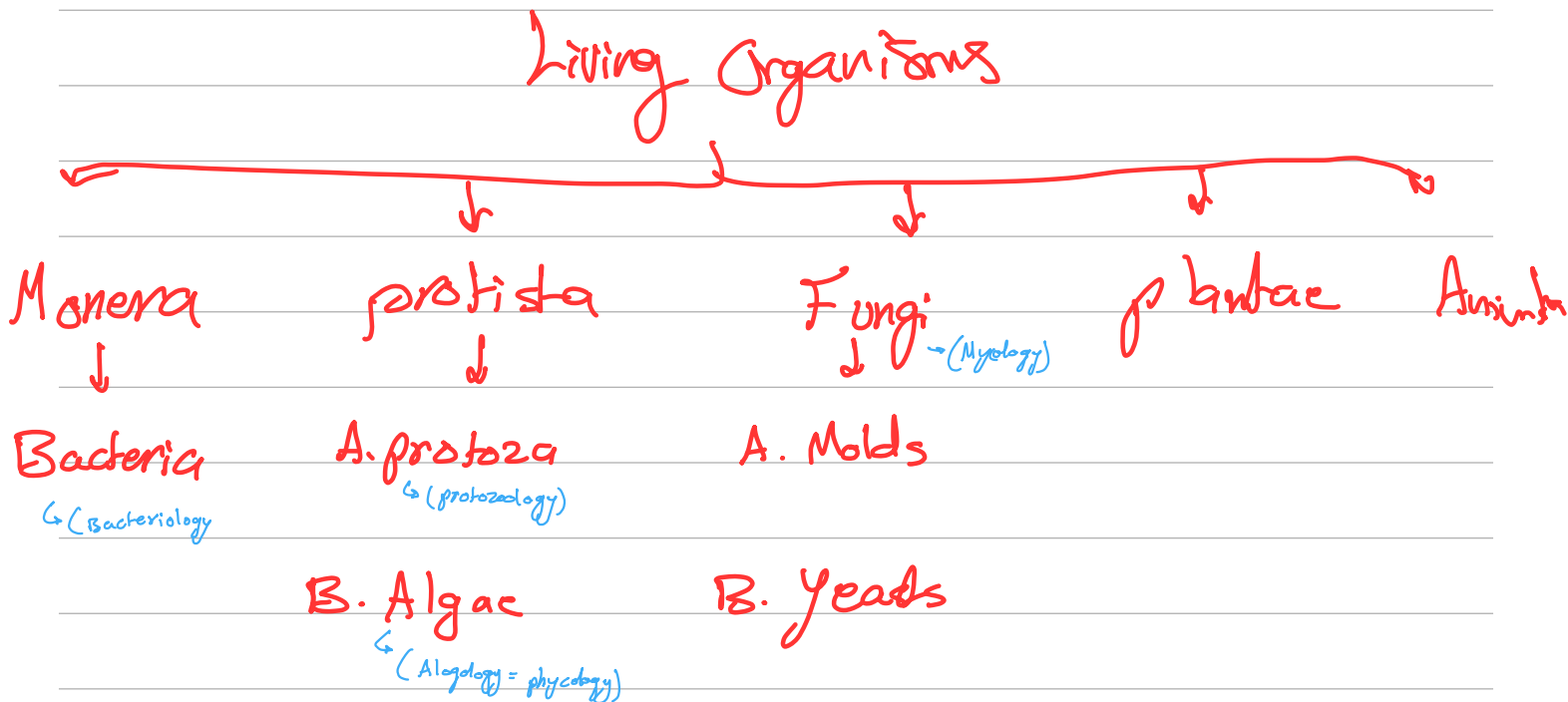


* Mycology = study of fungi.

Algology = phycology = study of algae.



Bacteria

- * prokaryotic
- * Unicellular.
- * Simple internal structure.
- * Grow on artificial lab. media.
- * asexual (simple cell division)

Viruses

- * don't grow on artificial media.
- * require living cells, Obligate parasite.
- * Cause diseases in A. humans.
B. animals.
C. plants.
D. Microorganisms.

Protozoa

- * Eukaryotic.
- * Unicellular:
 - sexual.
 - asexual.
- * cultivated on lab media.
- * intracellular parasites.

Algae

- * Eukaryotic
- * Unicellular.
- * photosynthetic.
- * Most occur in aquatic environments.
 - sexual.
 - asexual.

Molds

- * Eukaryotic.
- * Multicellular.
- * cultivated on artificial lab. media.
- sexual.
 - asexual.
- * can cause disease

← Fungi →

Yeasts

- * Eukaryotic.
- * Unicellular.
- * Grow on artificial lab. media.
- sexual
 - asexual (cell division, budding)

prokaryotic ← Bacteria. vs to Eukaryotic cells *

Multicellular ← Molds vs to Unicellular. cells *

asexual ← Bacteria vs sexual and conjugation reproduction cells *

asexual

* Pioneers of Microbiology // Discovery period.

⇒ Antony Van Leeuwenhoek = tailor, animalcules, first described bacteria and the protozoans.

⇒ Robert Hooke = Developed Compound microscope, 1st use term "cell", proposed the cell theory.

⇒ Ignaz Semmelweis = prevent "puerperal sepsis" by washing hands in antiseptic solutions.

* Transition period.

⇒ Redi = disapproved the theory of spontaneous generation.

* Golden period.

- ⇒ Louis Pasteur = Father of Microbiology. , anaerobic fermentation by both bacteria and yeast
- Developed pasteurization.
 - Introduction of sterilization techniques.
 - studies on Anthrax and cholera.
 - Vaccine concept.

- ⇒ Robert Koch =
- isolation of pure culture.
 - use solid media for isolation bacteria.
 - Bacterial staining techniques.
 - Koch's Postulates.
 - Discovered Anthrax bacillus, Tubercle bacillus and cholera.

- ⇒ Dmitri Ivanowski * Russian Botanist. =
- virus of tobacco mosaic disease.
 - launching the field of virology.

- ⇒ Alexander Fleming = penicillin and its effect on gram positive microorganisms.
- ↑

Microbiology

Lecture 1

* ارضين العلماء:

1. which of the following correct match:

- A. Louis Pasteur—>Discovered Mycobacterium tuberculosis
- B. Redi—> As a tailor
- C. Ignaz Semmelweis—>discovered hygiene
- D. botanist launching the field of vaccine

Ans:C

2. All the following are true except:

- A. Russian botanist -- virology
- B. Redi -- disapproved spontaneous generation
- C. Robert Koch -- animalcules
- d. botanist launching the field of virology

Ans:C

3. All of the following is true except :

- a. Robert Hooke : discovered animalcules
- b. Pasteur: vaccine concept
- c. Koch's postulate: one micro one disease
- d. botanist launching the field of virology

Ans: A



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دعواتكم