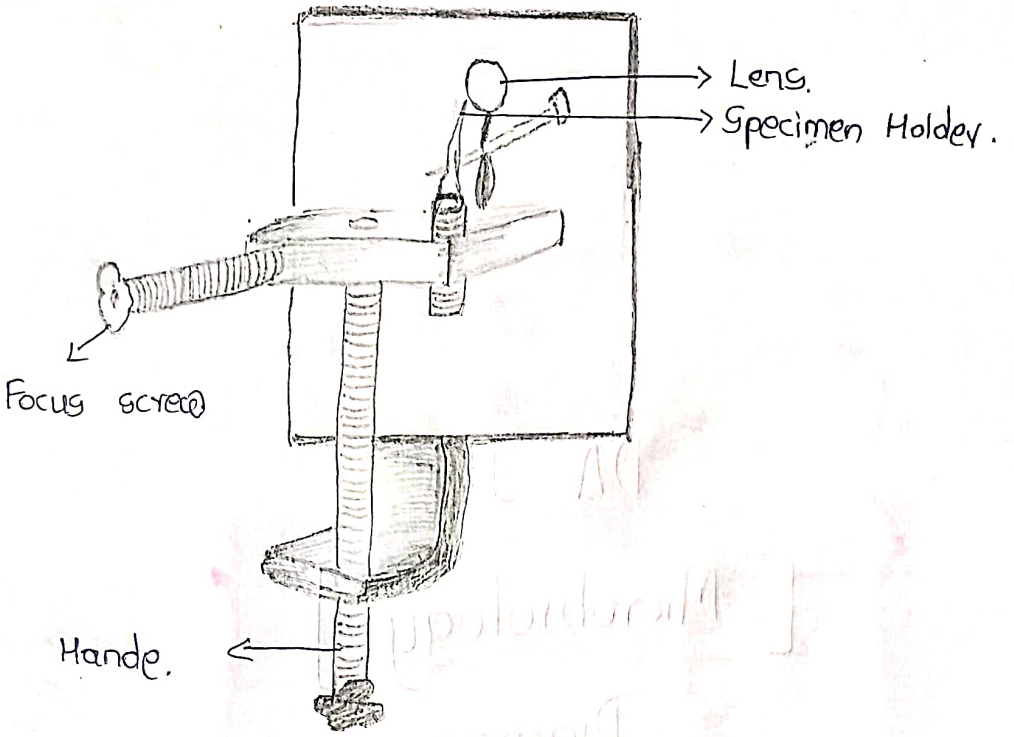
DA I.

[Microbiology]

