

Systematic Bacteriology, Mycology:

1- Systematic Bacteriology:

- Classification and Nomenclature of Bacteria.
- Genus Staphylococcus.
- Genus Streptococcus.
- Genus Listeria.
- Genus Erysipelothrix.
- Genus Actinobacteria.
- Genus Mycobacterium.
- Genus Bacillus.
- Genus Clostridium.
- Genus Brucella.
- Genus pseudomonas.
- Genus Burkholderia.
- Family Enterobacteriaceae.
- Genus Proteus.
- Genus yersinia.
- Genus Campylobacter.
- Family Pasteurellaceae.
- Genus Actinobacillus.
- Order Rickettsiales.
- Order Chlamydiales.
- Family Mycoplasmataceae.
- Order Spirochaetales.

2- Systematic Mycology:

- Yeasts.
- Moulds.
- Dermatophytes.
- Diphasic fungi.

E)Virology:

- **GENERAL VIROLOGY**
 - Virus size and structure
 - Atypical virus like agents
 - Viral replication
 - Viral genetics and viral genome interaction

- Gene therapy and recombinant vaccine
- Pathogenesis of viral infection
- Host defence
- Viral cultivation and isolation
- Laboratory diagnosis
- Antiviral drugs
- Classification of medically important viruses
- **SYSTEMATIC VIROLOGY**
 - **DNA ENVELOPED VIRUSES**
 - Poxviridae
 - Sheep pox
 - Lumpy skin disease
 - Contagious pustular dermatitis virus
 - Fowl Pox
 - Herpesviridae
 - Infectious bovine rhinotracheitis (IBR)
 - Malignant Catarrhal fever
 - Marek's Disease
 - Infectious laryngotracheitis (ILT).
 - Asfarviridae
 - African swine fever (ASF)
 - **DNA NON ENVELOPED**
 - Parvoviridae
 - Feline panleukopenia
 - Papovaviridae
 - Bovine papillomavirus (BPV)
 - Adenoviridae
 - Infectious canine hepatitis
 - **RNA ENVELOPED VIRUSES**
 - Paramyxoviridae
 - Rinder pest (RP)
 - Peste des petits ruminants (PPR).
 - Newcastle disease (ND).
 - Orthomyxoviridae.
 - Avian influenza.
 - Swine influenza.
 - Rhabdoviridae.

- **Rabies.**
- **Vesicular Stomatitis (VS).**
- **Bovine Ephemeral Fever.**
 - o **Bunyaviridae.**
 - **Rift Valley fever.**
 - o **Togaviridae.**
 - **Bovine viral diarrhea (BVD) Equine viral arteritis.**
 - o **Coronaviridae.**
 - **Avian infectious bronchitis (IB).**
 - o **Retroviridae.**
 - **Bovine leukaemia virus (BLV).**
 - **Maedi Visna Virus.**
 - **RNA NONENVELOPED VIRUSES:**
 - o **Picornaviridae.**
 - **Foot and mouth disease (Aphthus fever).**
 - **Duck virus hepatitis.**
 - o **Reoviridae.**
 - **African horse sickness (AHS).**
 - **Blue tongue.**
 - o **Birnaviridae.**
 - **Infectious bursal disease.**
 - **Bovine Spongiform encephalopathy (BSE).**