

STSN GDC, KADIRI, DEPARTMENT OF BOTANY

BOTANY - Bridge course: 2020-21

Bridge course (For I BZC students)

Syllabus:

వృక్షరాజ్యం - వర్గీకరణ; బాక్టీరియా, వైరస్ సాధారణ లక్షణాలు - 2 Periods

Plant Kingdom Classification; General characteristics of Bacteria and Virus

నిమ్నశ్రేణి మొక్కలు - ఉన్నత శ్రేణి మొక్కలు - సాధారణ లక్షణాలు

(శైవలాలు, శిలీంధ్రాలు, బ్రయోఫైటా, టెరిడోఫైటా, వివృతబీజాలు, ఆవృతబీజాలు)

General characteristics of Lower group and Higher group of Plants - 2 Periods

(Algae, Fungi, Bryophyta, Pteridophyta, Gymnosperms and Angiosperms)

వృక్ష వర్గీకరణ శాస్త్రం - 01 Period

Plant Taxonomy

వృక్ష కణం - నిర్మాణం; కణాంగాలు — 01 Period

Plant cell structure; Cell organelles

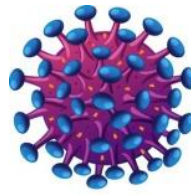
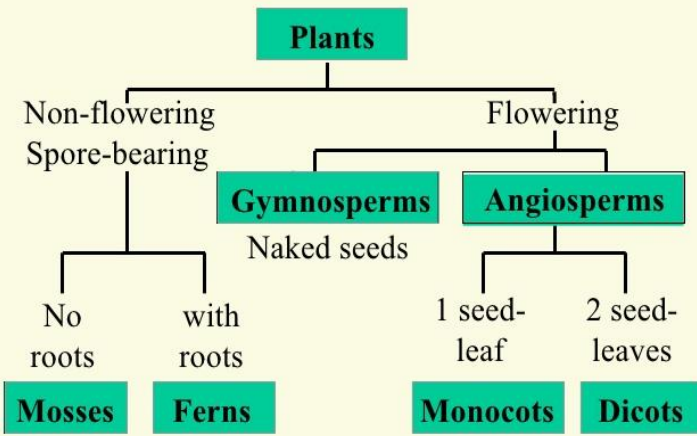
వృక్ష శరీరధర్మ శాస్త్రం

Plant Physiology – 01 Period

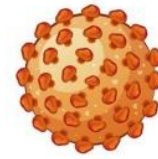
No. of Periods: **07** (January 2021)

Department of Botany
STSN GDC, KADIRI
Anantapuramu Dist.

