

The West Bengal University of Health Sciences
2nd BMLT September, 2023 Examination

Subject: Medical Parasitology, Mycology, Virology & Entomology

Time: 3 hrs

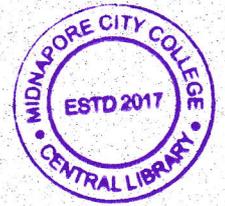
Full Marks: 100

Attempt all questions

1. Tick the correct answer : 20 x 1
- a) On microscopic examination eggs are seen, but on saturation with salt solution no eggs are seen, The eggs are likely to be of :
- i) *Trichuris trichura*. ii) *Taenia solium*.
 iii) *Enterobius Vermicularis*. iv) *Ancylostoma duodenale*.
- b) Germ tube test is used for diagnosis of :
- i) *Candida albicans*. ii) *Cryptococcus neoformans*.
 iii) *Histoplasma capsulatum*. iv) *Coccidioidomycosis*.
- c) Which is not true of *Cryptococcus neoformans*?
- i) Grows at 37°C. ii) Grows on Sabouraud's agar.
 iii) Polysaccharide capsule. iv) Urease negative.
- d) In a patient, corneal scraping reveals narrow angled septate hyphae. Which of the following is the likely etiologic agent :
- i) *Mucor*. ii) *Aspergillus*. iii) *Histoplasma*. iv) *Candida*.
- e) Which of the following is true about malaria?
- i) Size of RBC is enlarged in Vivax infection. ii) Size of RBC is enlarged in Falciparum infection.
 iii) Schuffner's dots are seen in Malariae infection. iv) Relapse is seen in Falciparum infection.
- f) Acute infection with HBV is characterized by :
- i) HBs Ag. ii) Anti HBs Ag. iii) IgM anti HBc Ag and HBs Ag. iv) Anti HBc Ag.
- g) HIV infects most commonly :
- i) CD 4 + helper cells. ii) CD 8 + cells. iii) Macrophage. iv) Neutrophil.
- h) Dermatophytes are fungi infecting :
- i) Subcutaneous tissues. ii) Systemic organs.
 iii) Nails, hair and skin. iv) Superficial skin and deep tissue.
- i) The capsule of *Cryptococcus neoformans* in a CSF sample is best seen by :
- i) Gram's stain. ii) Indian ink preparation. iii) Giemsa stain. iv) Methanamine - silver stain.
- j) The most common organism amongst the following that cause acute meningitis in an AIDS patient is :
- i) *Streptococcus pneumoniae*. ii) *Streptococcus agalactiae*.
 iii) *Cryptococcus neoformans*. iv) *Listeria monocytogenes*.
- k) Herpes simplex virus is :
- i) Single stranded DNA. ii) Double stranded DNA.
 iii) Single stranded RNA. iv) Double stranded RNA.
- l) H5N1 is :
- i) Bird flu virus. ii) Vaccine for HIV
 iii) Causative agent of Japanese encephalitis. iv) An eradicated virus.
- m) Negri body is seen in :
- i) CMV. ii) Rabies. iii) Inclusion of herpes simplex. iv) EBV.
- n) Chronic liver disease is caused by :
- i) Hepatitis B. ii) Hepatitis A. iii) Hepatitis C. iv) Hepatitis E.

P. T. O.

- o) A mother is HBs Ag positive at 32 weeks of pregnancy. What should be given to the new born to prevent neonatal infection :
- i) Hepatitis B vaccine + immunoglobulins. ii) Immunoglobulins only.
 iii) Hepatitis B vaccine only. iv) Immunoglobulins followed by vaccine after 1 month.
- p) Plasmodium falciparum infection of man is characterized by :
- i) The erythrocytes are increased in size.
 ii) All stages of erythrocytic schizogony are seen in peripheral blood.
 iii) Multiple infection of erythrocytes are seen.
 iv) Each erythrocytic cycle lasts for 72 hours.
- q) Screening test for AIDS :
- i) ELISA. ii) PCR. iii) Western blot. iv) CD-4 count.
- r) Commonest mode of AIDS transmission in India is by :
- i) Vertical transmission. ii) I.V. drug abuse.
 iii) Heterosexual promiscuity. iv) Homosexual promiscuity.
- s) A patient comes to hospital with a history of sore throat, diarrhoea and sexual contact 2 weeks before. The best investigation to rule out HIV is :
- i) p24 antigen assay. ii) ELISA. iii) Western blot. iv) Lymph node biopsy.
- t) Hepatitis A is transmitted by :
- i) Blood route. ii) Inhalation. iii) Feco-oral route. iv) All.



2. Answer the questions briefly : 5 x 2
- a) SDA.
 b) RNA virus.
 c) LPCB.
 d) Bile stained ova.
 e) NS1 antigen.
3. Write short notes on **any six** of the following : 6 x 5
- a) Viral culture.
 b) Dermatophytes.
 c) Amastigote & promastigote.
 d) SARS CoV 2.
 e) ELISA.
 f) Free living amoeba.
 g) PCR.
 h) Cysticercosis.
4. Answer **any one** of the following : 1x10
- a) Describe life cycle of malaria parasite & laboratory diagnosis of malaria. 4+6
 b) Describe mode of transmission & laboratory diagnosis of cryptococcal meningitis. 3+7
5. Answer **any two** of the following :
- a) Name the agents of viral hepatitis & their mode of transmission. Discuss laboratory diagnosis & prophylaxis of Hepatitis B virus. 2+2+8+3
 b) Name the protozoal parasite causing dysentery. Draw & label their morphological form. Discuss their laboratory diagnosis. 2+4+9
 c) Describe NACO strategies for HIV testing in India. Discuss laboratory diagnosis of HIV infection. 6+9