

Examination for Diploma Degree in: Tropical Medicine

Course title: Medical Microbiology & Immunology

Date: 26 /2/ 2022

Term: February 2022

Time allowed: 1 hour

Total assessment marks: 30 marks



Tanta University

Faculty of Medicine

Microbiology Department

All Questions Are to Be Answered:

- 1- Define and mention the criteria of healthcare associated infections. **(4 marks).**
- 2- Discuss the immune mechanisms against tumor. **(4 marks)**
- 3- Mention the causative agents and mode of transmission of the following diseases:
 - a- Whooping cough **(2 mark)**
 - b- Malta fever **(2 mark)**
 - c- Malignant pustule **(2 mark)**
 - d- Glandular fever **(2 mark)**
 - e- Bacillary dysentery **(2 mark)**
- 4- Discuss mode of infection and diagnosis of **hepatitis C virus** **(4 marks)**
- 5- **Pyrexia of unknown origin:** Define, list the most common causative agents **(3 marks)**
- 6- **A 55-year-old man who just arrived from Germany experiences attacks of bloody diarrhea and abdominal cramps. He states that he had a hamburger sandwich with green salad. Culture of stools on Mac Conkey's medium reveals a pure culture of rose-pink colonies. Examination of Gram-stained film from these colonies shows Gram-negative bacilli.**
 - a) what is the possible causative organism of this condition? (1 marks)
 - b) What is the virulence factor of this organism? (1 marks)
 - c) What is the most serious complication of this condition? (1mark)
 - d) Mention other types of the same species that can cause diarrhea (2 mark)

Chairman of Department
Prof. Mohamed Zakaria

Oral exam: Monday 7/3/2022 At 10 am in Microbiology & Immunology Department



Diploma Degree of Tropical Medicine
Course Title: Medical Parasitology
Date: 26-2-2022
Time Allowed: 1.5 hours
Total Assessment Marks: 100 MARKS

Tanta University
Faculty of Medicine
Medical Parasitology Dep.

Answer all the following questions:

I. Give an account on:

30 marks

- 1- Pathogenesis and clinical aspects of hydatid disease.
- 2- Protozoa induced splenomegaly (clinical aspects and laboratory diagnosis).
- 3- Medical importance of fleas.

II. Case Study:

30 marks

A 43-year-old male came to hospital complaining of severe occipital headache, projectile vomiting, fever, myalgia, and fatigue. At the time of Hospital admission, his temperature, 39.1°C; pulse, 89 beats/min; respiratory rate, 33 breaths/min; blood pressure, 133/56 mmHg. Physical examination revealed the presence of positive meningeal irritation and Babinski signs. The patient was diagnosed with bacterial meningitis. However, no improvement was achieved after administration of empirical treatment. His brother mentioned that he had been to a water park five days before the onset of symptoms.

- 1- What can be the suspected disease and causative parasite?
- 2- What is the correct therapeutic approach for this patient?
- 3- Mention another three parasites that may cause a CNS insult.

III. Explain why and mention three possible parasites:

20 marks

- 1- Anemia may result from parasitic infections (mention their mechanism).
- 2- Opportunistic parasites are dangerous.
- 3- Fever can be precipitated by insect bites.
- 4- Respiratory complications may proceed gastrointestinal parasitic infections.

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IV. Choose ONE correct answer:

20 marks

1. Which of the following protozoa can cause jaundice?

- a) *Trichomonas vaginalis*
- b) *Plasmodium vivax*
- c) *Dientamoeba fragilis*
- d) *Trypanosoma gambiense*

2. Which of the following helminths is soil transmitted?

- a) *Diphyllobothrium latum*
- b) *Opithorchis viverrini*
- c) *Strongyloides stercoralis*
- d) *Trichinella spiralis*

3. Which of the following protozoa can cause cardiomyopathy?

- a) *Cryptosporidium parvum*
- b) *Trypanosoma cruzi*
- c) *Giardia lamblia*
- d) *Balantidium coli*

4. Which of the following parasitic diseases can be diagnosed by blood film?

- a) Cryptosporidiosis
- b) Elephantiasis
- c) Trichuriasis
- d) Scabies

5. Which of the following diseases can be treated by ivermectin?

- a) Diphyllbothriasis
- b) Fascioliasis
- c) Pediculosis
- d) Trypanosomiasis

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6. Which of the following insects may carry cestodal infection?

