

CORE VII

MEDICAL MYCOLOGY AND PARASITOLOGY

| Semester | Subject code | Category | Lecture | | Theory | | Practical | | Credit |
|----------|--------------|----------|-----------|----------|-----------|------------|-----------|----------|--------|
| | | | Total hrs | Hrs/week | Total hrs | Hrs / week | Total hrs | Hrs/week | |
| V | | Core | 60 | 4 | 60 | 4 | 0 | 0 | 4 |

COURSE OBJECTIVES

To enable the students to understand the fungi and parasite that cause infections to human beings and how it diagnosed and its preventive measures.

COURSE OUTCOMES

On the successful completion of the course, students will be able to understand the disease caused by fungi and parasite and its mode of transmission, diagnosis and prevention.

| CO Number | CO Statement | Knowledge Level (K1 – K4) |
|------------|---|------------------------------|
| CO1 | To understand the taxonomic of fungi, diagnosis of infections, antifungal agents | K2 |
| CO2 | To understand how the different types of fungi that cause different type of skin infections and its diagnosis | K2 |
| CO3 | To understand the diseases caused by systemic mycosis and its allergic reaction. | K2 |
| CO4 | To understand the classification of parasites and the protozoan diseases | K2 |
| CO5 | To understand the diseases that was caused by the metazoan parasites. | K2 |

MAPPING WITH PROGRAMME OUTCOMES

| COS | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 |
|-----|-----|-----|-----|-----|-----|-----|
| CO1 | S | S | L | M | S | M |
| CO2 | S | M | L | M | S | S |
| CO3 | S | M | M | M | S | S |
| CO4 | S | S | M | M | S | S |
| CO5 | S | M | M | M | S | S |

S- Strong;

M- Medium;

L- Low

Unit-I: Introduction to Mycology

12 hrs

General Introduction: Morphology and Taxonomy of fungi of medical importance. Detection and recovery of Fungi from clinical specimens - Immunity to fungal infections - Antifungal agents - sensitivity tests - Mycotoxins.

Unit-II: Superficial, cutaneous and subcutaneous mycosis

12 hrs

Superficial mycosis: Tinea, Piedra, Cutaneous mycosis: Sporotrichosis. Mycetoma.

Unit-III: Systemic and opportunistic mycosis

12 hrs

Systemic mycosis: Coccidiosis, Histoplasmosis, opportunistic mycosis: Candidiosis, Aspergillosis. Allergic fungal diseases: Bronchial asthma, Maple Bark Stripper's disease

Unit-IV: Protozoan diseases

12 hrs

General properties, Classification, Morphology, Pathogenesis, Lab diagnosis of common Protozoan diseases – Amoebiasis, Giardiasis, Leishmaniasis, Trypanosomiasis, Balantidiosis.

Unit-V: Parasitic metazoan diseases

12 hrs

Classification, Morphology, Pathogenicity, Lab diagnosis of common parasitic metazoan diseases - Ascariasis, Filariasis, Hydatididosis, Taenia, Fasciola infection.

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

TEACHING METHODOLOGY:

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

TEXT BOOKS:

| S.No | Authors | Title | Publishers | Year Of Publication |
|------|-------------------------------|--------------------------------------|--------------------------|---------------------|
| 1. | Karyakarte RP and AS Damle | Medical Parasitology Revised edition | Books and Allied Pvt Ltd | 2012 |
| 2. | Alexopoulos C.J and C.W. Mims | Introduction to Mycology | 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 | 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:

1. Ms. R.Sangeetha Assistant Professor
2. Dr. A.Vidhya HOD & Assistant Professor