Plant Classification



HIV



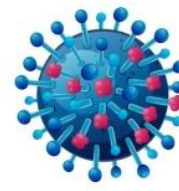
Hepatitis B



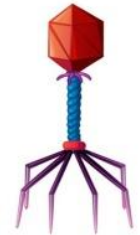
Ebola Virus



Adenovirus



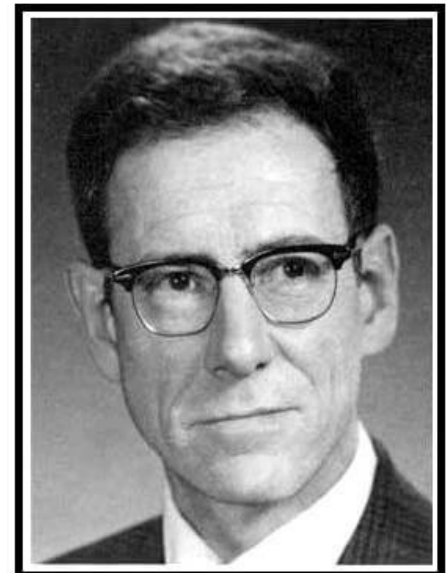
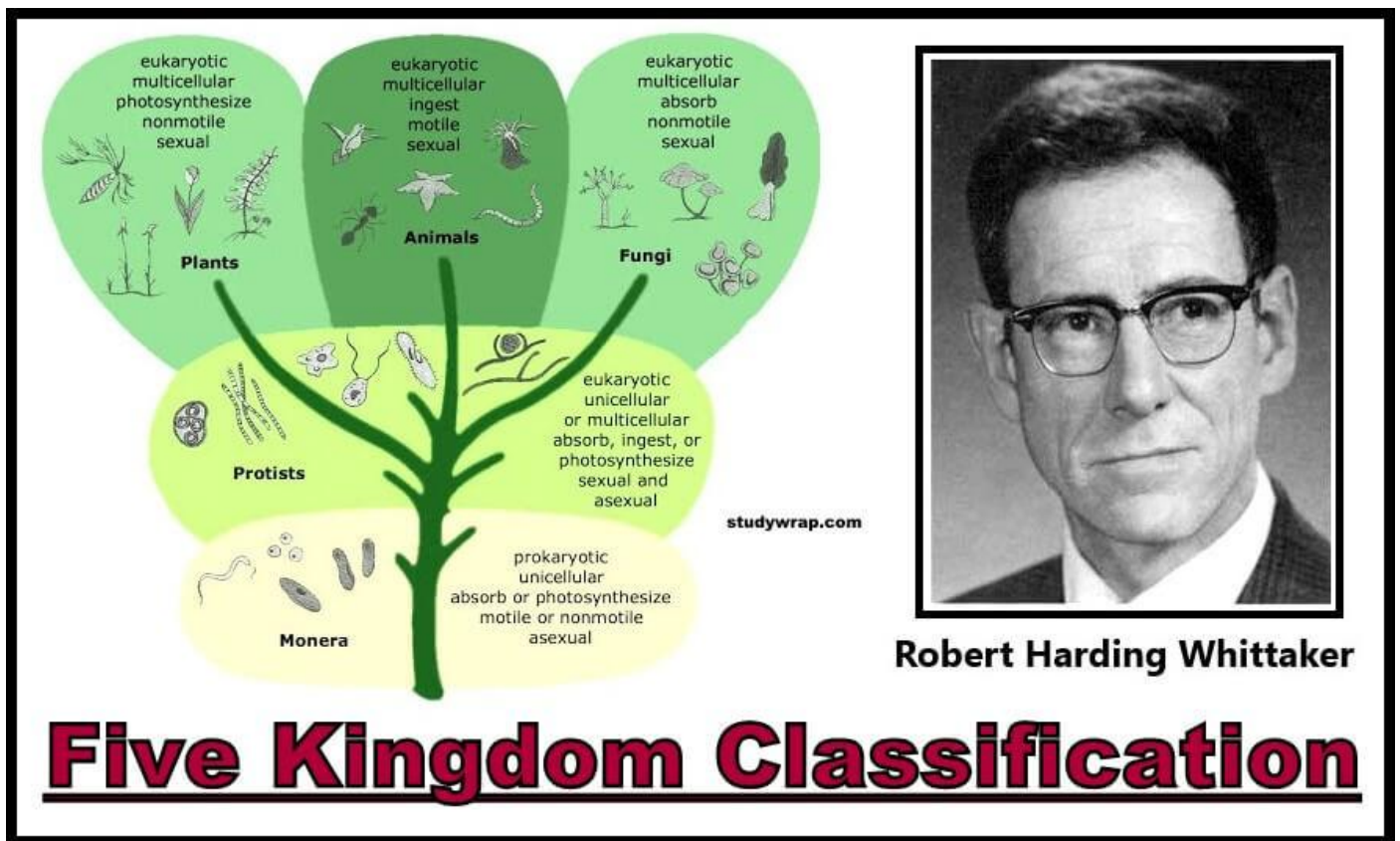
Influenza



Bacteriophage

Plant - Kingdom

Virus – Types

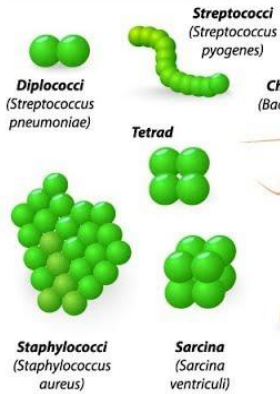


Robert Harding Whittaker

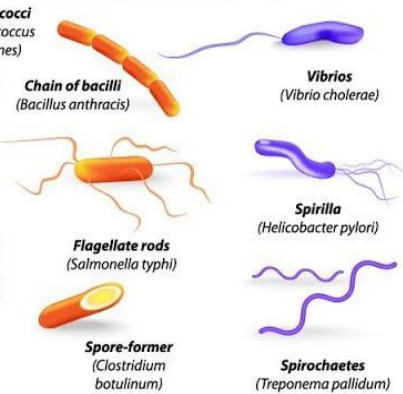
Five Kingdom Classification

BACTERIA SHAPES

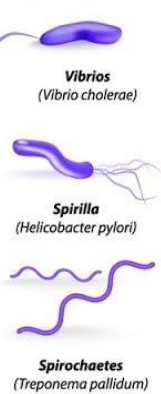
SPHERES (COCCI)



