

Smt Sindhutai Jadhao Arts and Science Mahavidyalaya, Mehkar
B.Sc. I SEMESTAR I
MICRO BIOLOGY

Topic	Link for Material
Unit I	
Discovery of Microscope	https://youtu.be/TJyOOmdwHhE
Controversy over Spontaneous generation	https://youtu.be/J_57hCdUg4w
History of Microbiology- Aristotle	https://youtu.be/rh0fxJkvL44
History of Microbiology- 1	https://youtu.be/dzrUzQEHXVE
History of Microbiology- 2	https://youtu.be/3eNP_qRiR30
Scope of Microbiology as a modern Science	https://youtu.be/hSUCWbj66TM
Types of Microorganisms	https://youtu.be/sShylYBXxtE
Distribution of Microorganisms in nature and their beneficial and harmful activities	https://youtu.be/IP9feNea0mQ
Unit II	
Microscopy- 1	https://youtu.be/icRQE73AUII
Microscopy- 2	https://youtu.be/gvOIFWhvUn0
Microscopy- 3	https://youtu.be/dZu2GWTgAtw
Microscopy- 4	https://youtu.be/4DXiKwAnVH0
Microscopy- 5	https://youtu.be/6GqhmDdkGGc
Microscopy- 6	https://youtu.be/2_uN5qj2U2g
Microscopy- 7	https://youtu.be/4DXiKwAnVH0
Microscopy- 8	https://youtu.be/Y3h5IKUk01g
Microscopy- 9	https://youtu.be/hCzwKH0QbgU
Microscopy- 10	https://youtu.be/RNC0Xj2z4YM
Staining Techniques	https://youtu.be/Fvx8Lm-IJOY
Gram staining	https://youtu.be/FgsgpoFhleA
Simple Staining	https://youtu.be/5V52RzM84TM
Acid fast staining	https://youtu.be/cX8j1-qjuFc
Endospore and Flagella	https://youtu.be/xsehvfR7BBw
Unit 3	
classification of microorganisms- bacterial classification	https://youtu.be/QTtIxOUvDE4
bergy's manual of systematic bacteriology	https://youtu.be/e8y17MJ51mg
Methods of Classification- Intuitive, Numerical Taxonomy, Genetic relatedness	https://youtu.be/1eQwAcINazE
General Characters of Viruses	https://youtu.be/SAbYEEys-ak
General Characters of Fungi	https://youtu.be/Gevv6Yg9YrA
General Characters of Actinomycetes	https://youtu.be/ze0NNICJGDw
General Characters of Microplasma	https://youtu.be/Qc57m9FYjB8
General Characters of Rickettsia	https://youtu.be/xgwnkjo5v-4
General Characters of Algae	https://youtu.be/D8zZJMEp3uE
Unit 4	
Prokaryotes and Eukaryotes	https://youtu.be/BeBUTtVFmQI
Typical Bacterial Cell	https://youtu.be/GJPbh7afRIY
Shape Size and arrangement of Bacteria	https://youtu.be/L6f3QiTTXNc
Structure and functions of Capsule and Slime layer	https://youtu.be/3SuiggdP5_Q
Structure and functions of Cell wall	https://youtu.be/_DnH3gScZAM
Structure and functions of Cytoplasmic membrane	https://youtu.be/UxvFdW9aO0s
Structure and functions of Flagella	https://youtu.be/fbHPWfPerK8
Structure and functions of pili	https://youtu.be/wwaV3UMpThY

Structure and functions of ribosomes of prokaryotic and eucaryotic	https://youtu.be/4fP1Tp1dNIE
Structure and functions of plasmid	https://youtu.be/VLM5TXqdf54
Structure and functions of bacterial chromosome	https://youtu.be/KSBmZfaC09M
Structure and functions of Endospores	https://youtu.be/9nrVfKfMcew
Unit 5	
Basic nutritional requirements of bacteria	https://youtu.be/MWR0wUYh5po
Types of growth media of bacteria	https://youtu.be/mUmEe-Byg8o
Determination of nutritional requirement - Auxanographic technique	https://youtu.be/V47QuMAR8rY
Determination of nutritional requirement - Replica plating technique	https://youtu.be/vJGkCcvP3IA
Nutritional classification of bacteria on the basis of source of carbon and nitrogen	https://youtu.be/BV3fDTNqFEQ
Pure and mix culture of bacteria	https://youtu.be/949qQtAnjIc
Methods of isolation of pure culture of bacteria 1	https://youtu.be/Om7lq2OFU3c
Methods of isolation of pure culture of bacteria 2	https://youtu.be/loyeVy1D-3o
Methods of isolation of pure culture of bacteria 3	https://youtu.be/jWdxK6zSoUY
Methods of isolation of pure culture of bacteria 4	https://youtu.be/gwPZhsyMI9M
Methods of isolation of pure culture of bacteria 5	https://youtu.be/eTT3O0hnNpk
Methods of preservation of pure culture 1	https://youtu.be/mjvx8ext9iw
Methods of preservation of pure culture 2	https://youtu.be/rm_E8I8P9lo
Methods of preservation of pure culture 3	https://youtu.be/RygKhIOztRw
Unit 6	
Reproduction of bacteria	https://youtu.be/4PsUiJwv9UU
growth rate and generation time of bacteria	https://youtu.be/1vx_J5xBcoY
bacterial growth curve	https://youtu.be/2_jNKYxD8DQ
synchronous culture of bacteria	https://youtu.be/FdkhxoAn-6Q
continuous culture of bacteria	https://youtu.be/9hoxKyDDNDc
Measurement of growth of bacteria	https://youtu.be/hlZFv0nag4
Cell mass measurement of bacteria	https://youtu.be/Gfpc3UIyJ3c
Cell activity measurement of bacteria	https://youtu.be/Y2eCE6zNXTI
Factors influencing bacterial growth Temp Ph and gases	https://youtu.be/biIx0desyP0