



# UNIVERSITY OF NAIROBI

UNIVERSITY EXAMINATIONS 2015/2016

## LEVEL II EXAMINATIONS FOR THE DEGREE OF BACHELOR OF MEDICINE AND SURGERY

### HMM 210: MEDICAL MICROBIOLOGY - WRITTEN

#### MULTIPLE CHOICE QUESTIONS (MCQs)

H31/2534/2015

DATE: JANUARY 27, 2016

TIME: 9.00 A.M. - 12.00 NOON

#### INSTRUCTIONS:

1. Read the instructions carefully and answer as instructed in each section.
2. Circle the correct response on each question.
3. Only one response needed for each question
4. If you change your response, please indicate clearly by putting an (X)

1. Autoinfection is common in which parasitic infection:

- cutting placts Strongylorides*
- (a) Necator americanus
  - (b) Trichinella spiralis
  - (c) Trichiuris Trichiura
  - (d) Ancylostoma duodenale
  - (e) Enterobius vermicularis

2. Which parasite is associated with intermediate host?

- (a) Ascaris lumbricoides
- (b) Trichinella spiralis
- (c) Trichiuris trichiura
- (d) Ancylostoma duodenale
- (e) Necator americanus

3. Jaundice is common in which parasitic infection?

- (a) Necator americanus
- (b) Ascaris lumbricoides
- (c) Trichinella spiralis
- (d) Ancylostoma duodenale
- (e) Enterobius ssp

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50

781  
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V

PARASITE

*Hookworms w/ Shortest Tail-pointed*  
*Strongylorides*  
*Not Shortest Tail-pointed*

4. The following have a barrel shaped egg

- (a) Trichinella spiralis
- (b) Strongyloides stercoralis
- (c) Ancylostoma duodenale
- (d) Capillaria ssp
- (e) Trichiuris trichiura ✓

5. Complications Ascaris lumbricoide infection include all except:

- (a) Malnutrition ✓
- (b) Obstruction ✓
- (c) Jaundice ✓
- (d) Abdominal swelling ✓ E
- (e) Microcytic anaemia - Hook worm

6. Select the correct statement from the following:

- (a) All trematodes are hermaphroditic *except schistosomes*
- (b) Nematodes have segmented bodies - *unsegmented*
- (c) Cestodes are hermaphroditic
- (d) Nematodes have no alimentary canal X C
- (e) None of the above

7. In which of the following parasites is Man a paratenic host?

- (a) Ascaris lumbricoides
- (b) Ancylostoma duodenale
- (c) Trichiuris trichiura
- (d) Ancylostoma braziliense
- (e) Enterobius vermicularis

8. Which of the following statements is true?

- (a) All protozoa are motile X
- (b) All protozoa reproduce asexually by binary fission X
- (c) Protozoa are a subset of helminthes
- (d) All protozoa are pathogenic X
- (e) Protozoa are unicellular organisms

9. Which of the following parasites causes cutaneous larva migrans?

- (a) Ascaris lumbricoides X
- (b) Necator americanus X *larva migrans*
- (c) Toxocara canis - *visceral*
- (d) Ancylostoma braziliense D
- (e) Strongyloides stercoralis X

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10. Pulmonary symptoms may be associated with infection by these parasites except:

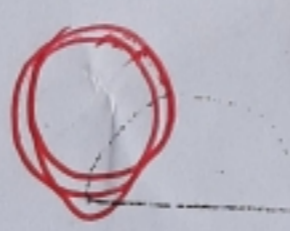
- (a) Necator americanus ✓
- (b) Strongyloides stercoralis ✓
- (c) Ascaris lumbricoides ✓
- (d) Ancylostoma duodenale ✓
- (e) Ancylostoma braziliense

11. Which of the following is associated with Trichinella spiralis?

- (a) Jaundice
- (b) ~~Steatorrhoea~~ = excretion of abnormal quantities of fat with  $\bar{e}$  faeces
- (c) Autoinfection
- (d) Splinter haemorrhages
- (e) Iron deficiency anaemia

12. Which of the following parasites has a planoconvex egg?

- (a) Trichinella spiralis
- (b) ~~Enterobius vermicularis~~ ✓ B
- (c) Ascaris lumbricoides - Round
- (d) Necator americanus
- (e) Strongyloides stercoralis

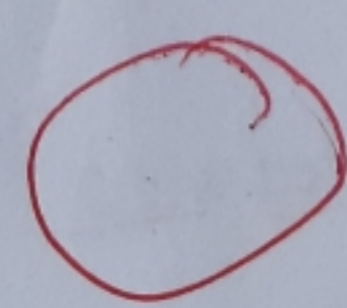


13. Topical application of Thiabendazole may be useful in the treatment of which of the following parasites?

- (a) Ancylostoma braziliense
- (b) Strongyloides stercoralis A
- (c) Ascaris lumbricoides ✗
- (d) Trichinella spiralis ✓
- (e) Toxocara canis ✓