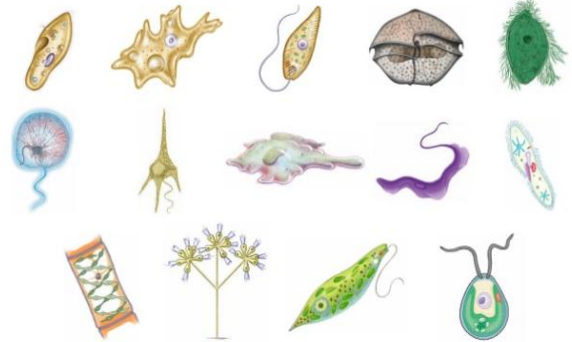
RODS (BACILLI)



SPIRALS



Kingdom Protista



Classification of Algae



red
alga

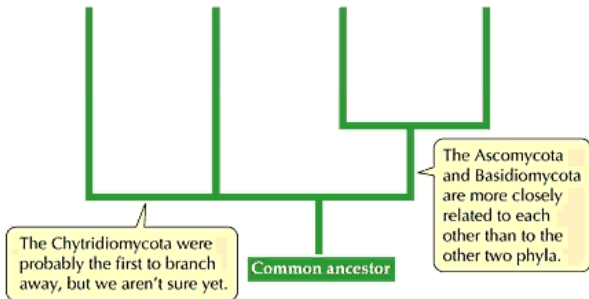
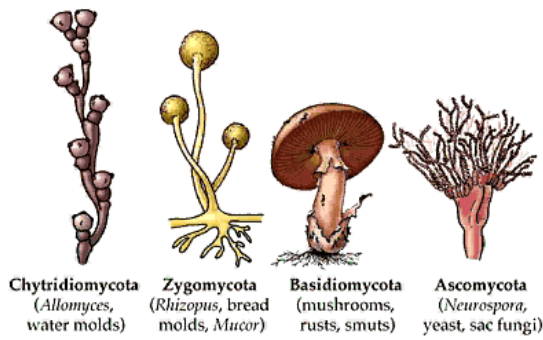
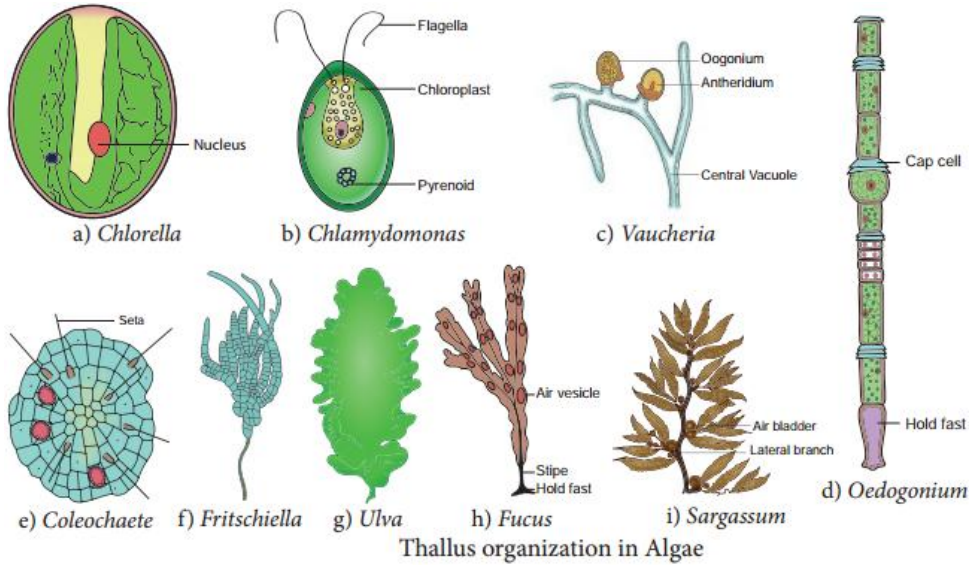


brown
alga



green
alga

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Division Bryophyta: Mosses and Their Allies