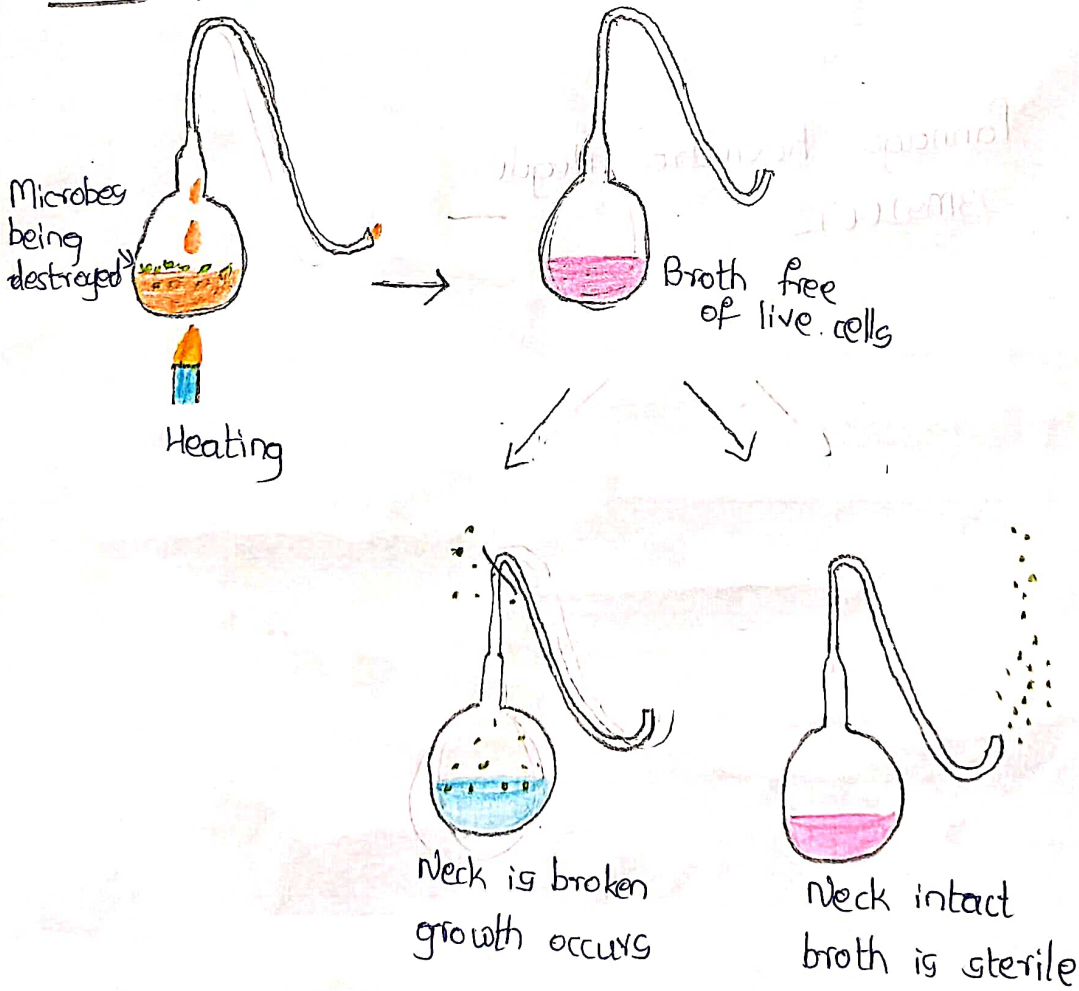
Diagrams

Name: Pannaga Ravindra Hegde
Reg. No: 23MSI0072

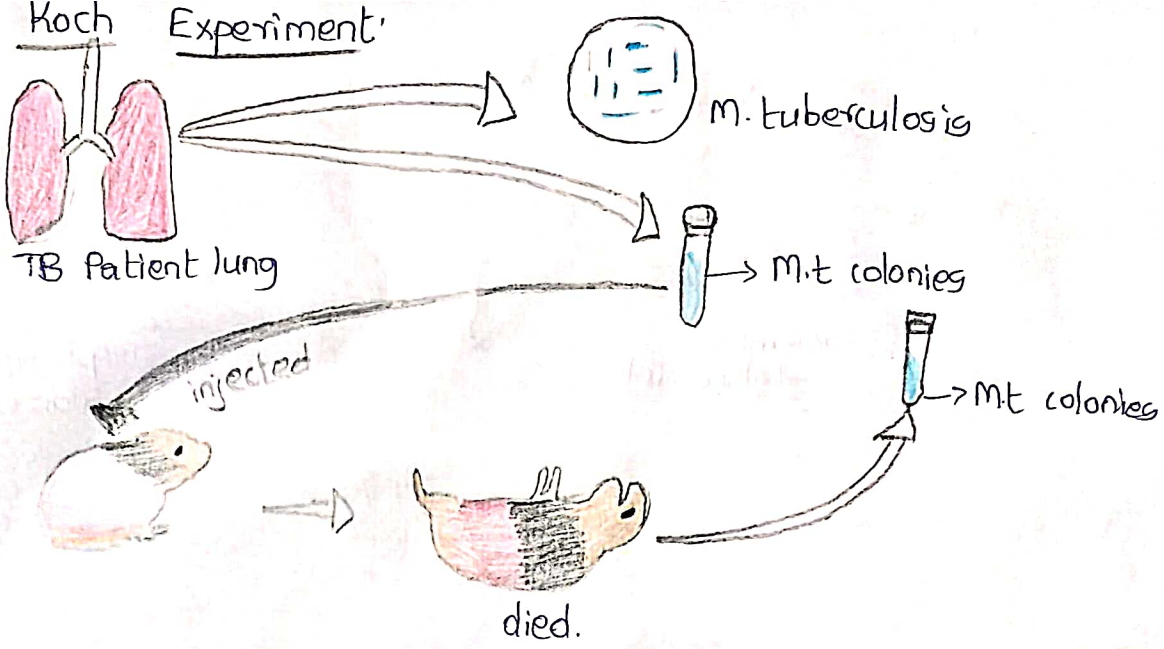
1) Primitive Microscope.



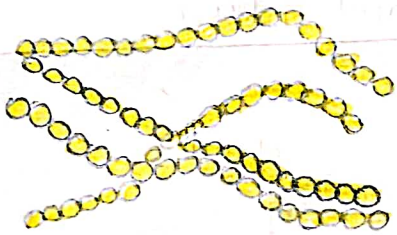
2) Louis Pasteur Swan Neck Experiment



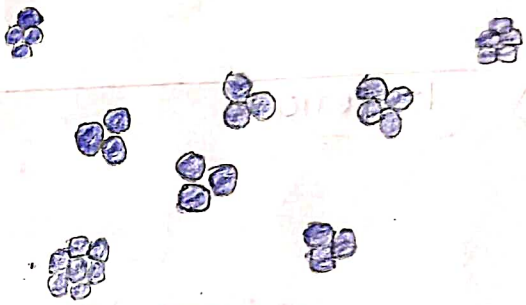
3) Robert Koch Experiment:



