TEACHING AND LEARNING METHODOLOGIES

Department of Botany

ICT ENABLE LEARNING

Power point presentation:

It is the mode of education that uses information and communication technology to support , enhance and optimize the delivery of information. It leads to improved student learning and better teaching methods.

https://in.docworkspace.com/d/sIMyji45lioD_pAY?sa=00&st=0t

Zoom class:

TOPIC:- TYPES OF DNA

DNA IS A GROUP OF MOLECULES THAT ARE RESPONSIBLE FOR CARRYING AND TRANSMITTING THE HERIDITY MATERIALS OR THE GENETIC INSTRUCTIONS FROM PARENT TO OFFSPRINGS.

It was recognized by Swiss biologist Johannes Fried rich miescher.

DNA is abbrevated as Deoxy ribonucleic acid.

Three types of DNA:-

A-DNA B-DNA Z-DNA

A-DNA:-

It is right handed double helix similar to the B-DNA.

Dehydrated DNA takes an A form that protects the DNA during extreme conditions such as desiccation.

B-DNA:-

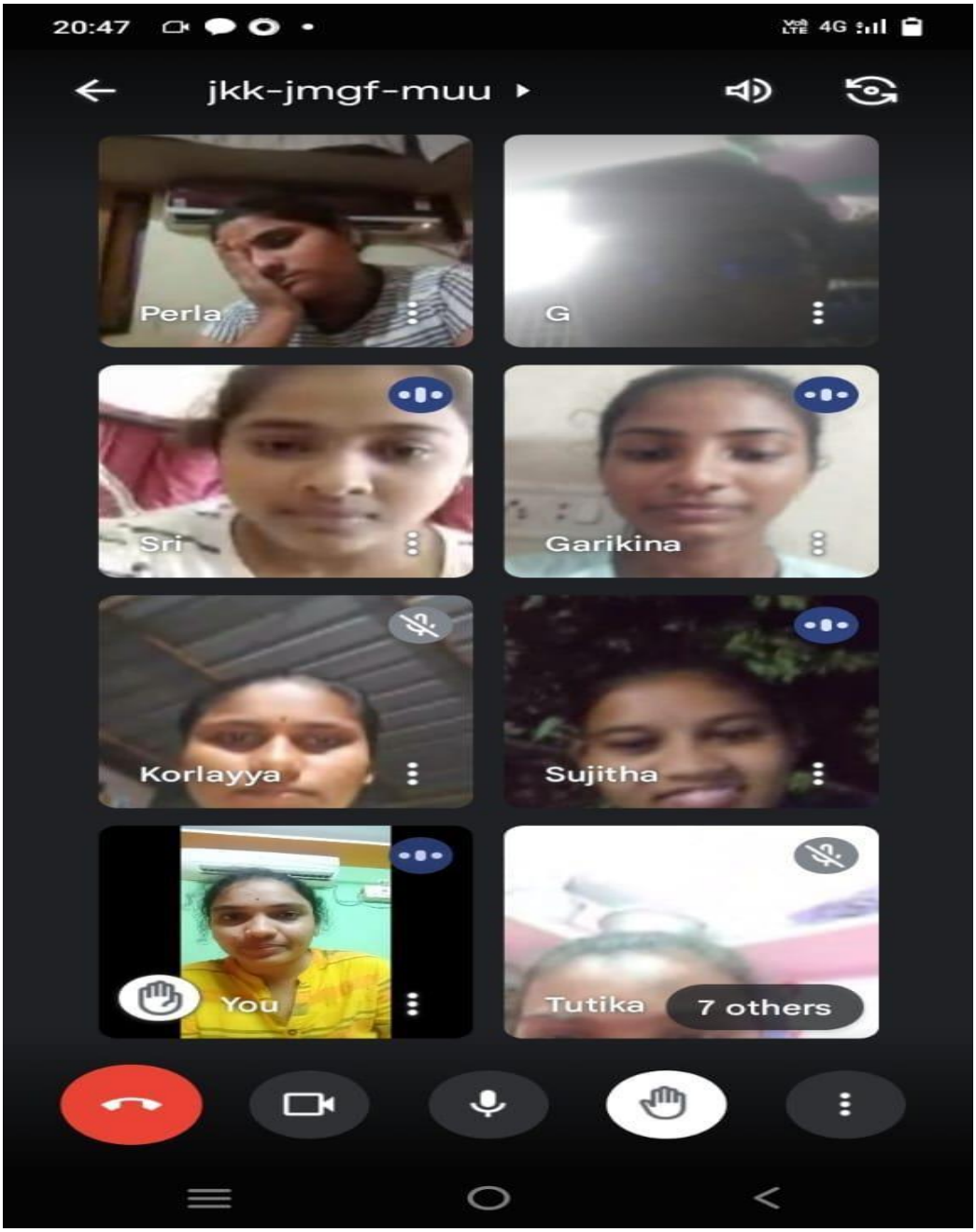
This is the most common DNA confirmation and is a right handed helix.