Thalloid Liverworts



Examples of Pteridophytes



marsilea



fern



horsetails



Psilotum

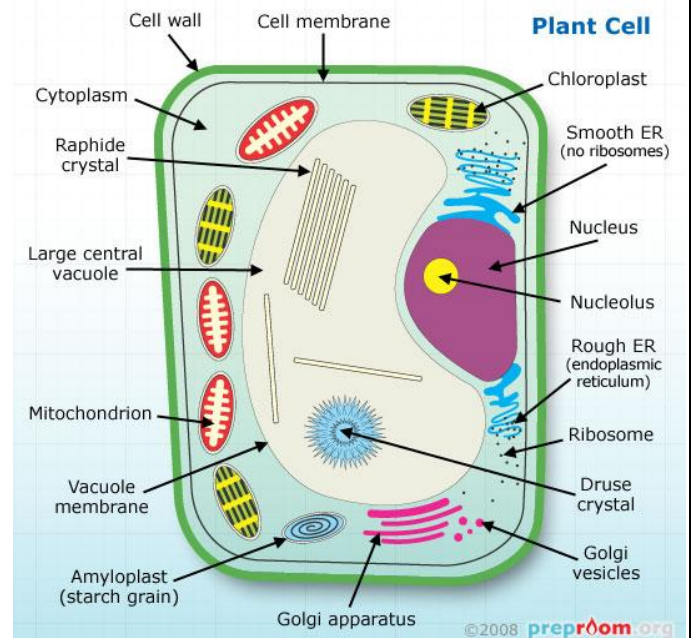
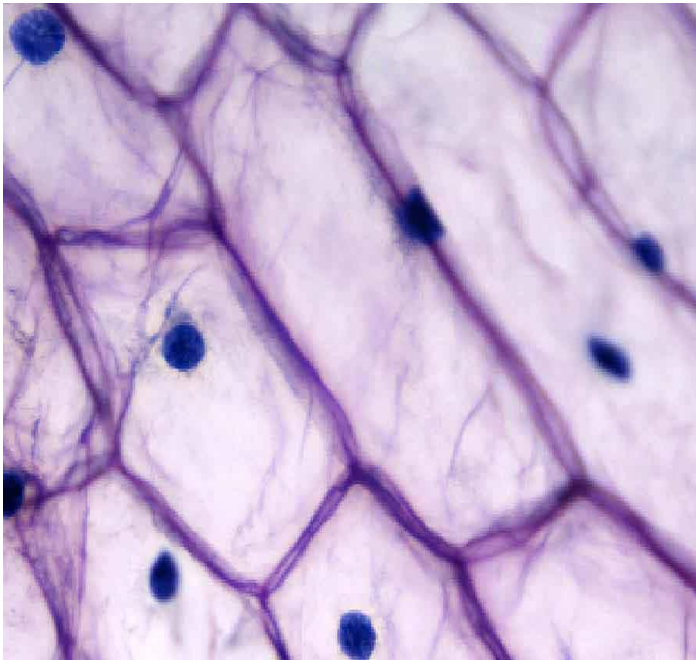










Gymnosperms
first plants to have seeds

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వృక్ష కణం - నిర్మాణం (Plant Cell - structure)

