

BV (4/CBCS)MLT/MDT-VC 1

2024

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

Paper : MLT-VC-4016/MDT-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) _____ is one of the largest nematode.
 - (b) In malaria _____ is the vector.
 - (c) All are pathogenic free-living amoeba except _____.
 - (d) The protein coat of viruses that enclose the genetic material is called _____.
 - (e) _____ species of hookworm infects Man.
 - (f) Disease produce by *Leishmania donovani* is called _____.
 - (g) The presence of blood and mucus in the faeces is called _____.

2. Answer the following questions :

2×4=8

- (a) Classify the helminths.
- (b) Write down the general properties of viruses.
- (c) Write the pathogenesis of *Entamoeba histolytica*.
- (d) Write the names of intestinal nematodes.

3. Answer any three from the following questions :

5×3=15

- (a) Give a brief description about host-parasite relationship.
- (b) Justify how 'HIV' causes 'AIDS'.
- (c) What do you mean by encystation and excystation of protozoa?
- (d) Define acute dysentery. Write the life cycle and pathogenesis of *Balantidium coli*.
- (e) Mention the importance of thick blood smear.

4. Answer the following questions :

10×3=30

- (a) What do you mean by visceral leishmaniasis? Write in detail about morphology, life cycle, clinical significance and laboratory diagnosis of Kala Azar.

1+9=10

(3)

Or

What is parasite? Classify the types of parasite with example and source of infection.

1+5+4=10

(b) Write the classification and general characteristic of Picorna viruses. Give a brief description about morphology, pathogenesis and laboratory diagnosis of polio virus.

2+2+6=10

Or

Write about the description and pathology of disease caused by intestinal flagellate.

10

(c) Why is concentration technique important for faecal parasite? Mention the steps in zinc sulphate floatation technique.

4+6=10

Or

What do you mean by filariasis? Name the causative agents of filariasis. Enumerate the life cycle of malarial parasite.

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