعضاء لجنة الامتحان

أ.د/ ثريا بدوي

أ.د/ محمد سويلم

أ.د/ أماني أبو العينين

أ.د/ هشام السروجي



Tanta University
Faculty of Medicine
Department of Parasitology

Course Title: Parasitology Examination for Master Degree of Clinical Pathology

Date: 10-4-2017 Time allowed: 2 hours Total assessment marks: 100 Marks

Chairman of Department

Prof Dr. Samy El-Kowrany

Prof Dr. Samy El-Kowrany

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

- I) Mention **four** different methods for direct laboratory diagnosis of blood parasites. Discuss **one** of these methods. Illustrate with diagrams the diagnostic stages of intra-erythrocytic protozoa.

[20 marks]

- II) **Give an account on:**

[20 marks]

- 1) Laboratory diagnosis of *Fasciola gigantica* infection.
- 2) External myiasis.
- 3) Visceral leishmaniasis (clinical aspects and direct laboratory diagnosis).

- III) **Give the reason(s) for the following statements:**

[20 marks]

- 1) Avidity test is needed for diagnosis of maternal toxoplasmosis.
- 2) Elephantiasis may occur in chronic infection with *Wuchereria bancrofti*.
- 3) *Entamoeba histolytica* infection could be fatal.
- 4) Hyperinfection may occur in strongyloidiasis.

- IV) **Name only TWO parasites which can be:**

[10 marks]

- 1) Diagnosed by cerebrospinal fluid examination.
- 2) Complicated with chorioretinitis.
- 3) Presented with hypochromic anaemia.
- 4) Diagnosed by cultivation on NNN medium.
- 5) Presented with high eosinophilia.

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V) Read the following and answer the related questions: [20 marks]

A diarrhoeic stool sample with mucus and blood was referred to your laboratory. Available clinical data included hepatosplenomegaly, recurrent abdominal pains, and hypochromic anaemia.

- 1) What is the possible diagnosis of this case?
- 2) How would you confirm this diagnosis?
- 3) Enumerate other **three** parasites that may cause dysentery.

VI) Choose the correct answer(s): [10 marks]

1- The cyst can be a diagnostic stage for all the following parasites

EXCEPT:

- | | |
|-----------------------------|------------------------------|
| (A) <i>Giardia lamblia</i> | (B) <i>Naegleria fowleri</i> |
| (C) <i>Balantidium coli</i> | (D) <i>Acanthamoeba</i> spp. |

2- Autoinfection may occur in infection with:

- | | |
|----------------------------|-----------------------------------|
| (A) <i>Taenia saginata</i> | (B) <i>Trichuris trichiura</i> |
| (C) <i>Giardia lamblia</i> | (D) <i>Dracunculus medinensis</i> |

3- Diethylcarbamazine is useful in the diagnosis of:

- | | |
|------------------------|-------------------|
| (A) Hepatic amoebiasis | (B) Scabies |
| (C) Cysticercosis | (D) Onchocercosis |

4- Loeffler's syndrome may occur in patients infected with:

- | | |
|----------------------------------|------------------------------------|
| (A) <i>Giardia lamblia</i> | (B) <i>Enterobius vermicularis</i> |
| (C) <i>Ancylostoma duodenale</i> | (D) <i>Entamoeba histolytica</i> |

5- Xenodiagnosis is used for diagnosis of which of the following?

- | | |
|--------------------------------------|--------------------------------|
| (A) <i>Fasciola hepatica</i> | (B) <i>Schistosoma mansoni</i> |
| (C) <i>Strongyloides stercoralis</i> | (D) <i>Trypanosoma cruzi</i> |

6- Eating raw beef is the mode of infection in all of the following parasites **EXCEPT:**

- | | |
|------------------------------------|------------------------------------|
| (A) <i>Taenia saginata</i> | (B) <i>Heterophyes heterophyes</i> |
| (C) <i>Sarcocystis bovihominis</i> | (D) <i>Toxoplasma gondii</i> |

7- Thrombocytopenia may occur in infection with:

- (A) *Trichinella spiralis* (B) *Leishmania donovani*
(C) *Cryptosporidium* spp. (D) *Fasciola gigantica*

8- Duodenal fluid examination is useful for diagnosis of infection with:

- (A) *Isospora belli* (B) *Trichinella spiralis*
(C) *Toxoplasma gondii* (D) *Strongyloides stercoralis*

9- Which of the following parasites can be infective for laboratory personnel?

- (A) *Ascaris lumbricoides* (B) *Strongyloides stercoralis*
(C) *Heterophyes heterophyes* (D) *Cryptosporidium* spp.

10- Nephrotic syndrome may complicate infection with:

- (A) *Trichuris trichiura* (B) *Plasmodium malariae*
(C) *Schistosoma mansoni* (D) *Hymenolepis nana*

((TURN OVER THE PAPER))

سيتم تحديد مواعيد الإمتحانات الشفوى و العملى بمعرفة القسم

Best wishes