

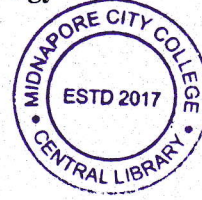
The West Bengal University of Health Sciences
2nd BMLT November-December, 2022 Examination

Subject: Medical Parasitology, Mycology, Virology & Entomology

Time: 3 hrs

Full Marks: 100

Attempt all questions



20 x 1

1. Tick the correct answer :
- a) Vector of Kala-azar is :
i) Flea. ii) Tsetse fly. iii) Sand fly. iv) Mite.
- b) A potent vaccine is available for :
i) Hepatitis A. ii) Hepatitis B. iii) Malaria. iv) Respiratory syncytial virus.
- c) Regarding HIV which of the following is not true :
i) It is a DNA retrovirus.
ii) Contains Reverse Transcriptase.
iii) May infect host CD 4 cells other than T lymphocytes.
iv) Causes a reduction in host CD 4 cells at late stage of disease.
- d) HIV can be detected and confirmed by :
i) Polymerase chain reaction (PCR). ii) Reverse transcriptase – PCR.
iii) Real time PCR. iv) Mimic PCR.
- e) Which one of the following is detected by the antigen detection test used for the diagnosis of P. falciparum malaria?
i) Circumsporozoite protein. ii) Merozoite surface antigen.
iii) Histidine rich protein I (HRPI). iv) Histidine rich protein II (HRP II).
- f) In a patient only anti HBs Ag is positive in serum all other viral markers are negative. This indicates :
i) Acute hepatitis. ii) Chronic active. iii) Persistent carrier. iv) Hepatitis B vaccination.
- g) The following eggs have hexacanth embryos except :
i) Taenia solium. ii) Taenia saginata. iii) Clonorchis nana. iv) Hymenolepis nana.
- h) In Japanese Encephalitis pigs acts as :
i) Amplifier. ii) Definitive host. iii) Intermediate host. iv) Any of the above.
- i) Primary amoebic meningoencephalitis is caused by :
i) Naegleria fowleri. ii) Entamoeba histolytica. iii) Endolimax nana. iv) Dientamoeba fragilis.
- j) Cysticercosis is caused by larva of :
i) Taenia solium. ii) T. saginata. iii) Echinococcus. iv) Ascaris.
- k) Non - parenteral hepatitis is :
i) Hepatitis A. ii) Hepatitis B. iii) Hepatitis C. iv) Hepatitis D.
- l) All of the following methods are used for the diagnosis of HIV infection in a 2 month old child except :
i) DNA PCR. ii) Viral culture. iii) HIV ELISA. iv) p24 antigen assay.
- m) During epidemic of hepatitis E, fatality is maximum in :
i) Pregnant women. ii) Infants. iii) Malnourished male. iv) Adolescents.
- n) Dermatophytosis is caused by :
i) Herpes simplex. ii) Papilloma virus. iii) Trichophyton. iv) Candida.
- o) Segmented RNA is found in :
i) Influenza virus. ii) Rabies virus.
iii) Herpes virus. iv) Molluscum contagiosum virus.
- p) The infective form of malarial parasite in the vertebrate host is :
i) Sporozoite. ii) Merozoite. iii) Schizont. iv) Gametocyte.

P. T. O.

- q) Largest intestinal protozoa is :
- i) Entamoeba coli. ii) Balantidium coli. iii) Giardia lamblia. iv) Toxoplasma gondii.
- r) Which of the following Hepatitis virus is a DNA virus?
- i) Hepatitis C virus. ii) Hepatitis B virus. iii) Delta agent. iv) Hepatitis E virus.
- s) All are Arboviral disease except :
- i) KFD. ii) West Nile Fever. iii) Ganjam virus. iv) RSV.
- t) All are true regarding filariasis except :
- i) Man is an intermediate host. ii) Caused by Wuchereria bancrofti.
iii) Involves lymphatic system. iv) DEC is used in treatment.

2. Answer the questions briefly :

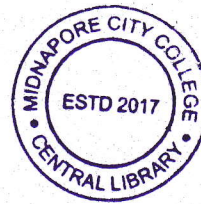
5 x 2

- a) Inclusion bodies.
b) Germ tube test.
c) Flotation technique of stool.
d) Prions.
e) Fungal stain.

3. Write short notes on **any six** of the following :

6 x 5

- a) Hepatitis A virus.
b) Candidiasis.
c) Entamoeba histolytica.
d) Viral gastroenteritis.
e) Western blot.
f) Antigenic shift & drift.
g) SARS CoV 2.
h) Relapse & Recrudescence.



4. Answer **any one** of the following :

- a) Describe morphological forms of Leishmania donovani & Laboratory diagnosis of Kala-azar. 4+6
b) Describe route of transmission & laboratory diagnosis of Hepatitis B virus. 3+7

5. Answer **any two** of the following :

- a) Name the parasite which causes benign tertian malaria in India. Describe life cycle. Discuss laboratory diagnosis. 1+5+9
b) Name the agents causing dermatophytic infection. How will you collect sample from a case of dermatophytic infection? How will you proceed to diagnose the case in laboratory? 3+4+8
c) Define arboviruses. Name 3 mosquito borne arboviruses. Discuss laboratory diagnosis of any one of them. 3+3+9