4) Bacterial Morphology

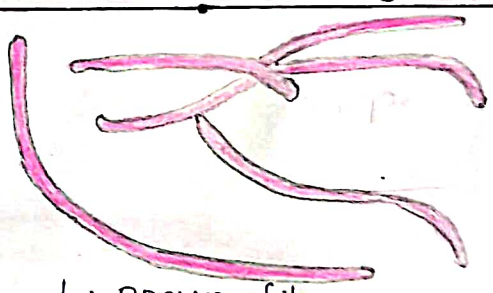


S. agalactiae
cocci in chains



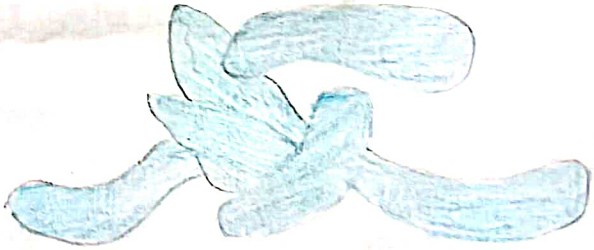
S. aureus
cocci in clusters

M. mazei
cocci in cubical packets

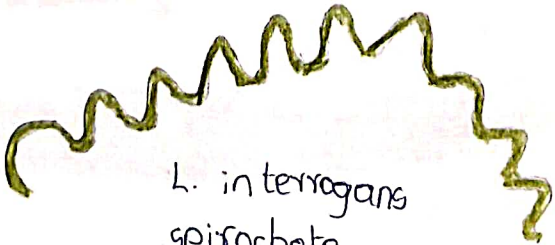


L. pneumophila
rods in chain

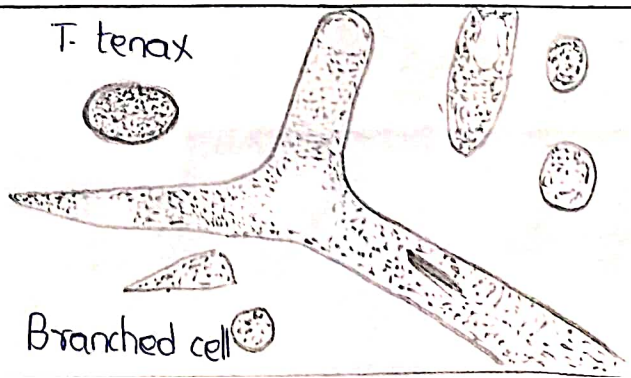
V. vulnificus
comma shaped vibrio



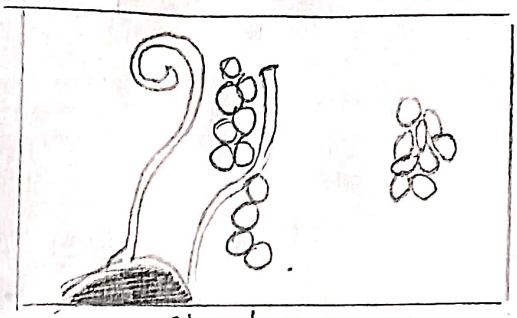
C. jejuni (spiral)



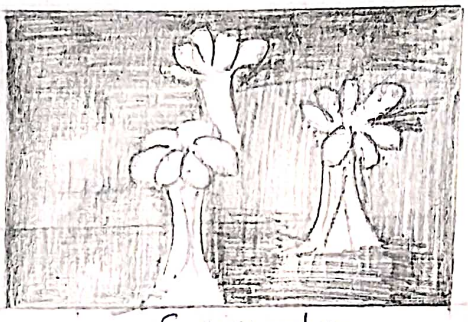
L. interrogans
spirochete



C. crescentus stalked cell

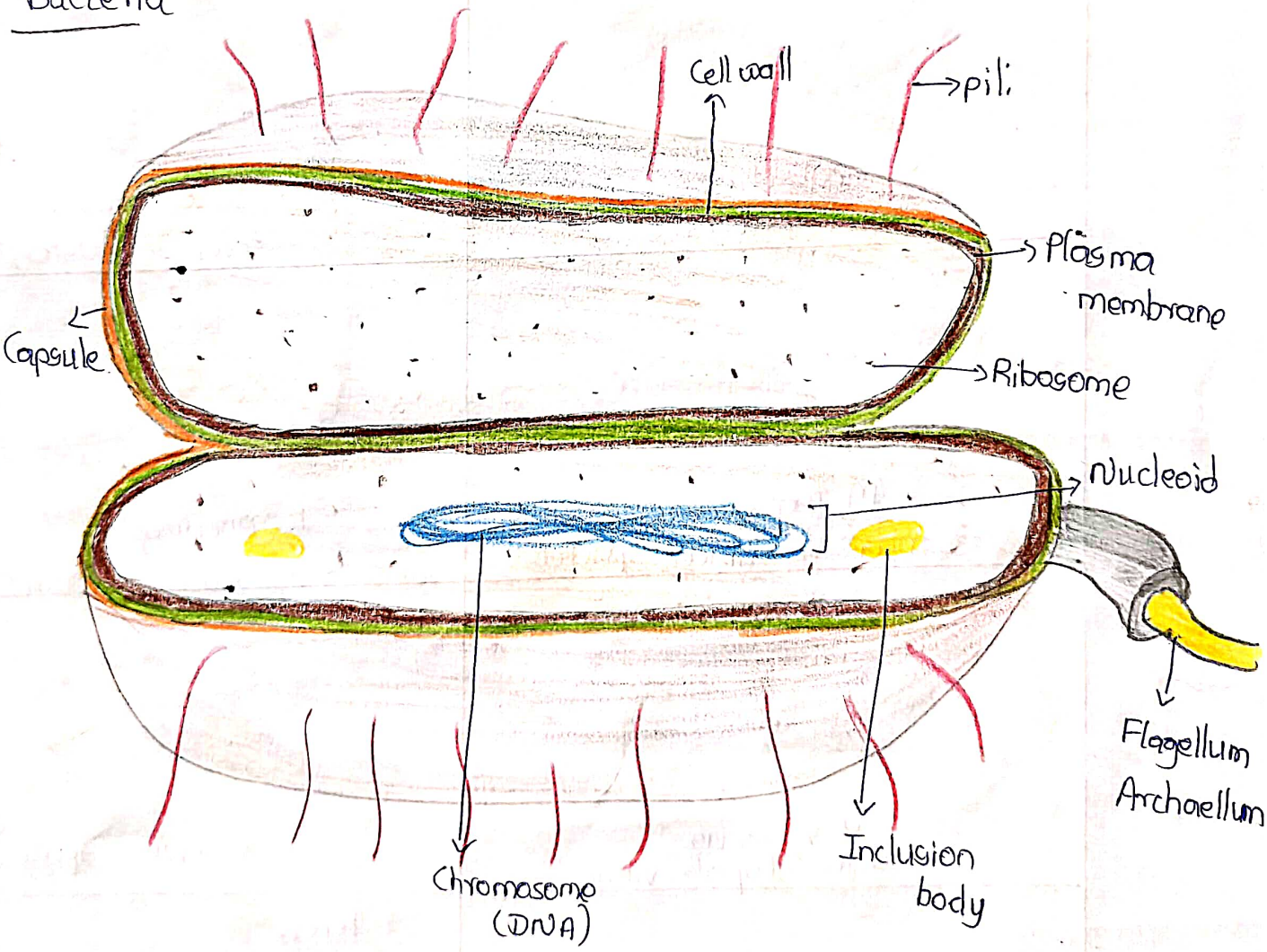


Streptomyces filamentous



C. crocatus fruiting body

9) Bacteria



6) Simple Staining

Crystal violet stain
[rod shaped bacteria]

[Coccus]