14. The infective form of strongyloides stercoralis is

- (a) Mammilated egg - Ascaris
- (b) Embryonated egg - Enterobius
- (c) Filariform larva
- (d) ~~Rhabditiform larva~~
- (e) Free living adult



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15. Ocular larva migrans is associated with

- (a) Strongyloides stercoralis
- (b) Toxocava canis
- (c) Trichinella spiralis
- (d) Ancylostoma braziliense
- (e) Capillaria hepatica

16. In which of the following parasites in liver biopsy is useful in the diagnosis of its infection?

- (a) Ascaris lumbricoides
- (b) Enterobius vermicularis
- (c) Capillaria hepatica
- (d) Ancylostoma duodenale
- (e) Trichuris trichiura

17. Which of the following parasites have mammalated eggs?

- (a) Trichinella spiralis
- (b) Strongyloides stercoralis
- (c) Ascaris lumbricoides
- (d) Enterobius vermicularis
- (e) Ancylostoma duodenale

\* 18. Which of the following parasites is associated with asphyxiation?

- (a) Ascaris lumbricoides
- (b) Enterobius vermicularis
- (c) Necator americanus
- (d) Trichinella spiralis
- (e) Strongyloides stercoralis

19. Which of the following is not a soil-transmitted helminth?

- (a) Strongyloides stercoralis ✓ F
- (b) Trichinella spiralis
- (c) Necator americanus ✓
- (d) Trichuris trichiura ✓
- (e) Ancylostoma duodenale ✓

\* 20. Intestinal intussusception is commonly associated with?

- (a) Ancylostoma duodenale
- (b) Enterobius vermicularis
- (c) Trichinella spiralis
- (d) Toxocava canis
- (e) Strongyloides stercoralis

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21. Which of the following parasites is associated with visceral larva migrans?

- (a) Necator americanus
- (b) Strongyloides stercoralis
- (c) Ancylostoma duodenale
- (d) Toxocava canis
- (e) Ascaris lumbricoides

22. Which of the following parasites is associated with dysentery?

- (a) Ascaris lumbricoides
- (b) Enterobius vermicularis
- (c) Toxocava canis
- (d) Toxocava cati
- (e) Trichuris trichiura

23. Which of the following drugs is recommended for heavy Ascaris lumbricoides infections in small children?

- (a) Albendazole
- (b) Mebendazole
- (c) Praziquantel
- (d) Thiabendazole
- (e) Pyrantel pamoate

24. Pruritus ani occurs in which of the following:

- (a) Ascaris lumbricoides
- (b) Necator americanus
- (c) Wuchereria bancrofti
- (d) Brugia malayi
- (e) Enterobius vermicularis

25. Microcytic hypochromasia occurs in:

- (a) Ascaris lumbricoides
- (b) Necator americanus
- (c) Trichuris trichiura
- (d) Enterobius vermicularis
- (e) Trichinella spiralis

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26. One of the following is NOT an arbovirus

transmitted by ticks, Mosquito

- (a) Yellow fever virus ✓
- (b) Rift valley fever virus ✓
- (c) Dengue virus ✓
- (d) Chikungunya virus ✓
- (e) Ebola virus

27. Viral hemorrhagic fever viruses

- (a) All are DNA viruses ×
- (b) All are naked viruses × *enveloped*
- (c) Cause generalized mucosal bleeding in all patients ×
- (d) Most can be prevented through vaccines ×
- (e) All are RNA viruses

28. One of the following statements in Bunyaviridae is false:

- (a) Includes Rift Valley fever virus ✓
- (b) Transmitted by mosquitoes and ticks ✓
- (c) Are segmented ✓
- (d) Are limited to tropical Africa
- (e) Are zoonotic

FI -  
FI -  
Dengue  
B.V.F.

29. Dengue virus:

Flaviviridae

DEN 1, 2, 3, 4

- (a) Has 3 distinct serotypes ×
- (b) Infection with one serotype prevents infection with other serotypes
- (c) Is transmitted by ticks
- (d) Causes hemorrhagic shock in at least 50% of all patients
- (e) Usually presents with an acute febrile illness

30. Retroviruses:

- (a) Are reverse transcribing DNA viruses
- (b) Have a segmented genome
- (c) Cause a rapidly progressive illness in humans
- (d) Have a double-shelled naked capsid
- (e) Are incorporated into the host genome

1. One of the following statements about HIV is false:

- (a) Reverse-transcription occurs in the nucleus *Cytoplasm*
- (b) It has two copies of its genome
- (c) Viral proteins require post-translational modification
- (d) Requires a co-receptor to enter the host cell ✓
- (e) Exits the cell through budding ✓

