الورقة الأولى

Examination for Diploma Degree in: Tropical Medicine & Infectious Diseases Course Title: Tropical Medicine & Infectious Diseases . Date: October, 2018

Number of questions: Three Time Allowed: Three hours Total Assessment Marks: 50 Marks Tanta University
Faculty of Medicine
Department of Tropical
Medicine & Infectious
Diseases

Hepatology and gastroenterology

Case scenario

(10 marks)

34 years female patient had obtained ERCP to dislodge common bile duct stone. By next morning she developed severe epigastric pain referred to the back.

1. What is The most likely diagnosis?

(5 marks)

2. What are the investigations you recommend?

(5 marks)

MCQS

(15 marks)

- 1- A patient with lower abdominal pain, no weight loss and normal colonoscopy. The most likely diagnosis is:
 - a) Colonic carcinoma.
 - b) Crohn's colitis.
 - c) Ulcerative colitis
 - d) Irritable bowel syndrome
- 2- A 60 year old man presents with fever watery diarrhea and crampy abdominal pain since one week. He has just completed treatment for osteomyelitis. Proctosigmoidoscopy reveals erythematous ulcerations and yellowish white plaques. The most likely diagnosis is
 - a) Crohn's disease
 - b) Pseudomembranous colitis
 - c) Viral gastroenteritis
 - d) Clostridium perfringens enterocolitis
 - 3- The most common benign lesion in the liver is?
 - a) Hepatic adenoma
 - b) Hemangioma
 - c) hepatoplastoma
 - 4-The following statements about lactulose are true except:
 - a) It is a disaccharidase.
 - b) Digested in intestine.
 - c) used to treat hepatic encephalopathy.
 - d) overdose worsens encephalopathy.

5- The following cause dysentery except:

- a) Cancer rectum.
- b) Steatorrhea.
- c) Amoeba.
- d) Ulcerative colitis

6- HELLP syndrome consists of all the following except:

- a) Elevated liver enzymes.
- b) Severe itching
- c) hemolsysis
- d) Low platelets
- e) Occurs in third trimester

7- Blood ammonia level are useful for the diagnosis of HE.

- a) False
- b) True

8- In obstructive jaundice, LFTs usually shows

- a) Elevated indirect bilirubin and alkaline phosphatase
- b) Elevated indirect bilirubin and GGT
- c) Elevated direct bilirubin and alkaline phosphatase
- d) Elevated direct bilirubin and ALT
- e) Elevated direct bilirubin and AST.

9- Which of the following complications of portal hypertension often require surgical intervention (for more than 25% of patients)?

- a) Hypersplenism.
- b) Variceal hemorrhage.
- c) Ascites.
- d) Encephalopathy.

10- All of the following have been associated with H. pylori infection except:

- a) Squamous cell carcinoma of the esophagus
- b) Adenocarcinoma of the stomach
- c) Duodenal ulcer
- d) Active gastritis

11- Causes of splenomegaly include the followings except:

- a) Infectious mononucleosis
- b) Schistosomiasis
- c) Sickle cell anemia
- d) Chronic myeloid leukemia

12- Acute pancreatitis is caused by variety of disorders. Which of the following pairs of disorders account for 80 to 90% of cases

- a) Diabetes and viral illness
- b) Trauma and hyperlipidemia
- c) Trauma and gallstones
- d) Hyperlipidemia and alcohol
- e) Alcohol and gallstones

13-Hepatic encephalopathy is not precipitated by:

- a) GIT hemorrhage
- b) HCC
- c) Infection
- d) Zinc intake

14-Rifaximin is used in treatment of the following except:

- a) Hepatic encephalopathy
- b) Traveler diarrhea
- c) IBD
- d) IBS

15-The risk factors of HCC include the following except:

- a) Cirrhosis
- b) Smoking
- c) NASH
- d) Bilhariziasis of liver due to S. Mansoni

Short questions	(25 marks)
1- Enumerate causes of portal hypertension.	(10 marks)
2- Diagnosis and treatment of hepatitis E	(8 marks)
3- Give an account on causes of dysentery	(7 marks)

(Good luck)

الورقة الثانيسة

Examination for Diploma Degree in: Tropical Medicine & Infectious Diseases

Course Title: Tropical Medicine & Infectious Diseases.

