

Aswan University  
Faculty of Medicine  
Department of Medical Parasitology



Date: 22/6/2017  
Time: 2 hours  
Total Marks: 75  
Number of Pages: 4

**Medical Parasitology Exam. for 3<sup>rd</sup> Year Medical Students**

**Answer The Following Questions: Illustrate your Answers with DIAGRAMS:**

**1- Case 1:**

An Egyptian farmer suffering from burring micturition with terminal haematuria (9 Marks)

- 1- Mention the disease of this case?
- 2- Mention the causative parasite and its habitat?
- 3- Mention the infective stage and methods of infection. (With Draw)?
- 4- Mention the diagnostic stage (with Draw) and How you confirm your diagnosis?
- 5- Mention three main complications of this parasite?

**2- Write short notes on: (9 marks)**

- 1- Larvae migrans (Types, Definition and causes).
- 2- Specific myiasis (Definition and causes).
- 3- Medical importance of Cyclops.

**3- Case 2: (5 Marks)**

A 5 year old child presented with loss of appetite, abdominal pain, insomnia, restlessness and severe perianal itching especially at night.

- 1- What is the causative parasite and its habitat?
- 2- Mention the infective stage (with Draw)?
- 3- Mention the diagnostic stage and the methods used for diagnosis of this parasite and how to confirm your diagnosis?

#### 4- Case 3: (9 Marks)

A sudanese patient came to Aswan University hospital complained of continuous or fluctuating fever, rapid pulse, vomiting followed by sweating. He also complained of dark color of urine and splenomegaly.

- 1- What is your diagnosis of this case. (Disease) and the causative parasite?
- 2- Mention and draw the diagnostic stages?
- 3- Mention the different methods of infection for this disease.
- 4- Mention the main complications of this parasite.?
- 5- How to treat this case (Drugs of Choice)?

#### 5- In a Table compare between: (Three differences) (9 Marks)

- 1- *Trypanosoma gambiense* and *Trypanosoma rodesiense*.
- 2- Hydatid cyst and coenurus cerebralis.
- 3- Microfilaria of *Wüchereria bancrofti* and *Loa Loa*.

#### 6- Case 4: (9 Marks)

A 20 years old male student complained of fever, abdominal pain and frequent motions with bulky offensive stool with mucous and blood. Abdominal examination revealed tender colon. Sigmoidoscopy revealed ulcers with narrow opening.

- 1- What your diagnosis of the case (Disease)? and what is the causative parasite?
- 2- What is the diagnostic stage(s) (with drawing)?
- 3- What is the infective stage?
- 4- What is the main complication of the this parasite?
- 5- Mention THREE potozoal parasites gave same picture of stool. Mention the infective stage for each parasite?



**7- Choose the CORRECT answer: (15 Marks) (MCQ)**

**1- The following eggs are excreted immature EXCEPT:**

- |                                     |                                  |
|-------------------------------------|----------------------------------|
| a) <i>Trichcephalus trichura</i> .  | c) <i>Fasciola gigantica</i> .   |
| b) <i>Heterophyes heterophyes</i> . | d) <i>Ascaris lumbricoides</i> . |

**2- Diethyl carbamizine (Hetrazan) is the drug of choice in treatment of:**

- |                                   |                                  |
|-----------------------------------|----------------------------------|
| a) <i>Fasciola hepatica</i> .     | c) <i>Wüchereria bancrofti</i> . |
| b) <i>Ancylostoma duodenale</i> . | d) All of the above.             |

**3- Filariform larva is the infective stage of:**

- |                                   |                                       |
|-----------------------------------|---------------------------------------|
| a) <i>Ancylostoma duodenale</i> . | c) <i>Strongyloides stercoralis</i> . |
| b) <i>Ascaris lumbricoides</i> .  | d) Both a & c.                        |

**4- Gravid segments come out with stool in chain (2-3 segments) in:**

- |                              |                           |
|------------------------------|---------------------------|
| a) <i>Taenia saginata</i> .  | c) <i>Taenia solium</i> . |
| b) <i>Hymenolepis nana</i> . | d) Both b & c.            |