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32. HIV-2:

- (a) Is a sub-type of HIV-1.
- (b) Progresses faster than HIV-1 ✓
- (c) Is easier to transmit than HIV-1 ✗
- (d) Has a wider geographical distribution than HIV-1 ✓
- (e) Is intrinsically resistant to most non-nucleoside reverse transcriptase inhibitors (NNRTIs)

33. Antiretroviral agents include the following except:

- (a) Entry blockers ✓
- (b) Polymerase inhibitors ✓
- (c) Viral release inhibitors
- (d) Integrase inhibitors ✓
- (e) Protease inhibitors ✓

34. Burkitt's Lymphoma is a cancer thought to be caused by this virus

- (a) Human herpes virus (HHV) type 1 (HHV-1)
- (b) HHV-2
- (c) HHV-3 - VZ ✓
- (d) HHV-4 - Epstein D ✓
- (e) HHV-5 - CMV

8 - Kaposi's sarcoma

35. This human herpes virus is associated with causation of two different diseases in the same person

- (a) HHV-1
- (b) HHV-2 ✓
- (c) HHV-3
- (d) HHV-4
- (e) HHV-5

36. Neonatal herpes is a disease associated with primary infection of a pregnant woman by this virus

- (a) HHV-1
- (b) HHV-2 ✓
- (c) HHV-3
- (d) HHV-4
- (e) HHV-5

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37. The drug of choice of treating people with alpha-herpes virus infections is

- (a) Gancyclovir ✓
- (b) Rimantadine
- (c) Ribavirin
- (d) Nevirapine
- (e) Acyclovir ✓

38. The virus HHV-6 causes

- (a) Herpes labialis - HSV-1
- (b) Roseola rash
- (c) Genital herpes - HSV-2
- (d) Warts - HPV
- (e) Conjunctivitis - HSV-1

39. What proportion of poliovirus infection of naïve individuals go on to develop paralysis assuming no prior vaccination?

- (a) 95%
- (b) 5%
- (c) 3%
- (d) 0.1%
- (e) 0.01%

40. Which of the following symptoms is NOT associated with furious rabies?

- (a) Depression
- (b) Headache
- (c) High fever
- (d) Restlessness
- (e) Anxiety

41. This virus typically reaches its target tissue via the peripheral nerves system (PNS)

- (a) Poliovirus
- (b) HSV-1 ✓
- (c) Rabies virus
- (d) Echovirus
- (e) Retrovirus



→ brain becomes inflamed

42. Encephalitis is a common condition following infection with this virus:

- (a) Rubella virus
- (b) Measles virus
- (c) Rotavirus
- (d) Wes Nile virus
- (e) SIV

D

43. One of the following belong to Flaviviridae family of viruses

- (a) Hantaviruses - Bunyaviridae
- (b) Lassa fever virus - Arenaviridae
- (c) Ebola virus - Filoviridae
- (d) Dengue fever virus - Flaviviridae
- (e) Junin virus - Arenaviridae

44. An outbreak of Ebola disease in humans is usually fuelled by:

- (a) Transmission of the virus from natural hosts to humans
- (b) Transmission of the virus from humans to humans
- (c) Transmission of the virus from food to human
- (d) Transmission of the virus from foreign doctors to locals
- (e) None of the above

O

45. The only available mode of treatment of Dengue shock syndrome is

- (a) Anti-retroviral drugs
- (b) Anti-malaria drugs
- (c) Replacement of plasma and electrolytes
- (d) Anti-biotics
- (e) None of the above

46. The term sylvatic transmission is usually associated with

- (a) Yellow fever virus
- (b) Hepatitis B virus
- (c) Dengue fever virus
- (d) Rotavines
- (e) Influenza virus

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47. The two human Papilloma virus strain associated with cervical cancer in women are:

- (a) Type 1 & 8
- (b) Type 5 & 13
- (c) Type 6 & 11
- (d) Type 16 & 18
- (e) Type 20 & 29

48. One of the following is NOT a risk factor associated with cervical cancer

- (a) Smoking
- (b) Drinking goat milk
- (c) Early age of sexual debut
- (d) High parity
- (e) Long term use of estrogen

x 49. Reactivation is a common characteristic human herpes simplex virus. One of the following factors is not associated with this phenomenon:

- (a) Infection
- (b) Irradiation
- (c) Menstruation
- (d) Physical stress
- (e) Diabetes

50. One of the following herpes viruses is **mainly** transmitted in sexual intercourse

- (a) Herpes simplex type 1
- (b) Herpes simplex type 2
- (c) Cytomegalovirus
- (d) Epstein Barr virus
- (e) Human herpes virus 6