Date: October, 2018

Number of questions: Three Time Allowed: Three hours

Total Assessment Marks: 490 Marks

Tanta University
Faculty of Medicine
Department of Tropical
Medicine & Infectious

Diseases

Infection and endemic diseases

Case scenario

(10 marks)

A27- year – old male presented with malaise, pyrexia, lymphadenopathy and a maculopapular rash. The monospot test is negative .Given history of high risk sexual behavior.

1. What is the likely diagnosis?

(5 marks)

2. What is the most appropriate investigation?

(5 marks)

MCQS

(15 marks)

1- Epstein-Barr virus is associated with the following except:

- a) Burkitt's lymphoma
- b) Cervical neoplasia
- c) Nasopharyngeal carcinoma
- d) Pharyngitis
- e) Autoimminue haemolytic anaemia

2- Typical features of Schistosoma mansoni infection include the following except:

- a) An endemic disease in Egypt and east Africa
- b) Abdominal pain with loose blood-stained stool
- c) Bowel papillomata
- d) Paraplegia and cor-pulmonale
- e) Weight loss and malabsorption due to small bowel disease

3- Which of the following is TRUE regarding amoebic liver abscess?

- a) Should be treated by diloxanide furoate alone
- b) Should be aspirated routinely
- c) Is associated with eosinophilia
- d) Usually affects the right lobe of the liver

4- Typhoid patient may develop rose spots ----- days after onset of fever.

- a) 7 days
- b) 10 days
- c) 5 days

5- Number of plasmodium species that cause malaria in humans

- a) 4
- b) 5

6- Black water fever is specific for :

- a) Plasmodium vivax
- b) Plasmodium malariae
- c) Plasmodium ovale
- d) Plasmodium falciparum

7- Rupture of spleen may occur in:

- a) Acute malaria
- b) Infectious mononucleosis (glandular fever)
- c) Both a and b
- d) Neither a nor b

8- Gold standard of diagnosis of typhoid is :

- a) Widal test
- b) Blood culture
- c) Stool culture
- d) None of the above

9- MDR TB: is defined as resistance to

- a) more than three anti tubercular drugs
- b) isoniazid and rifampin irrespective of resistance to any other drug
- c) INH, PZA and Rifampicin
- d) fluoroquinolones and at least one of the three injectable second-line drugs used to treat TB

10- Regarding toxoplasmosis in humans ,which of the following is NOT TRUE:

- a) becomes active in immuno-compromised patients
- b) acute infection could be transmitted from mother to her 3year old child
- c) associated with cats
- d) is mainly diagnosed by serological tests •

11- Blindness is a recognised complication of the following EXCEPT:

- a) cysticercosis
- b) Leprosy
- c) Onchocerciasis
- d) Legionella

12- The following parasites cause fever except:

- a) Trichinella spiralis
- b) Naegleria fowleri
- c) Hymenolopis nana
- d) Plasmodium vivax

13- There is lymphadenopathy in the following infections except:

- a) African trypanosomiasis
- b) Toxoplasmosis
- c) Schistosomiasis
- d) Kala-azar

14-splenomegaly is not caused by:

3- Short account on latent tuberculosis

- a) schistomiasis
- b) malaria
- c) ascariasis
- d) Kala-azar

15-Subcutaneous nodules are a typical finding in all except:

- a) Neurofibromatosis
- b) Hydatid disease
- c) Cysticercosis
- d) Onchocerciasis

Short questions: (25 marks) 1- Diagnosis and treatment of hepatitis E (10 marks) 2- Causes of fever of unknown origin (8 marks)