- a) *Phlebotomus morsitan*
- b) *Triatoma megistus*
- c) *Glossina palpalis*
- d) *Ctenocephalides felis*

7. Which of the following *Leishmania* species causes Chiclero's ulcer?

- a) *L. major*
- b) *L. tropica*
- c) *L. mexicana*
- d) *L. donovani*

8. Which of the following is an anti-intestinal protozoal drug?

- a) Albendazole
- b) Di-ethyl carbamazine
- c) Ketoconazole
- d) Nitazoxanide

9. Which of the following parasite can cause lymphangitis?

- a) *Dracunculus medinensis*
- b) *Leishmania donovani*
- c) *Schistosoma mansoni*
- d) *Wuchereria bancrofti*

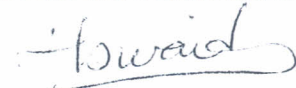
10. Retro-infection may occur with which of the following parasites?

- a) *Enterobius vermicularis*
- b) *Strongyloides stercoralis*
- c) *Toxoplasma gondii*
- d) *Toxocara canis*

Best wishes

Head of Medical Parasitology Department

Prof. Howaida Ismail



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Prof. Mohamed Zakaria

Oral exam: Monday 7/3/2022 At 10 am in Microbiology & Immunology Department

Tanta University ----- Internal Medicine Exam
Faculty of Medicine ----- Diploma of Tropical medicine
Internal Medicine Department -----
21/12/2022 ----- Time allowed: 3 hours



I) Choose the correct answer (40 marks)

1. Which of the following is generally accepted as the most sensitive screening tool for primary hypothyroidism?

- A. Free thyroxine (T4) assay
- B. Third-generation thyroid-stimulating hormone (TSH) assay
- C. Anti-thyroid peroxidase (anti-TPO) antibody assay
- D. Antithyroglobulin (anti-Tg) antibody assay

2. Which of the following is more suggestive of small cell lung cancer (SCLC) than non-small cell lung cancer (NSCLC)?

- A. Hemoptysis
- B. Pleural effusion
- C. Paraneoplastic syndromes
- D. Post obstructive pneumonia

3. When administering a dose of digoxin to a patient with heart failure (HF). The physician would become concerned with the possibility of digitalis toxicity if the patient reported which symptom(s)?

- A. Muscle aches
- B. Constipation
- C. Pounding headache
- D. Anorexia and nausea

4. In patient with chronic heart failure. Which clinical manifestations, if assessed, would indicate acute decompensated heart failure?

- A. Fatigue, orthopnea, and dependent edema
- B. Severe dyspnea and blood-streaked, frothy sputum
- C. Temperature is 100.4o F and pulse is 102 beats/minute
- D. Respirations 26 breaths/minute despite oxygen by nasal cannula

5. According to the 2019 EULAR/ACR classification criteria, what is the entry criterion required to receive a diagnosis of lupus?

- A. Butterfly rash
- B. Joint involvement
- C. Proteinuria >0.1 g/24 hours
- D. ANA titer >1:80

6. Patients with lupus who are taking an antimalarial drug should have which examination prior to treatment and annually during treatment?

- A. Pap test
- B. Ear examination
- C. Eye examination
- D. Colorectal examination

7. Treatment of severe, rapidly progressive or life- or organ-threatening vasculitis typically includes which of the following drugs?