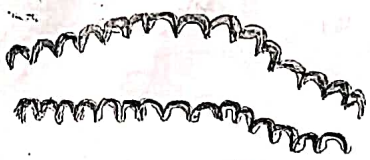
coccus | diplococcus | streptococcus

tetrad | staphylococcus | sarcinae

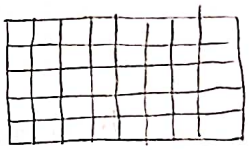
bacillus | diplobacillus | streptobacillus

vibrio | trichome | palisade | coccobacillus

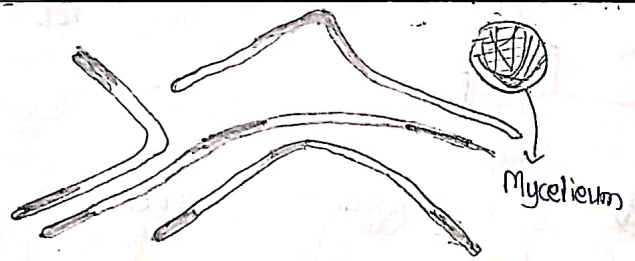
spirullum



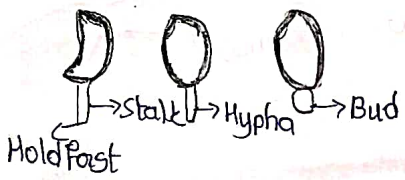
spirochete