Good Luck

(7 marks)

الورق الدوك

Diploma examination in: Tropical Medicine & Infectious Diseases Course Title: Tropical Medicine & Infectious Diseases

Date: October, 2018

Number of questions: Three Time Allowed: Three Hours

Total Assessment Marks: 180 Marks



Tanta University
Faculty of Medicine
Department of Tropical
Medicine & Infectious
Diseases

Hepatology & GIT

All questions must be answered

I. Case scenario:

(30 marks)

A 43-year-old woman presents with mild pruritus. Physical examination reveals hyperpigmentation of the skin, xanthelasma, and hepatosplenomegaly. Results of laboratory studies are as follows: INR, 1.1; albumin, 3.6 g/dL; bilirubin, 1.3 mg/dL; alkaline phosphatase, 2123 U/L; aspartate aminotransferase (AST), 78 U/L; alanine aminotransferase (ALT), 98 U/L; and antimitochondrial antibody (AMA), positive (1/2560). Ultrasonography reveals hepatosplenomegaly and gallstones, but no biliary dilatation. Liver biopsy demonstrates lymphocytic portal infiltrates, reduced number of bile ducts, and cirrhosis.

1. What is your diagnosis?

(15 marks)

2. What is the treatment of choice?

(15 marks)

II. MCQs:

(50 marks)

- 1. Which one of the following enzymes is found primarily in the liver:
 - a) AST
 - b) ALT
 - c) Alkaline phosphatase
 - d) 5'-Nucleotidase
 - e) γ-Glutamyl transpeptidase
- 2. All of the following contribute to peptic ulcer disease except
 - a. Cigarette smoking
 - b. NSAIDs
 - c. H.pylori
 - d. Spicy foods
- 3. Adenocarcenoma of esophagus is strongly associated with
 - a. Barrett esophagus
 - b. Smoking
 - c. Achalasia
 - d. All of the above

4. Primary prevention of variceal bleeding is not achieved by

- a. Non specific beta blockers
- b. Mononitrates
- c. Band ligation
- d. Sclerotherapy

5. Advanced HCC according to BCLC is treated with

- a. Liver transplantation
- b. TACE
- c. Sorafenib
- d. None of the above

6. The hepatorenal syndrome in cirrhosis is characterized by

- a. Acute renal tubular necrosis
- b. Proteinuria and an abnormal urinary sediment
- c. Urinary sodium concentration less than 10 mmol/L
- d. An elevated central venous pressure in most patients

7. Which of the following features is more commonly associated with ulcerative colitis than with Crohn's disease

- a. Fistulas
- b. Rectal bleeding
- c. Segmental involvement
- d. An abdominal mass
- e. Mesenteric lymph node involvement

8. The extent of liver damage done by chronic hepatitis B or C infection can best be evaluated by

- a. Symptoms
- b. Elevation of serum transaminases
- c. Duration of infection
- d. Liver biopsy
- e. Presence or absence of ascites

9. Symptoms due to Clostridium difficile infection can be accurately diagnosed by

- a. Presence of diarrhea
- b. Stool positive for WBCs
- c. History of recent antibiotic usage
- d. Pseudomembranes noted on a sigmoidoscopy
- e. KUB ...flat-plate x-ray of the abdomen

10. Which term characterizes the frequency of chronic disease following hepatitis A infection

- a. Rare
- b. Infrequent
- c. Common
- d. Typical
- e. Nonexistent

11. Jaundice without bilirubin in the urine is seen in:

- a. Carcinomatosis
- b. Haemolytic anaemia
- c. Obstruction of common bile duct
- d. Infective hepatitis
- e.Chlorpromazine hepatitis

12. Screening of HCC in EGYPT includes:

- a. CT scan every 6 months.
- b. Ultrasonography every 3 months.
- c. Ultrasonography and AFP every 4 months.
- d. PIVKA II every 6 months.

