$Memory\ Test\ -\ Microbiology\ -\ II_Class\ Test_Foundation_1$

Total Mark: 100 Time: 90 Min

1. Candida albicans is A) Gram positive fungi B) Doesn't form germ tube C) Culture grows yeast colonies D) Yeast with large capsule E) Mold with separate hyphae Answer: T, F, T, F, F Discussion: Reference: (Lange 14th414,Box501)	2. CD4 cell count less than 200 associated with risk of developing A) Oropharyngeal candidiasis B) Pneumocystis jirovecii pneumonia C) HIV wasting syndrome D) Disseminated MAC E) Peripheral neuropathy Answer: F, T, T, F, T Discussion: Reference:
3. Clinical features of ebola fever A) Diarrhoea B) ARDS C) Deafness D) Cerebellar signs E) Encephalopathy Answer: T, F, F, F, F Discussion: Reference:	4. Features of Reye's syndrome A) Associated with CMV B) Encephalopathy is seen C) Associated with influenza A D) Causes liver degeneration E) Associated with children having aspirin Answer: F, T, F, T, T Discussion: Reference: (lange 14th294)
5. Hepatobiliary flukes are A) Fasciols buski B) C.sinensis C) Fasciola hepatica D) S. mansoni E) Opisthorchis sinensis Answer: F, T, T, F, T Discussion: Reference:	6. Immunoglobulins are useful treatment in A) Hepatitis A B) Hepatitis E C) Hepatitis D D) Hepatitis B E) Hepatitis c Answer: T, F, F, T, F Discussion: Reference: (Lange 14th343,Box423)
7. In CMV infection A) Sexual transmission common in adult persons B) Lymphadenopathy more common than hepatomegaly C) All infected women spread CMV To fetes D) Alkaline phosphates level usually raised E) Heterophil antibody test positive Answer: T, F, F, T, F Discussion: TFF (40%chance)TF Reference: Davidson 23rd page 242'243	8. Inincubation period of hepatitis B infection A) HBsAg(+) B) Anti-HBcIgM(—) C) Anti-HBcIgG(—) D) Anti-HBs (+) E) Anti-HBe (+) Answer: T, F, T, F, F Discussion: Reference:

9. Japanese B encephalitis 10. Leishmania donovani A) Most infections are subclinical in childhood A) Life cycle involve sandfly B) No vaccine is available B) Amastigotes differentiates into promastigote C) Mortality rate with neurologic disease is 100% C) Increased IgG is highly specific D) Symptoms begin with intermittent fever D) Transmitted by mosquitos E) Recovery results in permanent immunity E) Neutropenia and hypernatraemia are found Answer: T, F, F, T, F Answer: T, F, F, T, T Discussion: Discussion: Reference: **Reference:** (Lange 14th447) 11. Regarding ankylostoma 12. Regarding fungal toxin and allergens A) A. caninum is cat hookworm A) Amanitin inhibits RNA polymerase B) A. brazilensis is dog hookworm B) Aflatoxin causes liver cancer C) Albendazole is the treatment of choice C) IgG mediated delayed hypersensitivity D) Aflatoxin causes mutation of p53 D) Ivermectine is usually effective E) Lesions are extremely pruritic E) Phalloidin is not toxic Answer: F, F, F, T, T Answer: T, T, F, T, F Discussion: Discussion: **Reference:** (Lange 14th485) **Reference:** (Lange 14th401, pearls) 13. Regarding histoplasma capsulatum 14. Warning signs of dengue A) Is a dimorphic fungus A) Persistent vomiting B) Rarely grows in soil B) Hepatomegaly <2cm C) Inhaled spores are engulfed by macrophages C) Rapid fall of hematocrit D) Pleural effusion E) Abdomianal pain D) Organism spread to liver and spleen E) Disseminated histoplasmosis is rare Answer: T, F, F, T, T Answer: T, F, T, T, F Discussion: Discussion: Reference: Reference: (Lange 14th409) 15. Antiviral drugs inhibit replication 16. Chikungunya virus A) Amantadine A) Fever may be followed by afebrile phase B) Maraviroc B) Blood borne virus C) Enfuviritide C) Vesicular rash may develop in children D) Main vector is aedes aegypti mosquito D) Ribavirin E) Neutrophilia and hyponatraemia are common E) Sofosbuvir Answer: T, F, F, T, F Answer: F, F, F, T, T Discussion: Discussion: Reference: (lange 14th270, Box351) Reference: 17. Entamoeba 18. Giardia lamblia A) auses amoebic dysentery and liver abscess A) Fever is very common B) Malabsorption of protein and fat B) Has motile cyst C) Removed by filtration of water C) IgA deficiency increases symptomatic infecton D) Fecooral route is rare E) No animal reservoir D) Bloody, foul smelling diarrhoea E) String test may be useful Answer: T, F, T, F, T Discussion: Answer: F, T, T, F, T **Reference:** (Lange 14th425) Discussion:

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Reference: (Lange 14th429)

19. HBsAg envelope is present in

- A) Hepatitis A
- B) Hepatitis C
- C) Hepatitis D
- D) Hepatitis E
- E) Hepatitis B

Answer: F, F, T, F, T

Discussion:

Reference: (Lange 14th343,Box412)

20. Hepatitis B virus

- A) DN Adependant DNA polymerase
- B) Occurs mainly in children
- C) Cytotoxic T-cells gives immunity
- D) Transmitted by breast feeding
- E) 90% infected neonate become chronic carrier

Answer: T, F, T, F, T

Discussion:

Reference: (lange 14th345)

21. Immune-tolerant phase of HBV infection characterised by

- A) ALT level become raise 4-fold
- B) Viral load becomes high
- C) HBsAg become positive
- D) Liver histology shows minimal necroinflamfmation
- E) Anti HBeAb become positive

Answer: F, T, T, T, F

Discussion: F(Normal)TTTF (Negative) **Reference:** Davidson 23rd p 874 box 22.37)

22. Incubation period for viral diseases

A) Lassa fever: 6-21 days

- B) Ebola fever: 3-9 daysC) Yellow fever: 2-7 days
- D) Dengue: 3-9 days
- E) Marburg fever: 5-19 days

Answer: T, F, F, F, F

Discussion: Reference:

23. Regarding Dengue fever

- A) Expanded Dengue Syndrome define as dengue with organopathy
- B) Dengue with encephalitis, judicious use of steroid may be given
- C) Blood transfusions indicated in refractory shock after fluid 40-60 ml/kg
- D) Dextran 40 may be given in sign of fluid overload
- E) Gastroenteritis commonly observed in paediatric dengue pt

Answer: T, T, T, T, T

Discussion:

Reference: (Ref: Dengue management guideline

2019)

24. Regarding rubella virus

- A) Epidemics occurs every 5 years
- B) Initial replication in nasopharynx
- C) Incubation period is 14-21 days
- D) Rash is due to cell mediated vasculitis
- E) Surface spikes contain neuraminidase

Answer: F, T, T, F, F

Discussion:

Reference: (lange 14th324)

25. RNA nonenveloped viruses are

- A) Herpesvirus
- B) Rabies
- c) HTLV
- D) HIV
- E) Rhinovirus

Answer: T, F, F, F, T

Discussion:

Reference: (lange 14th287)

26. A 42 year old man is reviewed in the hospital complaining of persistent lethargy . Routine blood show altered LFT , so hepatitis screen is sent . The lab show Anti HAV (-) ,HBsAg(-) , Anti HBs(+), Anti HBc (-) ,AntiHCV (+). Which statement is true ?

- A) Hepatitis B infection
- B) Hepatitis C infection
- C) Previous vaccination to hepatitis B and C
- D) Hepatitis C infection with previous hepatitis B vaccination
- E) Hepatitis B an C infection

Answer: D Discussion: Reference:

27. An AIDS patient's blood shows vascular endothelial cells with many spindle shaped cell and erythrocytes. The associated disease may be

- A) Burkitt's lymphoma
- B) Oral hairy leukoplakia
- C) Kaposi's sarcoma
- D) Infectious mononucleosis
- E) Reye's syndrome

Answer: C Discussion:

Reference: (Lange 14th299)

28. An intravenous drug user sees his doctor with a history oflethargy. LFT Shows ALT Of 80 IU/L and a bilirubin of 18 micro mol/L. Serological tests for hepatitis viruses show HBsAg positive and anti HepB core IgGAb positive, IgMAb was absent. Which option is most appropriate for serological studies?