[Square shaped] Arcula



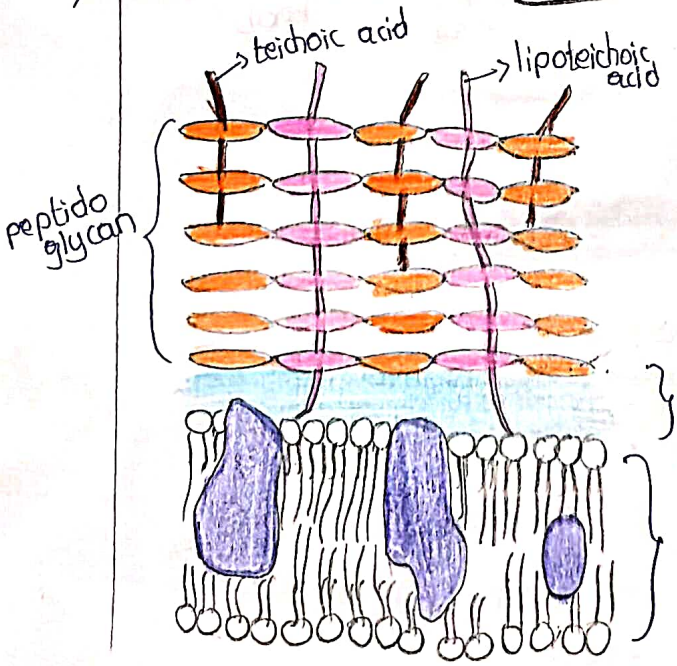
Filamentous bacteria



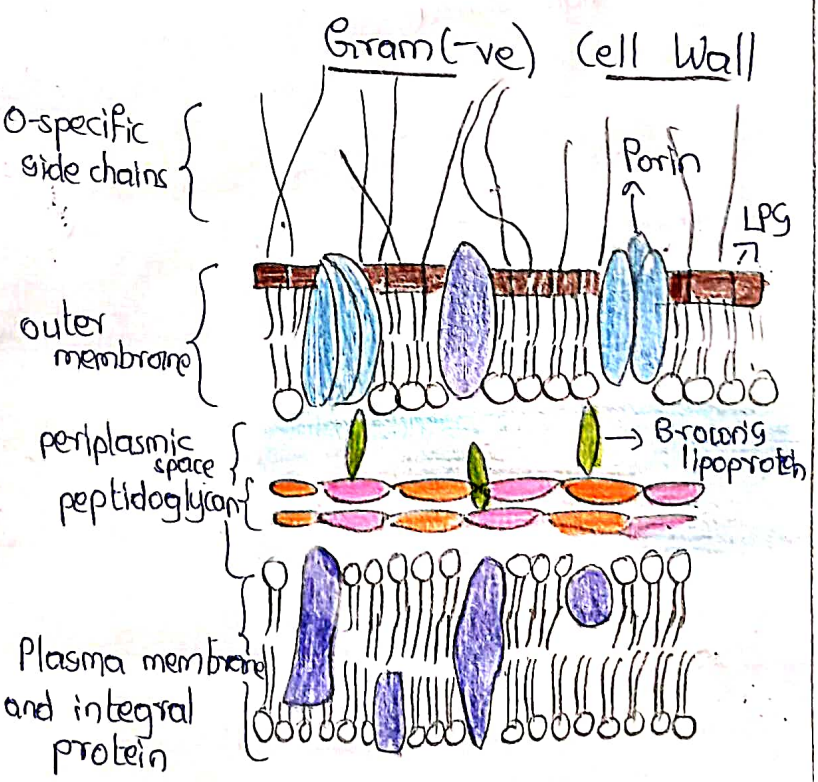
Appendaged bacteria

Pleomorphic bacteria

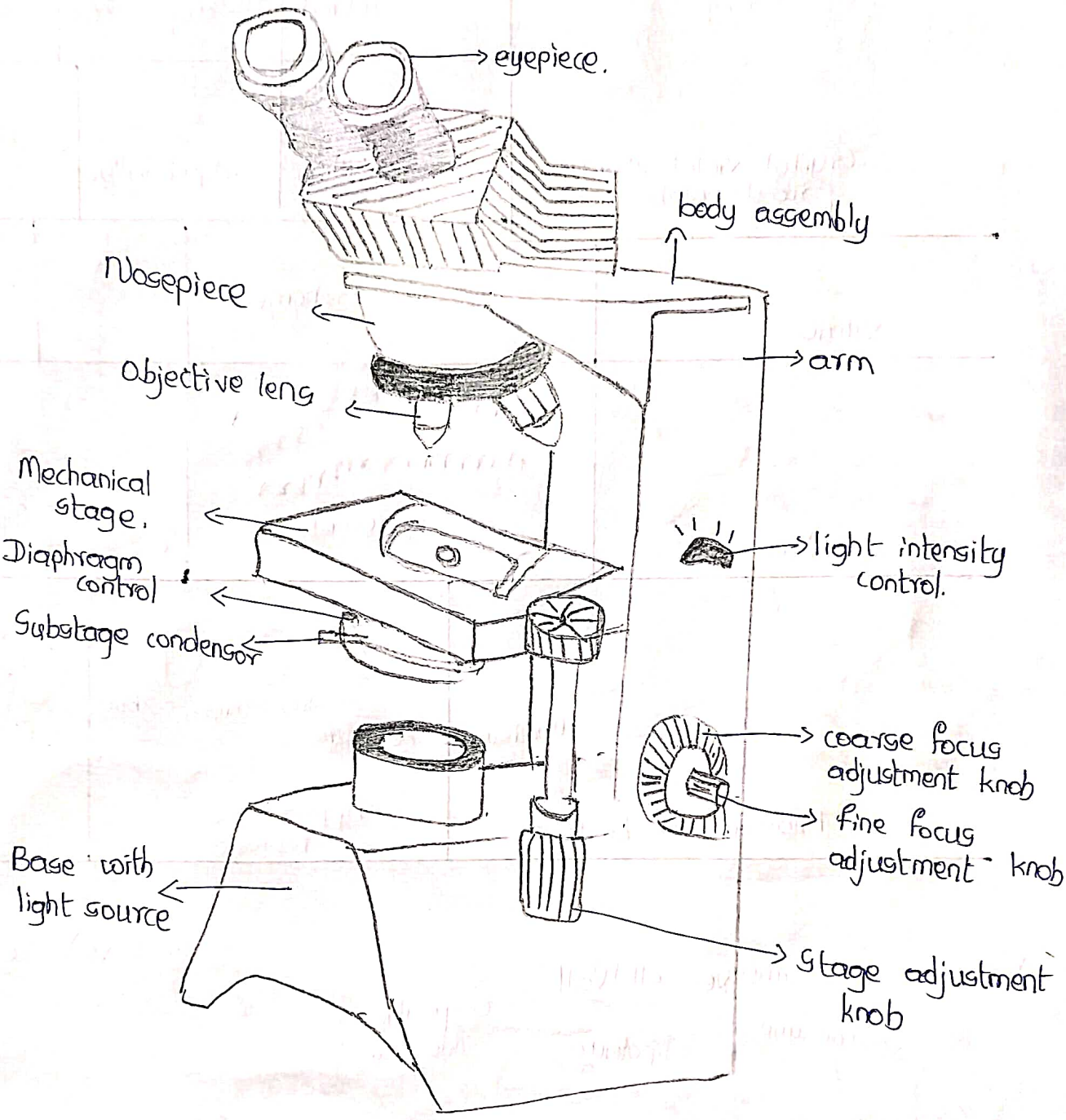
7) Gram(+ve) Cell Wall



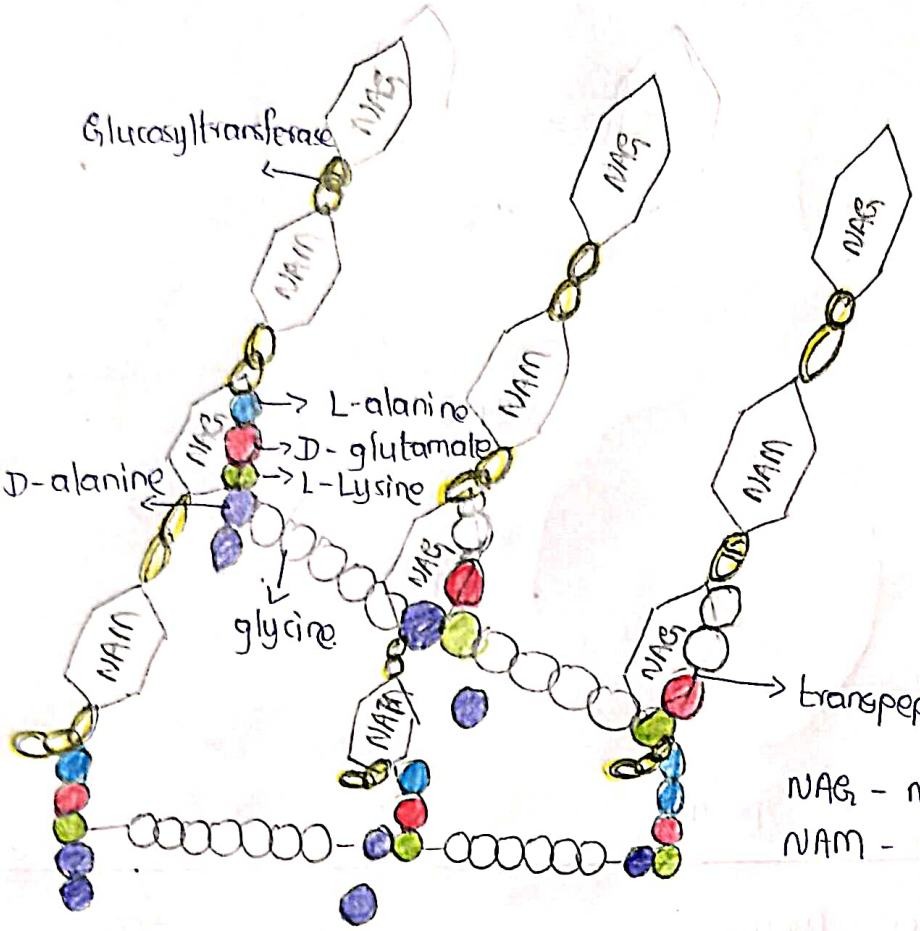
Gram(-ve) Cell Wall



8) # Bright Field Microscopy [Binocular microscope]