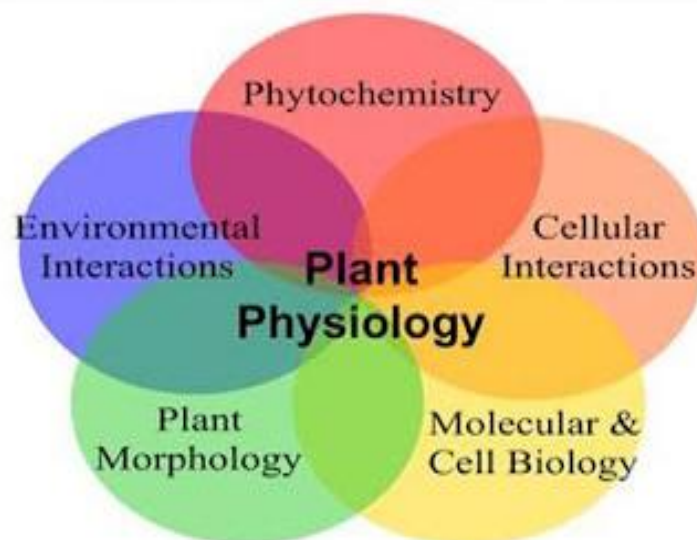


 <p>Nucleus the organelle that contains the cell's DNA and is the control center of the cell</p>	 <p>Chloroplast the organelle that uses the energy of sunlight to make food</p>
 <p>Ribosome the organelle in which amino acids are hooked together to make proteins</p>	 <p>Golgi complex the organelle that processes and transports proteins and other materials out of cell</p>
 <p>Endoplasmic reticulum the organelle that makes lipids, breaks down drugs and other substances, and packages proteins for Golgi complex</p>	 <p>Large central vacuole the organelle that stores water and other materials</p>
 <p>Mitochondrion the organelle that breaks down food molecules to make ATP</p>	 <p>Lysosome the organelle that digests food particles, wastes, cell parts, and foreign invaders</p>

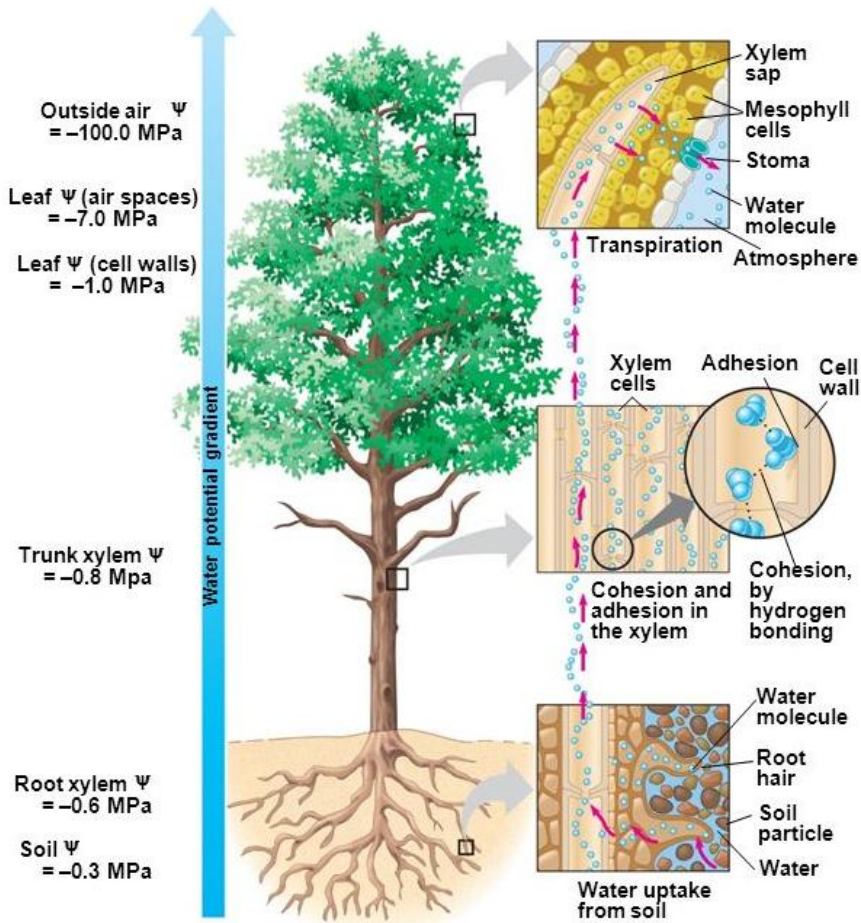
Plant Physiology

DEFINITION :

