

GOVT. COLLEGE FOR WOMEN, PARADE GROUND, JAMMU-180001, J&K.

(Erstwhile Maharani Mahila College)

Autonomous College affiliated to the University of Jammu

College with Potential for Excellence, 2016

(Estd. 1944)



Syllabus and Course of Study in Zoology B.Sc. Semester-V for examinations to be held in 2024-25, 2025-26, 2026-27

Core Course No.	UZOMJT- 501
Maximum Marks	100
Minimum Pass Marks	External-29, Internal-07
Core Course Title	Essentials of Parasitology
Credits	4
Marks (External)	80 marks
Internal Assessment	20 marks
Duration of external Exam.	3 Hours
Date of BOS	

Course Learning Objectives: The theory course on **Essentials of Parasitology** is designed to introduce undergraduate students to the fundamentals of parasitology. The course aims to provide a broad understanding of life cycle of parasites infecting man and other animals, symptoms of diseases caused by them and their control measures. It serves as an essential foundation for students pursuing healthcare-related fields.

Programme Learning Outcomes: By the end of the course, students should be able to:

- Identify different types of parasites belonging to different Phyla, their mode of transmission and various hosts that they infect.
- Describe the clinical manifestations and symptoms of diseases caused by specific parasite, and relate them to the affected organ systems or tissues.
- Demonstrate an awareness about modes of transmission of various parasites and the significance of infection, control measures in healthcare settings and the community.
- Communicate effectively about parasite related human diseases, both orally and in writing, using appropriate medical terminology and referencing credible sources.

UNIT-I

(12hours)

- 1.1 Introduction to parasitology: definition and scope
- 1.2 Symbiotic relationship and its types: Commensalism, Mutualism and Parasitism
- 1.3 Types of parasitic relationships in animal kingdom
- 1.4 Parasitic adaptations and degeneration
- 1.5 Vector and host types and interdependence

UNIT –II

(12hours)

2.1 Study of diseases caused by virus in man,their symptoms,mode of transmission and preventive measures:

2.1.1 COVID-19

2.1.2 AIDS

2.1.3 Rabies

2.2 Study of diseases caused by Bacteria in man,their symptoms,mode of transmission and preventive measures:

2.2.1 Cholera

2.2.2 Tuberculosis

2.2.3 Pneumonia

UNIT-III

(12hours)

Study of Habit, Habitat, General morphology,Life cycle,Transmission,Pathogenicity,Prophylaxis and Treatment of following parasitic Protists :

3.1 *Entamoeba histolytica*

3.2 *Giardia intestinalis*

3.3 *Trypanosoma gambiense*

3.4 *Plasmodium vivax*

3.5 *Leishmania donovani*

UNIT –IV

(12hours)

4.1 Study of Habit, Habitat, General morphology,Life cycle,Transmission,Pathogenicity,Prophylaxis and Treatment of following parasitic Platyhelminthes

4.1.1 *Schistosoma haematobium*

4.1.2 *Taenia solium*

4.1.3 *Fasciolopsis buski*

4.2 Study of Habit, Habitat, General morphology, Life cycle, Transmission, Pathogenicity, Prophylaxis and Treatment of following parasitic Nematohelminthes

4.2.1 *Ascaris lumbricoides*

4.2.2 *Ancylostoma duodenale*

4.2.3 *Wuchereria bancrofti*

UNIT –V

(12hours)

5.1 Study of Habit, Habitat, Morphology, Importance and control of following Parasitic Arthropods

5.1.1 Ticks

5.1.2 Mites

5.1.3 *Pediculus humanus*

5.1.4 *Xenopsylla cheopis*

5.1.5 *Cimex lectularius*

5.2 A brief account of Parasitic vertebrates (Vampire bat, hooded mocking bird, Candiru)

Suggested Readings

1. Cemerón. D. Parasites and Parasitism

2. Kudo. P.R. Protozoology

3. Greal. K.G Protozoology. Springer- Variog. Budlin

4. Baker Parasitic Protozoa Hutchinson lib. Series

5. Hyman. 11. The Invertebrate Protozoa through Ctenophora

6. Gynab L.H. (1951) The Invertebrates Platyhelminthes. Vol.III

7. Ben Daves (1968) The Trematoda. Cambridge Univ. Press

8. Thomas Chang (1964) The Biology Of animal Parasites Toppan Co Ltd. Tokyo, Japan

9. Chitwood & Chitwood: The Biology of animal

10. Gaust. E.C. (1949) Human Helminthology. Lea & Febiger. Philadelphia

12 Parasitology by Noble

13 Introduction to Parasitology by Chandler

14 Parasitology by Smith

15. Helmenthology by Faust.

16 Ecology of animal parasites by N. A. Gall

Note 1: Scheme of examination:

- Total weightage for theory paper shall be 100. 20% mark shall be reserved for internal assessment. External Theory paper will be set for 80 marks.

Internal Assessment Test.

- One long answer type question of 10 marks and five short answer type questions of 02 marks each.

Note 2: For paper setters

External End Semester Exam.

- **Section A:** 05 short answer type questions representing all units/syllabi i.e., at least one from each unit having 70-80 words and having 03 marks each. (All Compulsory)
- **Section B:** 05 medium answer type questions representing all units/syllabi i.e., at least one from each unit having 250-300 words and having 07 marks each. (All Compulsory).
- **Section C:** 05 long answer type questions representing all units/syllabi (02 to be attempted) with detailed analysis/ explanation to be stated within 500-600 words having 15 marks each.

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**PRACTICAL COURSE -1
B.Sc. Semester-V
for examinations to be held in
2024-25, 2025-26, 2026-27**

Core Course No.	UZOMJP- 504
Maximum Marks	100
Minimum Pass Marks	External- , Internal-
Practical Course Title	Essentials of Parasitology
Credits	2
Marks (External)	marks
Internal Assessment	marks
Duration of external Exam.	3 Hours
Date of BOS	

Course Learning Objectives: The theory course on **Essentials of Parasitology** is designed to introduce undergraduate students to the fundamentals of parasitology. The course aims to provide a broad understanding of life cycle of parasites infecting man and other animals, symptoms of diseases caused by them and their control measures. It serves as an essential foundation for students pursuing healthcare-related fields.

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- Communicate effectively about parasite related human diseases, both orally and in writing, using appropriate medical terminology and referencing credible sources.

PRACTICALS

1. Study of Sea anemone and hermit crab as example of commensalism
2. Study of termites and *Trichonympha* as example of Symbiosis
3. Study of virus through pictures and charts(COVID-19, AIDS)
4. Study of types of bacteria through picture and charts

5. Study of life cycle stages of *Entamoeba histolytica*, *Giardia intestinalis*, *Trypanosoma gambiense*, *Plasmodium vivax*, *Leishmania donovani*.
6. Study of life cycle stages of *Schistosoma haematobium*, *Taenia solium*, *Fasciolopsis buski*
7. Study of life cycle stages of *Ascaris lumbricoides*, *Ancylostoma duodenale*, *Wuchereria bancrofti*
8. Study of *Pediculus humanus*, *Xenopsylla cheopis*, *Cimex lectularius*