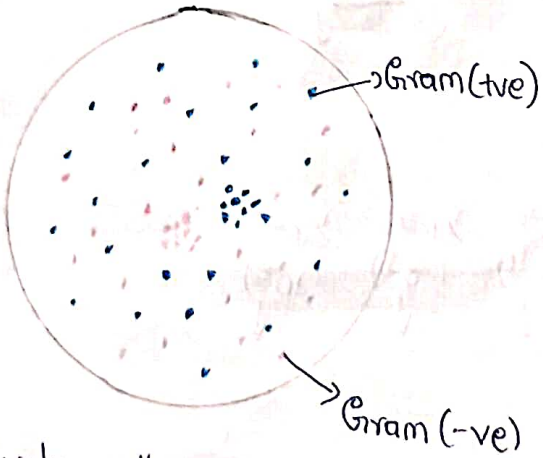


9) Peptidoglycan cell wall structure:



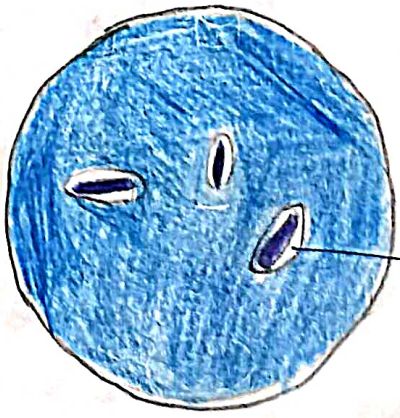
NAG - N-acetyl glucosamine
NAM - N-acetyl muramic acid

10) Gram's Staining



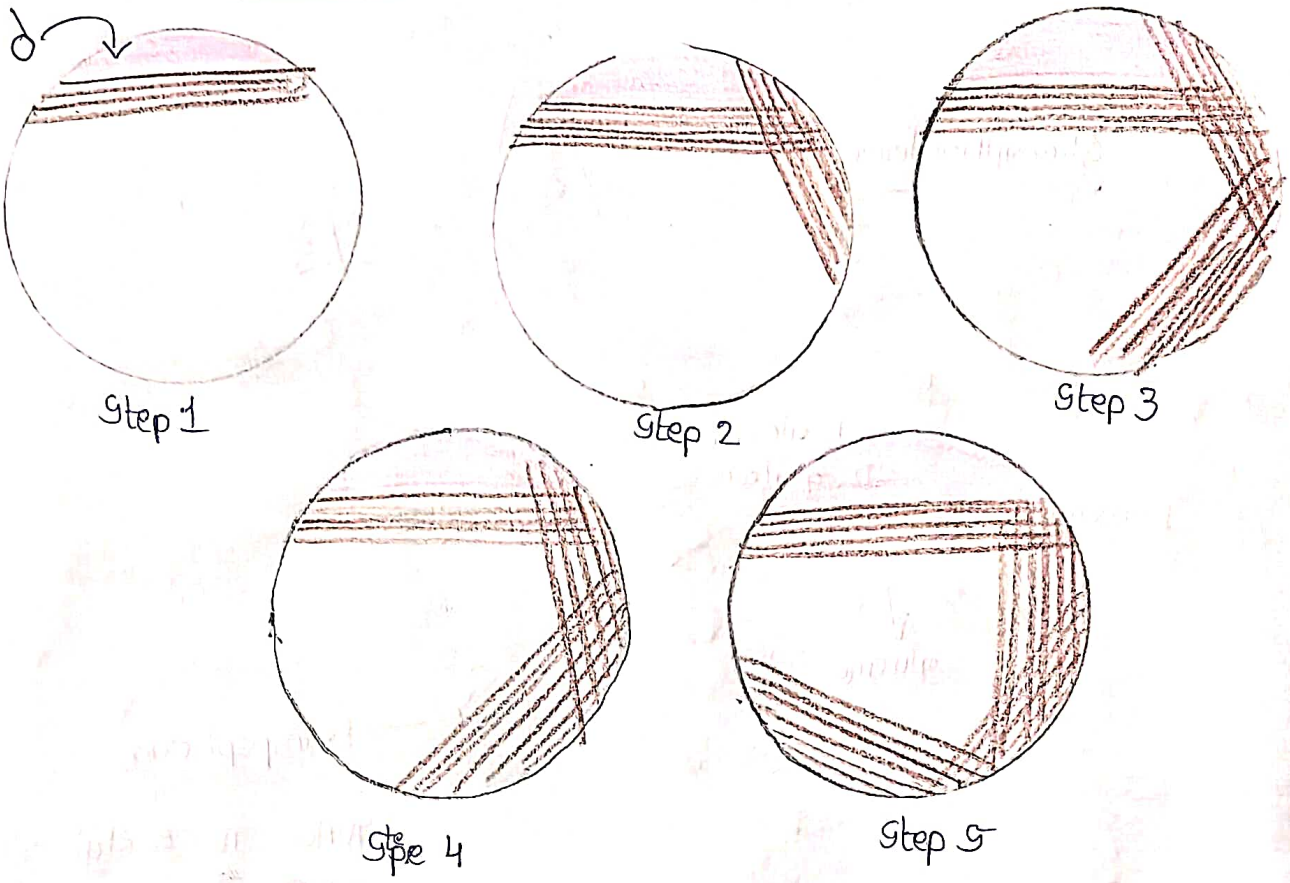
Purple cell → Gram (+ve)
Pink cell → Gram (-ve)