13. All the following are causes of diarrhea except

- a. Diabetes
- b. Hypercalcemia
- c. Hyperthyroidism
- d. Irritable bowel syndrome

14. The most common cause of acute liver failure world-wide is which of the following?

- a. Acetaminophen
- b. Autoimmune hepatitis
- c. Budd-chiari syndrome
- d. HAV infection
- e. HBV infection

15. In gastro-oesophageal reflux the following are wrong except:

- a. Typically results in bile-stained vomiting
- b. Usually requires drug treatment
- c. May result in an oesophageal stricture
- d. Is best diagnosed by a barium swallow

16. Fecal Ag of H. pylori is positive in:

- a) Recent infection with H. pylori
- b) During treatment with PPIs
- c) Both a and b
- d) Neither a nor b

a l	Which one of the followings is least likely to be helpful to determine cause of jaundice: a) U S b) Hepatitis serology c) Abdominal x-ray d) CBC
a l	Which one of the followings is unlikely in diagnosis of bleeding per rectum: a) Colonscopy b) CT of the abdomen c) US of the abdomen

- d) PR exam
- 19. A 30 year old woman as a new diagnosis of auto immune hepatitis confirmed by liver biopsy. The first choice for single drug therapy for this patient would be which of the following?
 - a) Prednisone
 - b) Azathioprine
 - c) Cyclosporine
 - d) Tacrolimus
 - e) UDCA
- 20. Which of the following drugs reduce portal pressure in patients with portal hypertension:
 - a) Aspirin
 - b) Beta-blockers
 - c) Sylmarine
 - d) Chenodeoxycholic acid
- 21. Hepatocellular damage is indicated by raised:
 - a) AST
 - b) Alkaline phosphatase
 - c) ALT
 - d) CPK
- 22. All of the following may be associated with ulcerative colitis except:
 - a) Cirrhosis
 - b) Iritis
 - c) Psoriasis
 - d) Arthritis
 - e) Sclerosing cholangitis

23. Immunological evidence of immunity to hepatitis B is the presence of :

- a) Hepatitis B core antibodies
- b) Hepatitis B core antigen
- c) Hepatitis B surface antibodies
- d) Hepatitis B surface antigen
- e) Any of the above

24. Which of the following is not a feature of primary biliary cirrhosis:

- a) Sclerosis of extrahepatic bile ducts
- b) Granulomatous destruction of small to medium size bile ducts
- c) Serum anti-mitochondrial antibodies is positive
- d) Increased incidence in women
- e) Increased incidence after the 5th decade of life

25. HBV has a higher replication rate than HCV

- a) Yes
- b) No

Mrite short notes on: Diagnosis and treatment of SBP Write short notes on: Diagnosis and treatment of acute pancreatitis Enumerate: Manifestations of liver cell failure Write short essay about: Management of Barrett's esophagus Discuss: Treatment of Ulcerative Colitis

Good luck

الورف الأرث

Diploma examination in: Tropical Medicine & Infectious Diseases Course Title: Tropical Medicine & Infectious Diseases

Date: October, 2018

Number of questions: Three Time Allowed: Three Hours

Total Assessment Marks: 180 Marks



Medicine & Infectious

Diseases

Infectious & Endemic Diseases

All questions must be answered

I. <u>Case scenario:</u>

(**30** marks)

A 14 year old boy presents with in a confused state. He developed a fever 2 days Previously, and had been complaining of headache, fever and photophobia. He had Vomited once. Previous history was unremarkable.

On examination his temperature was 38.0°C, and he has mild neck stiffness and photophobia. There is no rash. HR is 82/min and RR 12/min. There are no focal signs of infection.