**5- In Cutaneous Leishmaniasis Culture of biopsy material on NNN medium results in:**

- |                          |                        |
|--------------------------|------------------------|
| a) <i>Epimastigote</i> . | c) <i>Amastigote</i> . |
| b) <i>Promastigote</i> . | d) All of the above    |

**6- The parasite found in abnormal habitat in the body is called:**

- |   |                                 |
|---|---------------------------------|
| a) <i>Accidental parasite</i> .         | c) <i>Incidental parasite</i> . |
| b) <i>Erratic or Ectopic parasite</i> . | d) None of the above.           |

**7- Soft ticks ornithodoros transmit:**

- |                                   |                            |
|-----------------------------------|----------------------------|
| a) <i>Endemic typhus</i> .        | c) <i>Tick paralysis</i> . |
| b) <i>Endemic relapsing Fever</i> | d) Both a & b.             |

**8- Morula cells of Mott is diagnostic in case of:**

- |                        |                           |
|------------------------|---------------------------|
| a) <i>Toxoplasma</i> . | c) <i>Chagas' disease</i> |
| b) <i>Kala azar</i>    | d) None of the above      |

**9- Conjugation occurs for reproduction in:**

- |                            |                         |
|----------------------------|-------------------------|
| a) <i>Giardial lamblia</i> | c) <i>Isospora spp.</i> |
| b) <i>Balantidium coli</i> | d) All of the above.    |

**10- Whiff test is used for diagnosis of:**

- |                                |                                 |
|--------------------------------|---------------------------------|
| a) <i>Trichomonas hominis</i>  | c) <i>Trichomonas vaginalis</i> |
| b) <i>Cryptosporidium spp.</i> | d) Both a & c.                  |

**11- Bachman's test is used for diagnosis of:**

- |                     |                                  |
|---------------------|----------------------------------|
| a) Hydatid disease. | c) <i>Trichinella spiralis</i> . |
| b) Fasciolasis.     | d) Both a & c.                   |

**12- Mode of transmission of some protozal disease by Hard ticks is:**

- a) Cyclopropagative.
- b) Cyclodevelopmental.
- c) Transovarian.
- d) Both a & c.

**13- The Diagnostic stage(s) of *Ascaris lumbricoides* is/are:**

- a) Fertilized egg.
- b) Embryonated egg.
- c) Decorticated eggs.
- d) Both a & c.

**14- Disporocystic tetrazoic oocyst is the infective stage of:**

- a) *Giardia lamblia*.
- b) *Cryptosporidium spp.*
- c) *Toxoplasma gondii*.
- d) All of the above.

**15- River blindness is caused by:**

- a) *Loa Loa*.
- b) *Onchocerca volvulus*.
- c) *Taenia solium*.
- d) Both a & b.

**8) Put True (T) or False (F) for these statements: (5 Marks)**

- 1- All types of leishmania parasites transmitted by sand fly. ( )
- 2- Tunga penetrans is called Dog Flea. ( )
- 3- *Trypanosome cruzi* are polymorphic trypanosomes. ( )
- 4- *Naegleria fowleri* infections is diagnosed by lumber puncture. ( )
- 5- Katayma syndrome more common in *Schistosoma mansoni*. ( )

**9) Match statements of Group (A) with its relation in Group (B): (5 marks)**

**Group (A)**

- 1. *Aedes spp.*
- 2. Vagabond's disease.
- 3. Ziehl-Nielsen stain
- 4. Zoonotic protozal parasite.
- 5. True relapse

**Group (B)**

- a. Rat flea
- b. *Cryptosporidium spp.*
- c. *P. malariae*
- d. Yellow fever
- e. *Babesia divergans*
- f. *Pediculus humanus*
- g. *Plasmodium ovale*
- h. *Isospora spp.*

إنتهت الأسئلة

مع التمنيات بالنجاح والتوفيق

وكل عام وأنتم بخير

أ.د/ محمد الصلاحي محمد منيب





Aswan University

date: 4 \6\2017

Faculty of medicine

Time allowed: Two hour

Microbiology and immunology department

(Total marks 100)

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**Microbiology final examination- 3<sup>rd</sup> year**

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**I- Give short account on the following ( 35 marks)**

- 1- Lab. diagnosis of typhoid fever
- 2- Enumerate causes of sexual transmitted diseases
- 3- Congenital rubella syndrome and its prevention
- 4- Pathogenesis and treatment of HIV infection.
- 5- Pathogenesis and clinical forms of Type I hypersensitivity reaction
- 6- DiGeorge's syndrome
- 7- Clinical picture and diagnosis of candida fungal infection.

