

BV(4/CBCS) MDT/MLT-VC-4016/23

2023

**MEDICAL LABORATORY AND MOLECULAR
DIAGNOSTIC TECHNOLOGY/MEDICAL
LABORATORY TECHNICIAN**

QP : Medical Laboratory Technician

Paper : MDT/MLT-VC-4016

(Microbiology—III)

Full Marks : 60

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

1. Fill in the blanks : 1×7=7
- (a) The pH of stools in amoebic dysentery is _____.
- (b) Filarial larva can be collected from _____ at midnight.
- (c) Swine influenza is a respiratory disease of _____ animal.

A23/542

(Turn Over)

- (d) HIV attacks _____ cell in the immune system.
- (e) _____ mosquito spreads dengue.
- (f) Roundworm is also known as _____.
- (g) Fertilized ovum without the albuminous coat is referred to as _____.

2. Answer the following questions : 2×4=8

- (a) What do you mean by direct life cycle and indirect life cycle?
- (b) Write down the preventive measures for dengue fever.
- (c) Write down the general characteristics of hookworms.
- (d) What is the advantage of iodine preparation over saline preparation for stool examination?

3. Answer any three of the following questions :

5×3=15

- (a) Classify protozoa and helminths of medical importance with examples.
- (b) Which parasite causes balantidiasis? Explain briefly.

(3)

(c) Enumerate the difference between amoebic and bacillary dysentery.

(d) Write down the pathogenicity and clinical significance of the H₁N₁ virus.

2+3=5

(e) Write a note on the types and symptoms of poliomyelitis.

3+2=5

4. Answer any *three* of the following questions :

10×3=30

(a) What is the causative agent for ascariasis? Mention its transmission and life cycle, clinical significance and laboratory diagnosis.

1+4+2+3=10

(b) Enumerate the various species of *Plasmodium*. Discuss the pathogenicity and complications of malaria caused by *Plasmodium falciparum*.

6+2+2=10

(c) Write in detail about the morphology, transmission, life cycle, clinical significance and laboratory diagnosis of the pork tapeworm.

1+2+3+2+2=10

(d) What are the types and symptoms of influenza viruses? What is the difference between antigenic shift and antigenic drift?

5+5=10

(4)

(e) Describe the morphology of the amastigote and promastigote forms of *Leishmania donovani*. Discuss the pathogenicity and laboratory diagnosis of leishmaniasis.

4+2+4=10