Cerebrospinal fluid analysis showed:

Cell count 200 /mL (60% lymphocytes)

Protein 80 mg/dL

Glucose 78 mg/dL

Gram stain No organisms seen

1. What is your diagnosis?

(15 marks)

2. What is the differential diagnosis?

(15 marks)

II. MCQs:

(**50** marks)

- 1. Brucellosis during first trimaster of pregnancy is treated with
 - a. Rifampicin monotherapy
 - b. Co-trimoxazole alone
 - c. A and b
 - d. All of the above
- 2. Chemoprophylaxis against meningitis is achieved by:
 - a. Rifampicin
 - b. Ciprofloxacin
 - c. Ceftriaxone
 - d. All of the above
- 3. A patient with prolonged diarrhoea undergoes esophagogastro-duodenoscopy. Biopsy of the small intestine demonstrates numerous crescent –shaped protozoa adjacent to the epithelial brush border. Which of the following organisms is the most likely pathogen?
 - a. Entamoeba histolytica
 - b. Escherichia coli
 - c. Giardia Lamblia
 - d. Naegleria fowleri
 - e. Trichomonas vaginalis

4. Which of the following does not occur in infectious mononucleosis?

- a. Jaundice
- b. Thrombocytosis
- c. Atypical lymphocytosis
- d. Presentation commonly before the age of 30.

5. A 18 year old homosexual male developed progressive pneumonia not responding to antibiotics. Methenamine silver staining of the sputum showed small circular cyst and Giemsa staining demonstrated the small, punctate nuclei of the trophozoites and intracystic sporozoite. Which is the most likely organism?

- a. Toxoplasma gondii
- b. Trypanosoma cruzi
- c. Cryptococcus neoformans
- d. Leishmania donovani
- e. Pneumocystis carinii

6. Amoebic liver abscess is characterized by:

- a. Should be treated by diloxanide furoate alone
- b. Should be aspirated routinely
- c. Is associated with thrombocytopenia
- d. Usually affects the right lobe of the liver

7. E.coli 0157:

- a. Is a bowel commensal
- b. Is an important cause of cholera-like illness
- c. Is a recognised cause of the haemolytic uraemic syndrome
- d. Can be prevented from causing clinical illness by vaccination

8. The following neoplasms have a known infective actiology except:

- a. Burkitt's lymphoma
- b. Squamous carcinoma of the penis
- c. Hepatocellular carcinoma
- d. Squamous carcinoma of the bronchus
- e. Nasopharyngeal carcinoma

9. Nephrotic syndrome is a recognised complication of infection with the followings except

- a. Schistosoma mansoni
- b. Giardia lamblia
- c. Hepatitis B virus
- d. Mycobacterium leprae
- e. Loa loa

10. The following infections are zoonoses except:

- a .Salmonellosis
- b.Leprosy
- .cBrucellosis
- d. Weil's disease (leptospirosis)

11. Brucellosis is characterized by the following except:

- a. Is caused by a Gram positive bacillus
- b. Causes spondylitis
- c. Is treated with tetracycline
- d. Is a recognised cause of chronic depression
- e. Is contracted from unpasteurised milk

12. Blindness is a recognised complication of the following except:

- a. Leprosy
- b. Onchocerciasis
- c. Vitamin D deficiency
- d. Cysticercosis
- e. Toxoplasmosis

13. The following are features of congenital toxoplasmosis except:

- a. Generalised lymphadenopathy
- b. Microcephaly
- c. Intracranial calcification
- d. A good prognosis without treatment

14. The following are characteristic of early tetanus except:

- a. Rigid abdomen
- b. Rigid jaw muscles
- c. Dysphagia
- d. Hyperpyrexia
- e. Carpopedal spasm

15. Diseases have no convalescent carrier are all except:

- a. TB
- b. Typhoid
- c. Measles
- d. Mumps

16. 3 hours after eating in a restaurant, a patient presents with diarrhea, nausea and vomiting. The most likely pathogen in the above patient is:

- a. Salmonella
- b. Vibreo parahemolyticus
- c. Shigella
- d. Campylobacter
- e. Staph aureus