The majority of DNA has a D- type conformation under normal physiological conditions.

Z-DNA:-

It is left handed DNA where the double helix winds to the left in a zig-zag pattern.

It was discovered by Andres Wangand Alexander rich.



Student power point presentations:

TOPIC: PLANT BREEDING BY CHATURYA

Lecturer Power point presentation:

TOPIC: STELAR EVOLUTION

EXPERIMENTAL LEARNING

Visited BIODIVERSITY PARK, Pedda waltair:

TOPIC:--Explained the family cucurbitaceae.

Cucurbitaceae, the gourd family of flowering. Plants belonging to the order cucurbitales. It containing 98 genera and about 975 species of food and ornamental plants. Members of the family are annual or perennial herbs native to temperature and tropical areas and include cucumbers, gourds, melons, squashes, and pumpkins.

LEARNING BY DOING

Observing the spotters and section cutting of Lycopodium root:

GROUP DISCUSSION

TOPIC: PLANT CELL

Plant cells are eukaryotic cells that vary in several fundamental factors from other eukaryotic organisms. Plant cell contains cell wall, chloroplast and a large vacuole. Microbodies are present in plant cell which are absent in animal cell. The organalles of plant cell include plastids, nucleus, mitochondria, endoplasmic reticulum and Golgi apparatus. Centrioles are absent in plant cell.
Plant cell is unique by the presence of chloroplast which help in photosynthesis. Promote a deeper understanding of a topic and increases long-term retention. It helps in increasing participant's attention and helps in maintaining their focus by involving them in the learning process. It also provides feedback to instructors on participant comprehension. It is used to improve communication skills. Improve ability to think critically.

STUDENT SEMINAR

Discussion based courses. Typically students complete readings and assignments before the class and discuss major themes or topics during the class. Attending a seminar has numerous benefits, including improving communication skills, gaining expert knowledge, networking with others and renewing motivation and confidence. Oral communication. Expert knowledge. Renewed motivation.

BLACK BOARD METHODS

TOPIC:-Structure of chloroplast and its functions.

It is oval shaped and have two members , an outer membrane and inner membrane.

Outer and inner membranes are having space approximately 10-20nm in wide. To absorb carbondioxide during photosynthesis. To breakup water into hydrogen and oxygen during photosynthesis. To form Protein and amino acids in the presence of sunlight.

QUIZ

Following questions have been asked:

1. What is APG?
   Angiosperm phylogeny group.
2. Who proposed stellar evolution?
   Vantiegham and Dauliot.
3. Which plants are insectivorous?
   Nepenthis.
4. What is sunken stomata?
   Stomata that is present deeply inside the leaf.
5. Whatispurewaterpotential?
   0%
6. What is cell vomiting?
   Process of exudation the wasteproducts to outside of the cellcytoplasm.
7. What is snRNA?
   Small nuclear ribo nucleo protein complex.
8. What is bentham hooker classification is called?
   Natural system of classification.
9. What is specific heat?
   The amount of heat needed to raisethe temperature of 1 gram of asubstancein 1degreeCelsius (°c).

WINNERTEAM

TEAM -C

Names:--

G.Saiharshitha
G.Lalitha
G.Sowmya
G.Hemalatha
P.Yamini
P.Tejaswini
P.Savitri
P.Pavani
B.Renuka

ROUND	TEAM -A	TEAM -B	TEAM -C
01	05	04	05
O2	07	03	10
03	03	04	05
TOTAL	15	11	20