Lecturer Title:

1- Importance of microbiology, History of microbiology
2- Anatomy of bacteria: Surface appendage, Capsule, Cell wall of G.+ve & G –ve bacteria, Cytoplasmic membrane.
3- Bacterial physiology: Physical and chemical growth determinate, growth and growth curves, bacterial reproduction.
4- Genetics: Definition, genetic, element, mutation (spontaneous, gene transfer, transformation, conjugation, and gene transduction).
5- Recombinant DNA biotechnology.
6- Sporulation and germination.
7- Sterilization (chemical + physical Methods).
8- Chemotherapy.
9- Morphology of Bacteria, Staining and Classification.
10- Staphylococci species: Streptococcus pyogenes; Streptococcus pneumoniae
11- Aerobic Spore-forming bacteria Bacillus species (B . anthracis, B. s ubti l is , B. ceseus).
12- Clostridium p erfringe n s; Clostridium teta n i ; Clostridium botuli un
13- Corynebacterium diphtheriae
14- Propi on ibacterium ac n e s, Listeria
15- Mycobacterium tuberculosis ; M. le pr a e
16- Chlamyadiae; Actinomycetes
17- Identification & classification of G -ve bacteria
18- Enterobacteriaceae: E. coli ; Klebsiella spp.; Cilrobacte , Sert alia ,