17. The followings are features of cholera except:

- a. An incubation period of 21-28 days
- b. Sudden onset of profuse watery diarrhea followed by vomiting
- c. Acute circulatory failure developing within 12 hours of onset
- d. Rapid metabolic acidosis and dehydration

18. All the followings are causes of normocytic normochromic anemia except:

- a) Sickle cell anemia
- b) Hypersplenism
- c) Thalassemia
- d) Hereditary spherocytosis

19. Nephrotic syndrome is a common complication of infection with:

- a) Plasmodium vivax
- b) Plasmodium malariae
- c) Plasmodium ovale
- d) Plasmodium falciparum

20. As regard giardiasis, all the following statements are correct except:

- a) Can be diagnosed by duodenal biopsy
- b) Leaves the small bowel morphologically normal
- c) Causes abdominal distension
- d) Usually responds to treatment with metronidazole

21. Which of the following statement is true of infections with Mycobacterium tuberculosis:

- a. Non-sputum producing patients are non-infectious
- b. A positive tuberculin test indicates active disease
- c. Lymph node positive disease requires longer treatment than pulmonary disease
- d. In pregnant women treatment should not be given until after delivery
- e. Pyrazinamide has high activity against active extracellular organisms

22. As regard leptospirosis, all the following statements are correct except:

- a) Usually causes a self-limiting disease
- b) Causes leucopenia
- c) Causes jaundice
- d) Causes meningitis

23. As regard septic meningitis, all the following statements are correct except:

- a) Is commonly a result of meningococcal infection
- b) Due to meningococcal infection is very rare in those aged less than 1 year old
- c) Is associated with raised levels of IgM in the cerebrospinal fluid
- d) Is complicated by cranial nerve lesions

24. Presenting features of HIV infection in childhood include the followings except:

- a) Shrunken liver
- b) Failure to thrive
- c) Bilateral perihilar infiltrates on chest x-ray
- d) Recurrent otitis media

25. Brucella is transmitted by all except

- a) Aerosol transmission
- b) Ingestion of raw milk
- c) Man to man
- d) Contact with aborted fetuses

III. Answer the following questions:

(100 marks)

1.	Write short essay about clinical picture of meningitis	(20 marks)
2.	Mention the diagnosis of Familial Mediterranean fever	(20 marks)
3.	Write short notes about: Praziquantel.	(20 marks)
4.	Write short essay about: Heat stroke	(20 marks)
5.	Discuss: Management of typhoid fever	(20 marks)

Examination for Diploma in: Tropical Medicine Course title: Medical Microbiology & Immunology

Date: 1/10 / 2018 Term: October 2018 Time allowed: 1.5 hour

Total assessment marks: 25 marks



Tanta University
Faculty of Medicine
Microbiology Department

Answer the following questions:

- 1. Antimicrobial drug resistance: Discuss different mechanisms and explain the origin of resistance. (5 marks)
- 2. Atopy: Definition, mechanism, diagnosis and management.

(5 marks)

- 3. Mention the mode of transmission and the prophylactic measures of the following diseases: (2 marks each)
 - a- Whooping cough.
 - b- Hepatitis B.
 - c- Yellow fever.
- 4. Zoonotic diseases: Define, mention the causative agents and discuss the diagnosis and the treatment of one of them. (5 marks)
 - 5. A 20-year-old male presented to the emergency department complaining of profuse bloody diarrhea of two days duration and vomiting after eating undercooked hamburger. The patient was dehydrated and weak. Laboratory values revealed an elevated blood urea nitrogen and creatinine, with thrombocytopenia. Culture of the feces grew organisms producing pink colonies on MacConkey medium. (4 marks)
 - 1. What is the causative agent of this case?
 - 2. What is the most likely serotype causing this case?
 - 3. What is the mechanism of pathogenesis of this condition?
 - 4. What is the most common complication of such case?

Chairman of the Department Prof. Mohamed Zakaria Hussoin

GOOD LUCK