

UNIVERSITY EXAMINATIONS 2015/2016
EXAMINATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE IN
PHARMACY AND DENTISTRY

UPC 208/HMM 210: MEDICAL MICROBIOLOGY – WRITTEN

DATE: JANUARY 26, 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).

PARASITIC

1. Which of the following parasitic infection(s) commonly cause splenomegaly?

- (a) Leishmania tropica
- (b) Necator americanus
- (c) Balantidium coli
- (d) Leishmania mexicana
- (e) Leishmania donovani

2. Irregular fevers usually occur in infections with:

- (a) Necator americanus
- (b) Balantidium coli
- (c) Trichinella spiralis
- (d) Taenia solium
- (e) Trypanosoma rhodesiense

179

3. Which of the following drugs may be used in Chloroquine resistant plasmodium falciparum infection?

- (a) Primaquine
- (b) Paluclrine
- (c) Quinine
- (d) Primethamine
- (e) Tetracycline

4. Which of the following parasite(s) is/are pathogenic to humans?

- (a) Trichomonas tenax
- (b) Endolmax nana
- (c) Entamoeba coli
- (d) Balantidium coli
- (e) Trichomonas hominis

5. Jaundice may be observed in all of the following infections except:

- (a) Plasmodium falciparum ✓
 - (b) Ascaris lumbricoides ✓ *silamy g/canosis*
 - (c) Trypanosoma brucei gambiense (C)
 - (d) Leishmania infantum ✓
 - (e) Plasmodium vivax ✓
- appears liver, seen bone marrow*

6. The following statements about Leishmania donovani are true except:

- (a) Amastigotes may be in splenic smears
- (b) The stage of the parasite in the vector is called a promastigote
- (c) Human infections are restricted to the skin
- (d) The vector in Africa is Phlebotomus species
- (e) Human infections are found only in some regions of Kenya

7. Which of the following statements regarding Plasmodium falciparum malaria is true?

- (a) Hypnotizes are found in the life cycle *max 0.5h*
- (b) Chloroquine is the drug of choice for treatment of severe infections
- (c) May occasionally be transmitted by Culex mosquitoes
- (d) May cause renal failure
- (e) Sporocyst stages are found in the mosquito vectors

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8. One of the following statements regarding treatment of parasitic infections is NOT true:
- (a) Suramin is only useful in the treatment of early stage Trypanosomiasis
 - (b) Tiniclazole is useful in the treatment of Giardia lamblia infection in man
 - (c) Mebendazole is useful in the treatment of Isospora belli infection in man
 - (d) Artemisinin/Lumefantrine is used to treat uncomplicated plasmodium falciparum
 - (e) Conbrimoxazole is useful in the treatment of Pneumocystis carinii infection
9. Metronidazole may be useful in treating all of the following infections except:
- (a) Trichomonas vaginalis
 - (b) Giardia lamblia
 - (c) Strongyloides stercoralis
 - (d) Entamoeba histolytica
 - (e) None of the above
10. Muscle biopsy is useful in diagnosis of which of the following infections?
- (a) Balantidium coli
 - (b) Trichinella spiralis
 - (c) Toxoplasma gondii
 - (d) Ancylostoma duodenale
 - (e) Taenia solium
11. Urine examination by microscopy is useful in the diagnosis of which parasite?
- (a) Giardia lamblia
 - (b) Schistoma mansoni
 - (c) Entamoeba coli
 - (d) Entamoeba histolytica
 - (e) Trichomonas vaginalis
12. Anaemia and oedema may follow which parasitic infection?
- (a) Strongyloides stercoralis
 - (b) Ancylostoma duodenale
 - (c) Trichiuris trichiura
 - (d) Trichinella spiralis
 - (e) Enterobius vermicularis

23. For which of the following parasites is the Chrysops fly a vector?

- (a) Onchocerca volvulus
- (b) Wuchereria bancrofti
- (c) Leishmania aegypti
- (d) Trypanosoma cruzi
- (e) Loa loa

24. Megasophagus is a complication associated with:

- (a) Leishmania donovani
- (b) Trypanosoma cruzi *Answer*
- (c) Trichinella spiralis
- (d) Trypanosoma rhodesiense
- (e) Schistosoma mansoni

25. Use of latrines for disposal of human faecal waste is useful in the control of the following parasites except:

- (a) Trichuris trichiura
- (b) Ascaris lumbricoides
- (c) Strongyloides stercoralis
- (d) Trichomonas vaginalis
- (e) Giardia lamblia

26. Which of the following is associated with furuncular myiasis?

- (a) Musca domestica
- (b) Phlebotomus martini
- (c) Lucilia sericata *green bottle*
- (d) Chrysops sp.
- (e) Glossina sp.

Tumbu fly (Cordylobia anthropophaga)

Answer

27. Which of the following parasites is associated with hyperinfection in immunosuppressed patients?

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

20(4)
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28. Which of the following parasites does not have a cyst in its life cycle?