11) Capsule Staining

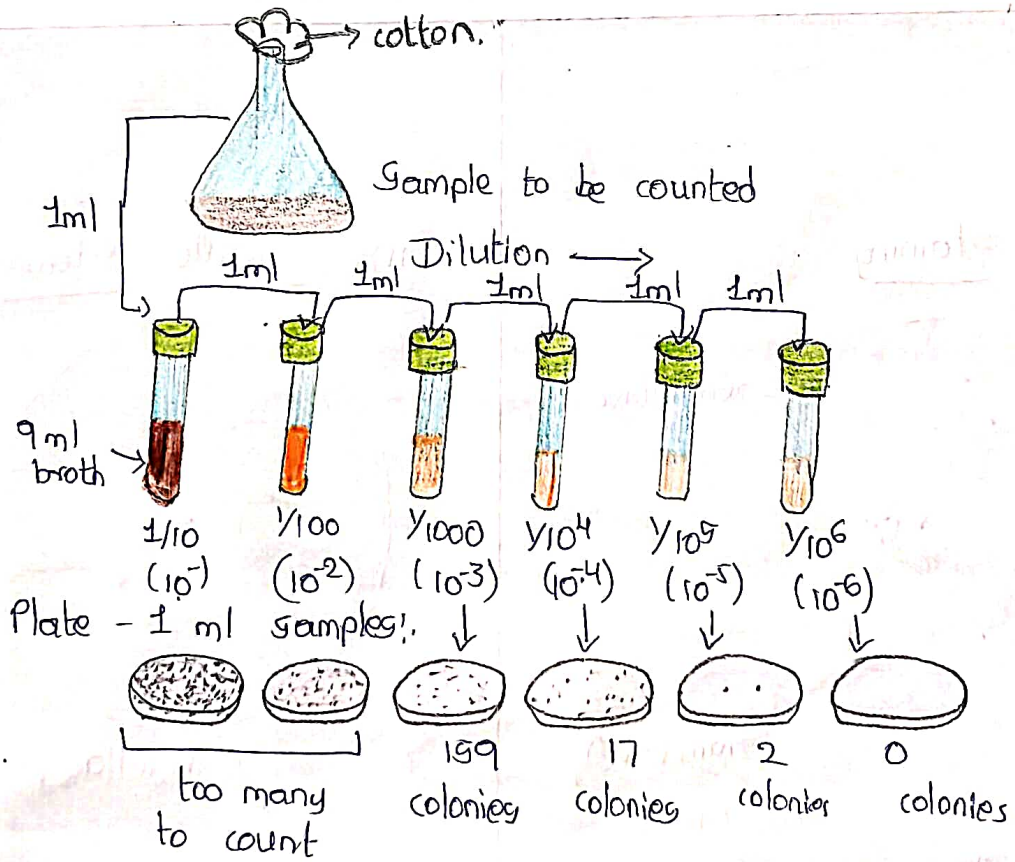


Klebsiella pneumoniae

11) Streak Plate technique.