- A. Methotrexate
- B. Corticosteroids
- C. Azathioprine
- D. Mycophenolate mofetil

8. Which of the following would not be an expected sign of right sided heart failure?

- A. Prominent jugular vein
- B. Hepatomegaly
- C. Pulmonary edema
- D. Pleural effusion

9. Which of the following causes of Cushing's syndrome does the phrase "Cushing's disease" specifically refer to?

- A. Ectopic ACTH production
- B. Adrenal adenoma
- C. Pituitary adenoma
- D. Iatrogenic

10. In patients with diabetic nephropathy, Blood Pressure should be controlled aggressively, usually beginning with which of the following?

- A. Diuretics
- B. Statins
- C. Calcium channel blockers
- D. Angiotensin inhibition

11. In addition to chest x-ray and pulmonary function testing, which of the following studies is most appropriate for patients < 50 yrs. who have symptomatic COPD?

- A. CBC
- B. Pulse oximetry
- C. Serum alpha-1 antitrypsin level
- D. Serum electrolyte levels

12. In all forms of progressive untreated aortic stenosis (AS), exertional syncope, angina, and dyspnea eventually develop. There are no visible signs of AS, although there are palpable signs such as carotid and peripheral pulses that are reduced in amplitude and slow rising. On auscultation, which of the following audible findings is most characteristic of AS?

- A. Crescendo-decrescendo ejection murmur
- B. Ejection click early after S1
- C. S4
- D. Splitting of S2

13. About 90% of pheochromocytomas are in which of the following?

- A. The adrenal medulla
- B. The brain
- C. The genitourinary (GU) system
- D. The pericardial sac

14. Which of the following is usually the first treatment given to patients with autoimmune hemolytic anemia?

- A. Corticosteroid
- B. Blood transfusions
- C. Immunosuppressant drugs
- D. Removal of the spleen

15. A patient with thrombocytopenia has fragmented RBCs on peripheral blood smear and decreasing Hb level. Which of the following is the most likely suspected diagnosis?

- A. Hemolytic-uremic syndrome
- B. Hereditary hemorrhagic telangiectasia
- C. HIV infection
- D. Immune thrombocytopenia

16. Giant cell arteritis is a relatively common form of vasculitis in the US and Europe. This disorder most often affects which of the following structures in the body?

- A. Aortic arch branches
- B. Coronary arteries
- C. Peripheral arteries
- D. Temporal arteries

17. Which of the following increases the risk of cardiovascular disorders in patients with obesity?

- A. Osteoporosis
- B. Excess abdominal fat
- C. Psychologic disorders
- D. Gastric ulcer

18. Which statement concerning renal replacement therapy in patients with CKD is accurate?

- A. Renal replacement therapy is indicated for all patients with CKD
- B. Severe metabolic acidosis, unresponsive to medical management, is an indication for renal replacement therapy
- C. Hyperkalemia, unresponsive to medical management, does not indicate the need for renal replacement therapy
- D. Renal replacement therapy is not indicated in asymptomatic patients

19. Which of the following is a major cause of secondary dyslipidemia?

- A. Apo C-II deficiency
- B. Diabetes
- C. Familial combined hyperlipidemia
- D. Sitosterolemia

20. A 45-yr-old patient with a history of asthma is found to have an elevated blood pressure. Elevated pressures are confirmed on 2 additional readings in the physician's office. In evaluating therapies for this patient, which class of antihypertensive drugs is contraindicated?

- A. Thiazide diuretics
- B. Beta blockers
- C. Angiotensin II blockers
- D. Calcium channel blockers

II) Mention (20 marks)

- Intrinsic renal causes of acute kidney injury.
- Causes of hereditary thrombophilia.
- Injectable medications for type 2 diabetes mellitus.
- Indications for renal replacement therapy in chronic kidney disease.
- Hypertensive emergency and urgency.

سيتم عقد امتحان الشفوى والكلينكال يوم الأربعاء الموافق ٢ مارس ٢٠٢٢ الساعة الثامنة صباحا بقسم
الامراض الباطنة