REV-01
BMLT/57/29/34

2025/11

SET A

BACHELOR OF MEDICAL LABORATORY TECHNOLOGY
FIFTH SEMESTER
MICROBIOLOGY V
BMLT – 504

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs. **Full Marks: 70**

Time: 30 min. **(Objective)** **Marks: 20**

Choose the correct answer from the following: ***1×20=20***

1. Which of the following is not structural gene of HIV
   a. vif gene
   b. pol gene
   c. gag gene
   d. env gene
2. Which form of malaria parasite is infective to mosquito?
   a. Ring form
   b. Sporozoite
   c. Gametocyte
   d. Merozoite
3. Yolk Sac inoculation is used for
   a. Poxvirus
   b. Hepatitis
   c. Arbo virus
   d. Both a & c
4. Crescent shape or Banana shape gametocyte are seen in infection with
   a. *P. vivax*
   b. P. falciparum
   c. *P. ovale*
   d. P. malariae
5. Encystation means
   a. Formation of Cyst to Trophozoite
   b. Formation of Trophozoite to cyst
   c. It is infection stage of parasite
   d. None of the above
6. Infective stage of Entamoeba histolytica
   a. Uni-nucleated cyst
   b. Quadri-nucleated cyst
   c. Bin-ucleated cyst
   d. Trophozoite
7. Ectoparasite means
   a. A parasite which lives external surface of host
   b. A parasite which lives internal surface of host
   c. Organism which cannot exist without host
   d. None of the above
8. Largest DNA virus is
   a. Adeno virus
   b. Hepatitis B virus
   c. Parvo virus
   d. Pox virus
9. How many flagella are there in trophozoite of Giardia lamblia
   a. One pair
   b. Two pair
   c. Three pair
   d. Four pair

10. Which of the following viral structure resemble wheel shape
    a. Rotavirus
    b. Adenovirus
    c. Poxvirus
    d. Rabies virus

11. Which of the following is the largest protozoa
    a. Balantidium coli
    b. Giardia lamblia
    c. L donovani
    d. Entamoeba histolytica

12. gp120 binds with which receptor
    a. CD3
    b. CD8
    c. CD4
    d. All of the above

13. Production of colour shows negative result in
    a. Indirect ELISA
    b. Competetive ELISA
    c. Sandwich ELISA
    d. Direct ELISA

14. Saline wet mount is done to detect
    a. Cyst
    b. Trophozoite
    c. Both a & b
    d. None of the above

15. Which of the following parasite is found in brain
    a. *E. histolytica*
    b. Ascaris
    c. *Naegleria fowleri*
    d. Trichonas vagilnalis

16. Parasite which may transmitted through sexual contact
    a. *Tryponosoma cruzi*
    b. Ascaris lumbricoids
    c. *Tryponosoma brucei*
    d. T. vaginalis

17. Negri body found in
    a. Liver
    b. Small intestine
    c. Brain
    d. All of the above

18. Which of the following DNA virus is single stranded
    a. Parvovirus
    b. Adenovirus
    c. Small pox virus
    d. Hepatitis B virus

19. All of the following is RNA virus except
    a. Enterovirus
    b. Adenovirus
    c. HIV
    d. Hepatitis A virus

20. String test done for
    a. *Balantidium coli*
    b. Giardia lamblia
    c. *L donovani*
    d. Entamoeba histolytica

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(Descriptive)

Time : 2 hrs. 30 min. **Marks : 50**

[Answer question no.1 & any four (4) from the rest]

1. Define Von Magnus phenomenon. Write different symmetry of virus along with example. Name different structural genes of HIV. Significance HIV & Hepatitis infection. **1+3+2+4=10**

2. Write a short note about Plasmodium. Explain the life cycle of Plasmodium falciparum. **10**

3. Explain the morphology, life cycle, pathogenesis and laboratory diagnosis of *Leishmenia donovani*. **10**

4. **a.** Write short notes on hemoflagellates. **3+7=10**
   b. Explain the morphology and life cycle of Trypanosoma brucei.

5. Write short note on pathogenesis of viral disease. Name the DNA viruses. **8+2=10**

6 Describe briefly about Hepatitis B virus. Name the steps of viral replication. **7+3=10**

7. **a.** Write short note on HIV virus. **8+2=10**
   b. Name different shape viruses along their example.

8. Define parasites. Explain the classification of parasites. Describe briefly the morphology and pathogenesis of *Entamoeba histolytica*. **2+3+5=10**

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