- (a) Entamoeba histolytica
- (b) Balantidium coli
- (c) Giardia lamblia
- (d) Entamoeba coli
- (e) Trichomonas vaginalis

→ Trophozoites only

29. Which of the following drug is most appropriate for treatment of Entamoeba histolytica infections?

- (a) Metronidazole
- (b) Albendazole
- (c) Ivermectin
- (d) Diethyl carbamazine
- (e) Paracetamol

30. Larva curvens is mostly associated with infections with?

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

cutaneous larva migrans

31. Which of the following can be transmitted by sharing of towels?

- (a) Trichomonas vaginalis
- (b) Giardia lamblia
- (c) Ancylostoma duodenale
- (d) Balantidium coli
- (e) None of the above

Answer

32. Which of the following is a vector for Hymenolepis nana?

- (a) Pediculus humanus
- (b) Sarcophaga scabiae
- (c) Dermatobia hominis
- (d) Ctenocephalides canis
- (e) Ornithodoros moubata

33. One of the following denotes 'family' in taxonomy of viruses:

- (a) - virinae
- (b) - viridae
- (c) - virus
- (d) - viridans
- (e) - virales

34. True about naked viruses:

- (a) All are RNA viruses
- (b) All are DNA viruses
- (c) They lack a capsid
- (d) They exit the cell through budding
- (e) Can withstand acidic environment

35. A virus:

- (a) Contains both RNA and DNA
- (b) Contains ribosomes which are targeted in treatment
- (c) Does not need host cell machinery for replication
- (d) Usually attaches on host cells using specific ligands
- (e) Has very few organelles

36. Enveloped virus are transmitted through the following means except:

- (a) Blood transfusion
- (b) Respiratory droplets
- (c) Feco-oral route
- (d) Unsafe injection
- (e) Transplacental

37. HIV-1:

- (a) Progresses slower than HIV-2
- (b) Has a smaller geographical distribution than HIV-2
- (c) Has fewer clades than HIV-2
- (d) Is more susceptible to non-nucleoside reverse transcriptase inhibitors than HIV-2

(e) Is in the same species as HIV-2

38.

The following are important in attachment of HIV: *except*

- (a) P24 (capsid) protein
- (b) gp41
- (c) gp120
- (d) CD4 receptor
- (e) CCR5 coreceptor

39.

The following increase the risk of HIV transmission *except*:

- (a) Delta-32 mutation
- (b) Herpes genitalis infection
- (c) High viral load
- (d) Low CD4
- (e) Insertive anal sexual intercourse

40.

HIV viral load is usually highest in:

- ~~(a)~~ Primary stage (Acute retroviral syndrome) *Answer*
- (b) Asymptomatic stage
- (c) In patients on antiretroviral therapy
- (d) In Elite controllers
- (e) In all HIV patients

41.

Chronic Hepatitis:

- ~~(a)~~ Occurs in 10 percent of patients infected with Hepatitis C virus
- (b) Occurs in 90% of adults infected with Hepatitis B virus
- (c) Is usually symptomatic in all patients
- (d) Pathogenesis is immune-mediated
- ~~(e)~~ May present with fulminant Hepatitis in 50% of patients

42.

The following is the commonest cause of Hepatocellular carcinoma:

- (a) Hepatitis B virus
- (b) Hepatitis C virus
- (c) Hepatitis D virus
- (d) Hepatitis E virus
- (e) Alcohol

43. The following can be prevented through vaccinations:

- (a) Hepatitis C
- (b) Hepatitis A and C
- (c) Hepatitis B and C
- (d) **Hepatitis B and D**
- (e) Hepatitis A, B and C

44. One of the following laboratory findings indicate vaccination against Hepatitis B virus (HBV):

- (a) Presence of HB_sAg and Anti-HB_s antibodies
- (b) **Presence of Anti-HB_s and absence of Anti-HB_e antibodies** *ANSWER*
- (c) Absence of Anti-HB_s and Anti-HB_e
- (d) Presence of HB_sAg, Anti-HB_s and Anti-HB_e
- (e) Presence of HB_sAg and Anti-HB_e

45. One of the following viruses is usually curable:-

- (a) Hepatitis B virus
- (b) **Hepatitis C virus**
- (c) HIV
- (d) Human herpes virus 1
- (e) Cytomegalovirus

S. Ab

anti HB_s

Anti HB_s

46. One of the following is used to treat influenza B virus infection:

- (a) Lamivudine
- (b) Amantadine
- (c) **Zanamivir** *ANSWER*
- (d) Tenofovir
- (e) Daclatasvir

47. The following inhibit nucleic acid synthesis except:

- (a) Polymerase inhibitors
- (b) Integration inhibitors
- (c) Reverse transcriptase inhibitors
- (d) **Protease inhibitors**
- (e) Acyclovir

48. This herpes virus is associated with two diseases:

- (a) Human herpes virus (HHV) - 1
- (b) HHV - 2
- (c) HHV - 3 *Epstein Barr & Zoster*
- (d) HHV - 4
- (e) HHV - 5

49. Nasopharyngeal carcinoma is caused by this virus:

- (a) HHV - 3
- (b) HHV - 4 *Epstein Barr*
- (c) HHV - 5
- (d) HHV - 6
- (e) HHV - 7

50. This is the drug of choice for treating CMV infections:

- (a) Amantadine
- (b) Zanamivir
- (c) Acyclovir
- (d) Deoxyguanosine
- (e) Gancyclovir *Answer*

51. The adenovirus associated with gastroenteritis is:

- (a) Adenovirus 1
- (b) Adenovirus 30
- (c) Adenovirus 40 *342*
- (d) Adenovirus 50
- (e) Adenovirus 60

52. Rotavirus belong to:

- (a) Herpesviridae family
- (b) Reoviridae family
- (c) Hepaduaviridae family
- (d) Filoviridae family
- (e) Buongaviridae family