- A) Acute hepatitis B
- B) Carrier of hepatitis B
- C) Recovery from past hepatitis B infection
- D) Requires hepatitis B vaccine
- E) Vaccinated from hepatitis B

Answer: B

Discussion: (Explanation: Persistence of surface antigen here indicate chronic hepatitis B / carrier status.IgG core antibody and no IgM core antibody means that primary infection take place some time ago.

Reference: Ref: Davidson 23 rd box 22.37, 22.38)

29. Haemorrhagic fever with renal symptoms associated with

- A) Hantan fever
- B) Lassa fever
- C) Ebola virus
- D) JC virus
- E) None of them

Answer: A

Discussion: (Explanation-Hantan fever usually associated with viral haemorrhagic fever and renal failure and ARDS. Lassa fever usually associated with ARDS and Encephalopathy. Ebola virus seen in in central Africa, associated with thrombocytopenia with blood oozing)

Reference:

30. The only protozoa can cause 'Infectious Mononeucleosis'

- A) Trichononas vaginalis
- B) Trepenosomacruzi
- C) Toxoplasma gondii
- D) Giardia intestinalis
- E) Cryptosporidium sativum

Answer: C

Reference:

31. Which one does not produce opportunistic infection?

- A) Rhizopus
- B) Sporothrix
- C) Aspergillus
- D) Mucor
- E) Cryptococcus

Answer: B Discussion:

Reference: (Lange 14th403)

32. Which one is false regarding parvovirus B19?

- A) Causes hydrops fetalis
- B) Nonenveloped, single stranded DNA genome
- C) Transmitted primarily by respiratory route
- D) Causes slapped cheek syndrome
- E) Genome is positive stranded DNA

Answer: E Discussion:

Reference: (Lange 14th308)

33. Which one is false regarding plasmodium?

- A) Sexual cycle is also called sporogony
- B) Merozoites infect RBC
- C) P.falciparum causes high level of parasitemia
- D) P.malaria is more severe than other plasmodium
- E) P.vivax infects only reticulocyte

Answer: D Discussion:

Reference: (Lange 14th434)

34. Which one is false regarding "infectious mononucleosis"

- A) Absolute lymphocytosis occurs
- B) Heterophil antibody test is useful in late stage
- C) Cytotoxic Tcells react against infected cell
- D) EBV specific antibody tests are diagnostic
- E) No virus is synthesized in cord lymphocyte

Answer: B Discussion:

Reference: (Lange 14th298)

35. Which one is lung fluke?

- A) S.mansoni
- B) P.westermani
- C) C.sinensis
- D) S.japonicum
- E) S.hematobium

Answer: B Discussion:

Reference: (Lange 14th463,table 551)

36. Which parasite is transmitted by sexual contact?

- A) Entamoeba
- B) Leishmania
- C) Toxoplasma
- D) Trichomonas
- E) Trypanosoma **Answer:** D

Discussion:

Reference: (Lange 14th426,table512)

37. Which virus cause perinatal infection through breast feeding

- A) Hepatitis B
- B) Parvovirus B19
- C) Human papilloma virus
- D) Herpes simplex
- E) Cytomegalo

Answer: E
Discussion: E

Reference: (Lange 14th255,table 322)

- 38. A 25 years old boy presented with chest pain with shortness of breath.on examination in ED , Temp raised , ECG T inverted and marked raised Troponin .which organism most likely diagnosis?
- A) Adenovirus
- B) HIV
- C) Chagas' disease
- D) Influenza
- E) Coxsackie

Answer: E Discussion: Reference:

- 39. A 27-year-old man who has recently moved to Bangladesh from AFRICA presents complaining of fatigue and purple skin lesion all over body. On examination he has multiple raised purple lesion on his trunk and arms. Some smaller lesion also in mouth. Recently he started acyclovir for herpes zoster infection. What is most likely diagnosis?
- A) Kaposi sarcoma
- B) Dermatofibroma
- C) Drug reaction to acyclovir
- D) Psoriasis
- E) Haemangioma

Answer: A Discussion:

Reference: (Ref Davidson 23rd page 315)

- 40. A 40-year-old renal transplant recipient on immunosuppressant, present with fever and fatigue. A blood film shows atypical lymphocyte, abnormal LFT but negative heterophil antibodynegative. Which one is mostly causative?
- A) Coxsackie virus
- B) CMV
- C) PB19
- D) JC virus
- E) Adenovirus

Answer: B

Discussion: (clue – atypical lymphocyte, heterophilnegative, transplant pt.)

