

CORE VII

MEDICAL PARASITOLOGY, MYCOLOGY AND ENTOMOLOGY

Semester	Subject code	Category	Lecture		Theory		Practical		Credit
			Total hrs	Hrs/week	Total hrs	Hrs / week	Total hrs	Hrs/week	
III		Core	75	5	75	5	0	0	4

COURSE OBJECTIVES

To enable the students to understand the fungi and parasite that causes infections to human being.

COURSE OUTCOMES

On the successful completion of the course, students will be able to understand the fungi and parasite that cause infections to animals and plants and its mode of transmission through vectors

CO Number	CO Statement	Knowledge Level K1 – K4)
CO1	To understand how the parasites are classified and its cultivation; to analyze the pathogenesis of parasitic infections	K1
CO2	To understand how the different types of parasites cause different type of infections and its diagnosis	K2
CO3	To remember the classification of fungi and the immune response of host to fungal infection; about mycotoxins and antifungal agents	K1
CO4	To understand different types of fungal infection	K2

	based on site of infection.	
CO5	To analyze the vectors which transmit different types of parasitic diseases and how it should be control	K4

MAPPING WITH PROGRAMME OUTCOMES:

COS	PO1	PO2	PO3	PO4	PO5	PO6
CO1	M	M	M	M	M	M
CO2	M	M	M	M	M	M
CO3	M	M	M	M	M	M
CO4	M	M	M	M	M	M
CO5	M	M	M	M	M	M

S- Strong;

M- Medium;

L-

Low

Unit-I: Parasites Introduction

12 hrs

Classification and laboratory techniques in parasitology, cultivation of parasites. Structure, Pathology, Diagnosis and treatment of *Entamoeba*, *Plasmodium*, *Leishmania*, *Trypanosoma*, *Giardia*, *Trichomonas*, *Balantidium*, *Toxoplasma*, *Cryptosporidium*.

Unit- II Parasitic Helminths

12 hrs

Taenia, *Fasciola*, *Paragonimus*, *Schistosoma*, *Ascaris*, *Ancylostoma*, *Trichinella*, *Enterobius*, *Strongyloides*, *Wuchereria*.

Unit -III Introduction to fungi

12 hrs

Morphology, Taxonomy, classification of Fungi – Macrofungi- Morphology, characteristics and human use. Mycotoxins. Immunity to fungal infections - Antifungal agents - sensitivity tests.

Unit - IV Mycosis**12 hrs**

Superficial mycosis: Tinea, Piedra, Cutaneous mycosis: Sporotrichosis. Mycetoma. Systemic mycosis: Coccidiosis, Histoplasmosis, opportunistic mycosis: Candidiosis, Cryptococcosis, Aspergillosis, Zygomycosis.

Unit -V Entomology**12 hrs**

Arthropods of medical importance. Biology and life cycle of mosquitoes, lice, flies, ticks, mites, fleas. Mode of transmission of pathogens by vectors, chemical, biological and environmental control of vectors.

DISTRIBUTION OF MARKS: Theory - 100% and Problems – Nil

TEACHING METHODOLOGY:

- ❖ Lectures
- ❖ Power point presentation
- ❖ Charts
- ❖ Models
- ❖ Group discussion
- ❖ Group assignments
- ❖ Seminars

TEXT BOOKS:

S.No	Authors	Title	Publishers	Year Of Publication
1.	Karyakarte RP and AS Damle	Medical Parasitology Revised edition	3 rd edition Books and Allied Pvt Ltd	2012
2.	Alexopoulos C.J and C.W. Mims	Introduction to Mycology (3rd edition)	4 th edition Wiley Eastern Ltd.	2007

REFERENCE BOOKS:

S.No	Authors	Title	Publishers	Year Of Publication
1.	Subhash Chandra Parija.	Textbook of Medical Parasitology	All India Publishers and Distributors, India.	2013
2.	Mehrotra RS and Aneja KR	An Introduction to Mycology	New age International Pvt Ltd.	2015
3.	Easwari Nayar	Handbook On Medical Entomology	Kalpana printing house, LHI	1974
4.	W.R.Arora	Medical Parasitology	4 th edition CBS Publishers & Distributers. New Delhi.	2015
5.	Jagdish Chander	Textbook of Medical Mycology	Jaypee Brothers Medical Publishers, India	2017

WEB REFERENCE:

<http://pathmicro.med.sc.edu/book/mycol.sta.htm>.

http://www.mycology.adelaide.edu.au/fungal_jungle/master_class.html.

<http://classes.plant.path.Wsu.edu/plp521/>

<http://www.k-state.edu/book/parasit-sta.htm>.

<http://www.dpd.cdc.gov/dpdx/>.

<http://www.who.int/tdr/media/default.html>

SYLLABUS DESIGNER:

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