2025

MEDICAL LABORATORY AND MOLECULAR DIAGNOSTIC TECHNOLOGY/MEDICAL LABORATORY TECHNICIAN

Paper : MHS0400404

(Medical Parasitology)

Full Marks : 45

Time : 2 hours

The figures in the margin indicate full marks for the questions

1. Fill in the blanks : 1×5=5

(a) The study of parasites and parasitic diseases is called _____.

(b) The organism which harbors the adult or sexually mature stage of the parasite is called the _____ host.

(c) The causative agent of amoebic dysentery is _____.

(d) The vector of *Leishmania donovani* is _____.

(e) The intermediate host for *Taenia solium* is _____.

2. Answer any *five* of the following questions : 2×5=10

(a) Define parasite and host. 1+1=2

(b) Name two classes of protozoa with examples.

(c) List any two differences between Platyhelminthes and Nemathelminthes.

(d) Define intermediate host with one example. 1+1=2

(e) Write two symptoms of leishmaniasis.

(f) Name the causative agent of giardiasis and mention one mode of its transmission. 1+1=2

(g) Name two intestinal nematodes.

(h) What are thick and thin blood smears?

(i) Define microfilaria and give one suitable example. 1+1=2

(j) Write any two methods for collection of stool sample.

3. Answer any *four* of the following questions : 5×4=20

(a) Explain the host-parasite relationship with examples.

(b) Describe the morphology and life cycle of *Entamoeba histolytica.* 2+3=5

(c) Write about the morphology and life cycle of *Plasmodium vivax.* 2+3=5

(d) Write a short note on *Leishmania donovani.*

(e) Describe the morphology, life cycle and pathogenicity of *Ascaris lumbricoides.* 2+2+1=5

(f) Write a brief account of examination of blood for malarfia parasites.

(g) Explain the methods for microscopic examination of sputum and urine for parasites.

(h) Explain the concentration techniques used in stool examination.

4. Answer any *one* of the following questions : 10

(a) Classify parasites and write about their different classes with examples. 3+7=10

(b) Explain the life cycle and clinical importance of Plasmodium species. 4+6=10

(c) Discuss the morphology, life cycle, pathogenicity and laboratory diagnosis of *Giardia lamblia.* 2+3+3+2=10

(d) Describe the morphology, life cycle, pathogenicity and laboratory diagnosis of *Wuchereria bancrofti.* 2+3+3+2=10

(e) Describe the classification and laboratory diagnosis of helminthic infections. 7+3=10

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