

M.D. Microbiology :

POST GRADUATE DEGREE STANDARD

1. General Microbiology

1 History & Milestone in Microbiology

2 Scope of Medical Microbiology

3 Microscopy

4 Staining of Bacteria

5 Bacterial morphology

6 Nutrition and growth of Bacteria

7 Culture Media & Cultivation of Bacteria

8 Identification of Bacteria & Bacterial Classification

9 Bacterial Genetics

10 Microbial Control

11 Normal Microbial flora

12 Microbial pathogenicity & Immunity

2. Immunology:

1 Host response (Immunity)

2 Structures and functions of Immune system

3 Cells of Immune System

4 Immune Response/Immunity

5 Antigen

6 Antibody

7 The complement System

8 Antigen - Antibody reactions

9 Hypersensitivity

10 Auto Immunity

11 Histo-Compatibility complex

12 Transplantation Immunity

- 13 Tumour Immunity
- 14 Immuno Deficiency diseases
- 15 Immuno Hematology
- 16 Immuno Prophylaxis against infectious Diseases

3. Systematic Bacteriology

- 1 Staphylococcus
- 2 Streptococcus
- 3 Neisseria
- 4 Coryne bacteria .
- 5 Bacillus
- 6 Mycobacteria
- 7 Actinomyecetes & Nocardia
- 8 Coliform bacteria-Escherichia coli & kelsiella
- 9 Proteus
- 10 Salmonella
- 11 Shigella
- 12 Yersinia
- 13 Pasteurella & Francisella
- 14 Haemophilus
- 15 Bordetella
- 16 Brucella
- 17 V. Cholerae
- 18 Pseudomonas
- 19 Spirochetes
- 20 Rickettsiae
- 21 Chlamydia22 Mycoplasma
- 23 Miscellaneous Bacteria

PAPER - II

1.Parasitology

INTRODUCTION

1 Classification

2 General principles of Diagnosing parasites / infestations & treatment of parasitic infection .

3 Protozoology Rhizopoda-Pathogenic and Non-pathogenic amoebae

4 Intestinal ,Blood & Tissue flagellates

5 Plasmodium -Taxoplasma -Isospora

6 Balantidium coli

7 Helminthology

Cestodes

Trematodes

Nematodes

VIROLOGY

A General Virology

B Morphology of Viruses

1 Replication of Viruses

2 Cultivation of Viruses

3 Classification of viruses

4 Identification of Viruses & Lab diagnosis

5 Genetics of viruses

6 Pathogenesis & Host response to Viral infection

7 Antiviral Agents

8 Bacteriophage

9 Viruses

Pox

Adeno

Herpes

Papova

Parvo

Picorna

Orthomyxo

Paramyxo

Rota virus

Rhabdovirus

Hepatitis

Arbo

Retro

Slowiruses

Oncogenic virus

10 Miscellaneous virus

11 Diagnosis of Viral Infection

12 Viral Vaccines

Mycology

1 Economic importance and harmful effects of

Fungi Mycotoxins

2 Classification of fungi

3 Pathogenesis & Lab diagnosis of Mycotic infections

4 Superficial Mycosis

5 Cutaneous Mycosis

6 Subcutaneous Mycosis

7 Systematic Mycosis8 Opportunistic Mycosis and common lab contaminants

9 Antifungal Agents

Applied Microbiology

1 Collection ,Transport and Disposal of Specimens

2 C.N.S infection

3 Respiratory Infections

4 Urinary Infection

5 Gastro intestinal Infection

6 Genital Tract Infection

7 Congenital Infection

8 Infections of Eye, Ear & Skin

9 Infections of CardioVascular System

10 P.U.O

11 Zoonotic Infections

12 Environmental Sanitation Test(Food,Water,Milk,and Air)

13 Hospital Infections (Prevention & Control)

14 Basic Molecular Biology in Relation to Diagnosis of Infectious diseases (PCR)