Reference:

- 41. A 70 years old HIV ptpresented with altered mental status. On MRI finding -non enhancing white matter lesion without surrounding oedema. which is most likely diagnosis?
- A) JC virus
- B) CMV
- C) Tuberculoma
- D) Cryptococcal infection
- E) Human polyoma virus 4

Answer: A

Discussion: (Diagnosis is PML caused by JC virus

(humanpolyma virus 2)

Reference: [ref Davidson 23rd page 320 fig 12.12)

- 42. A child of play group was found in the back bench of a school with abnormal movement with frothy discharge from mouth. Immediately the baby was shifted to A/E of nearby hospital where a CT brain done that ahows periventricular cystic lesion in the parietal lobe with surrounding oedema. Which of the following organism may cause this?
- A) Taenia solium
- B) Echinococcus granulosus
- C) Hymenolepsisdiminuta
- D) Diphylobothrium latum
- E) Strongyloidesstercoralis

Answer: A

Discussion: Exp: It is case of Cysticercosis. Taenia solium usually cause this, Tsaginata may also cause cysticercosis.

Reference:

- 43. A dengue patient presented in ED with shortness of breath. On examination findings BP 60/40, pulse feeble, on occultation crepitation present.which is next best Mx?
- A) IV crystalloid fluid
- B) IV colloidal fluid
- C) FFP
- D) Whole blood
- E) Crystalloid+ FFP

Answer: B Discussion:

Reference: (Ref - pocket guideline Dengue 2019,

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- 44. A patient admitted to Dhaka Medical College Hospital with H/O SOB, sore throat, cough & sneezing. His X-ray showed bilateral fluffy or wolen appearance. Nasal swab sent to IEDCR. Which of the following organism responsible for the condition?
- A) SARS
- B) COVID-19
- C) SARS CoV-2
- D) MERS CoV-2
- E) H5N1

Answer: C

Discussion: Exp: Virus is SARS CoV-2, COVID-19 (Corona Viral Disease-2019) is the disease.

Reference:

- 45. A patient of 60 years old presented to Medicine OPD fever with night sweat & weight loss for 3 months, abdominal CT shows bilateral adrenal gland enlargement. What will be the option to do to next?
- A) Abdominal MRI with contrast
- B) Contrast CT Abdomen
- C) Schirmer Test
- D) Adrenal Biopsy
- E) AFB staining

Answer: D

Discussion: Exp: PUO+ Night Sweat +Weight loss + BL Adrenal Swelling on CT Abdomen are the typical finding of Adrenal TB, Lymphoma, Histoplasmosis. To distinguish them Adrenal Biopsy is the next investigation of choice

Reference:

- 46. Regardingchikungunya, which is not associated with disease?
- A) Transmitted by Aedes mosquito
- B) Incubation period usually 2-14 days
- C) Afebrile and recrudescence present in fever cycle
- D) Usually affect large joint
- E) Chronicity associated with HLA B 27

Answer: D Discussion:

Reference: (Ref Davidson 23 page 250)

47. Which of the following fungi causes ringworm?

- A) Malassezia
- B) Mucor
- C) Coccidiodes
- D) Aspergillus
- E) Trichophyton

Answer: E Discussion:

Reference: (Lange 14th403, table 481)

48. Which of the following investigation shows highest specificity to diagnose COVID-19?

- A) RT-PCR
- B) Cell Culture
- C) ELISA
- D) CFT
- E) IFT **Answer:** A

LISWELL A

Discussion: Exp: RT-PCR is the highest specific test for COVID-19.

Reference:

49. Which one is true regarding hepatitis A?

- A) Children are rarely affected
- B) Frequently transmitted via blood
- C) Replicative cycle is different than other enterovirus
- D) Human are the reservoir of HAV
- E) Also known as enterovirus 72

Answer: D Discussion:

Reference: (Lange 14th343)

50. Which statement falseregarding dengue with warning sign?

- A) Abdominal pain
- B) Leukopenia
- C) Pleural effusion
- D) Ascites
- E) Rapid increase Hct

Answer: B Discussion:

Reference: (Ref Davidson 23rd page 244)