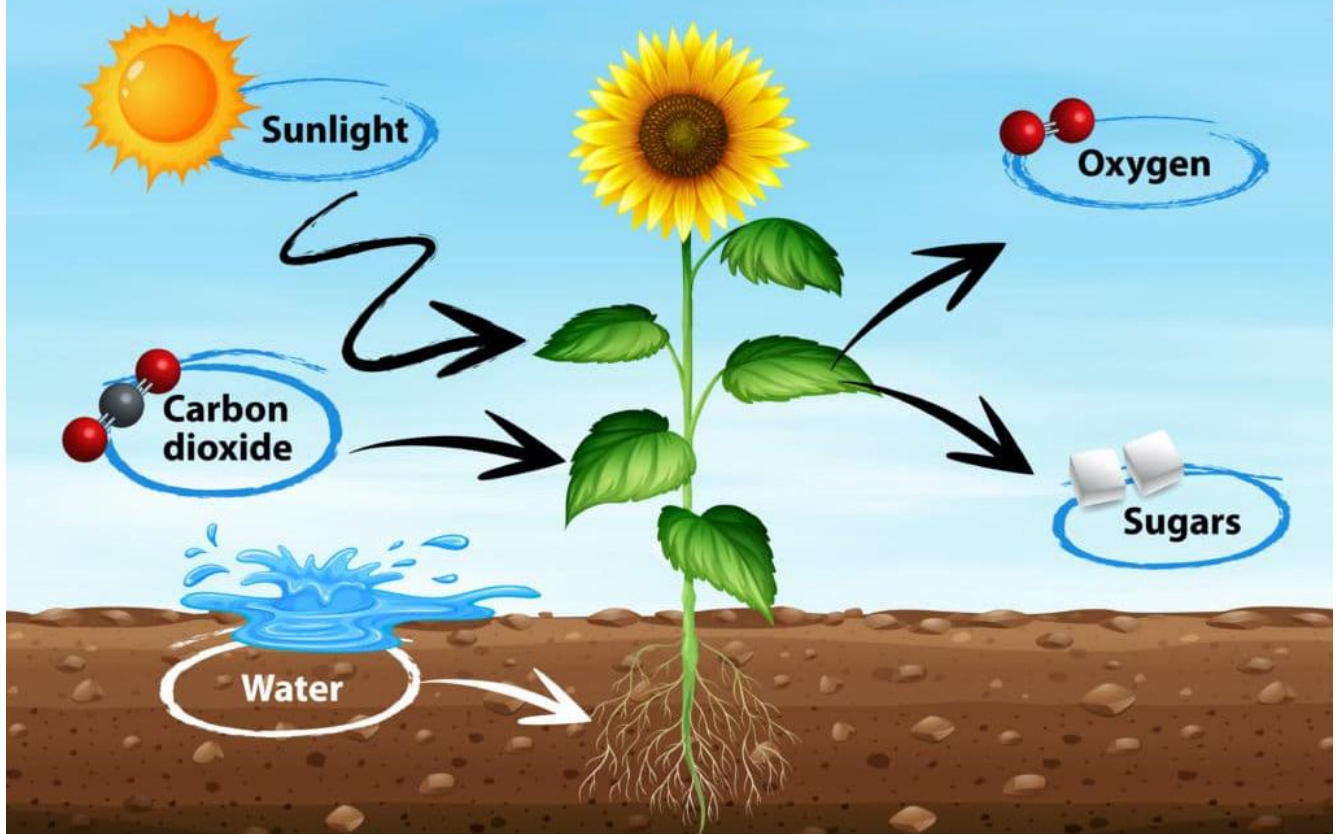
“ Sub-discipline of botany which deals with the functioning and physiology of plants.



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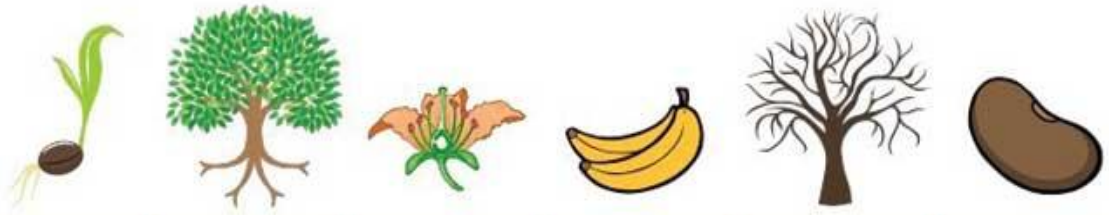


Process of Photosynthesis



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Phytohormones
(Plant hormones)



	Germination	Growth to Maturity	Flowering	Fruit Development	Abscission	Seed Dormancy
Gibberellin	✓	✓	✓	✓	✗	✗
Auxin	✗	✓	✓	✓	✗	✗
Cytokinins	✗	✓	✓	✓	✗	✗
Ethylene	✗	✗	✓	✓	✓	✗
Absciscic Acid	✗	✗	✗	✗	✓	✓

Dr.K.Sreedevi,
Lecturer in Botany,
STSN GDC,KADIRI.