12) Serial Dilution Method:-

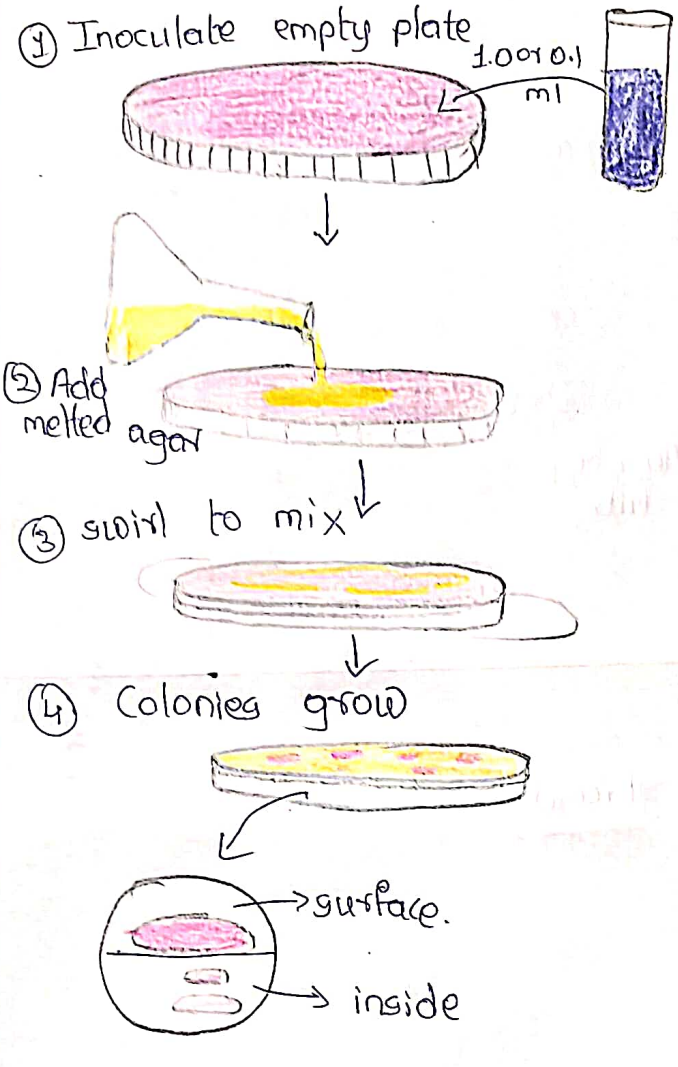


159×10^{3}

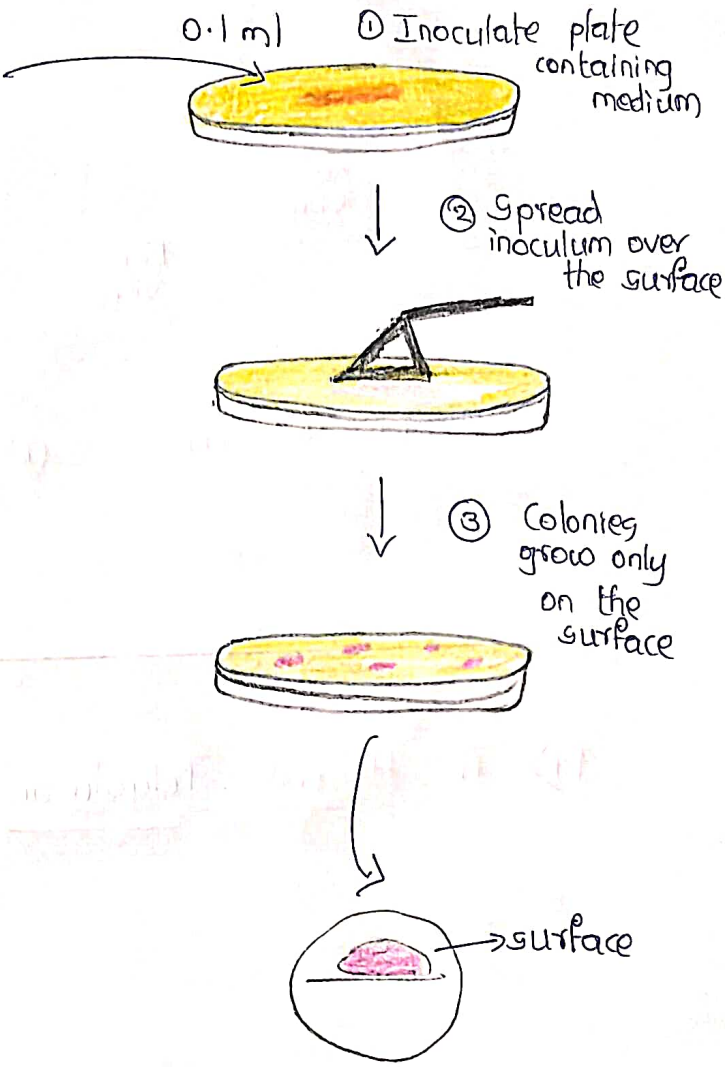
Plate count × dilution factor $= 1.59 \times 10^{5}$

Cells [colony forming units] per ml of original sample

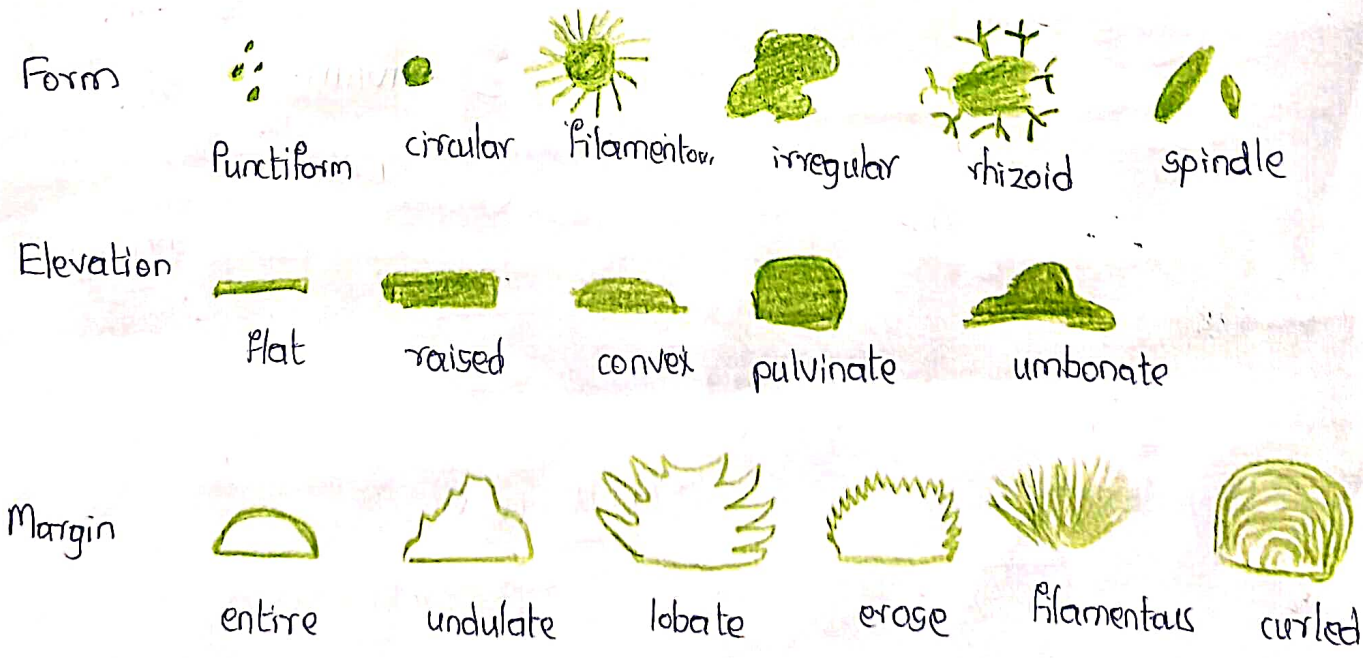
13) Pour - Plate Method.



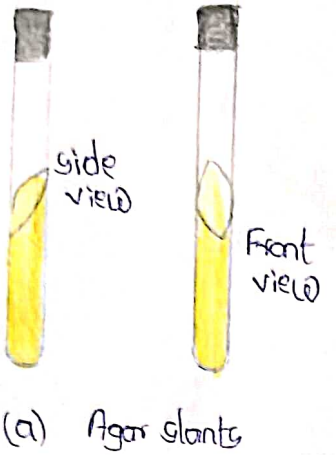
14) Spread Plate Method.



15) Bacterial Colony Morphology

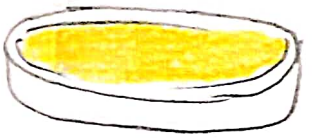


16) Stab Culture



(a) Agar slants

(b) Agar deep tube.



(c) agar plate

17) A Helical Polyglycan Strand.