**II- Mention the causative organism and mode of infection of the following diseases (20 marks)**

- 1- Hemolytic uremic syndrome
- 2- Undulant fever
- 3- Malignant pustule
- 4- Shingles disease
- 5- SARS

**III- Compare between the following (20 marks)**

- 1- Exotoxin and endotoxin
- 2- Pneumococci and Strept Viridans
- 3- Salk and Sabine vaccine
- 4- Innate and adaptive immunity
- 5- Ordinary Ag and super Ag



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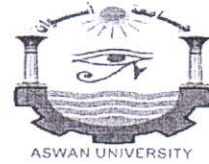
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**IV- Define the following terms (5 marks)**

- 1- Immune surveillance
- 2- Hapten
- 3- Epitope
- 4- phenotypic variation
- 5- satellitism

**V- Chose the correct answer (10 marks)**

1. Viral mediated transmission of genetic materials in bacteria is called:
  - A. transformation
  - B. transduction
  - C. transcription
  - D. conjugation
2. the preferred vaccine for diphtheria consists of:
  - A. heat killed C. diphtheria
  - B. live attenuated C. diphtheria
  - C. toxoid
  - D. Capsular polysaccharide
3. Graft versus host disease can be occurred in the following condition:
  - A. Liver transplantation
  - B. Kidney transplantation
  - C. Skin grafting
  - D. Bone marrow transplantation



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4. True statements about subacute bacterial endocarditis include that it:
- A. Usually arises in undamaged endocardium
  - B. Often arises as a complication of dental manipulation
  - C. Caused by  $\beta$ -hemolytic streptococci
  - D. Frequently caused by staph aureus
5. Which of the following is most frequently involved in herpes zoster?
- A. dorsal nerve roots of the trunk
  - B. sciatic nerve
  - C. perineal area
  - D. lower extremities
6. Wassermann test for syphilis Ab originally was designed as
- A. A precipitation test
  - B. A complement fixation test
  - C. An agglutination test
  - D. An opsonin test
7. Symptoms of *Clostridium botulinum* are consistent with
- A. Invasion of the gut epithelium by the organism
  - B. Secretion of an enterotoxin
  - C. Endotoxin shock
  - D. Ingestion of neurotoxins
8. Fungi with true mycelium are called
- A. Yeast
  - B. Yeast like fungi
  - C. Filamentous fungi
  - D. All of the above



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9. The presence of Negri inclusion bodies in host cell is characteristic of
- A. Mumps
  - B. Infectious mononucleosis
  - C. Congenital rubella
  - D. Rabies
10. Although Mumps virus characteristically invade the parotid glands, this virus also commonly produce inflammation of
- a- Testes
  - b- Kidneys
  - c- Bones
  - d- Colon

**VI- Put true or false for the following statements (5 marks)**

- 1- Nystatin and amphotericin B are examples of antimicrobial drugs that inhibit protein synthesis.
- 2- Unlike IgG, IgM is important in mucosal immunity
- 3- Lepromin test used for diagnosis of Leprosy is an example of type III hypersensitivity reaction
- 4- Exogenous Ag is presented in a complex with MHC class II molecule.
- 5- True pathogens are those capable of causing disease in healthy persons.





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**VII-**

An adult male was brought to the hospital emergency room complaining of severe vomiting, profuse watery diarrhea and abdominal cramps. His family described the diarrhea as rice watery. On examination finding of dehydration were recorded (5 marks)

- What is your diagnosis for this case?
  - What is the organism responsible for this case?
  - What is the virulence factor?
  - How it could be diagnosed?
- 

**GOOD LUCK**