***Question of MT “Basis of Plant physiology ”***

***Ticket 1***

1. Show concepts in Plant cell structure
2. Describe cell as osmotic system
3. Explain electron transport chain of respiration

***Ticket*** ***2***

1. Describe history of plant physiology.
2. Explain significance of water exchange
3. Describe structure and functions photosystem I (PSI)

***Ticket*** ***3***

1. Determine the features of plant cells
2. Describe Mechanisms of intracellular water movement
3. Describe Physiological significance of macroelements (C, P and S)

***Ticket*** ***4***

1. Determine physiological significance of respiration. Respiration substrates
2. Characterize water movement in plant
3. Present Dark Reactions (Light-Independent Reactions)

***Ticket 5***

1. Characterize a structure and functions of cell plastids
2. Determine energetic yield of phases of respiration and respiration substrates
3. Describe plants mineral nutrition

***Ticket 6***

1. Characterize the structure of biological membranes
2. Analyze anaerobic phase of respiration. Glycolysis
3. Show physiological significance of microelements (Cu, Mn, Ni, Se)

***Ticket 7***

1. Characterize the structure of the plant cell.
2. Give characterization water properties.
3. Show of main steps of aerobic phase of respiration

***Ticket 8***

1. Give characterization of the root anatomy
2. Present an electron transport chain (ETC) of photosynthesis
3. Describe physiological significance of microelements (Fe, Zn and Mo)

***Ticket 9***

1. Determine the structure and functions of mitochondria
2. Describe methods of introducing foreign DNA into a eukaryotic cell
3. Show the process of energetic yield of phases of respiration and respiration substrates

***Ticket 10***

1. Give characterization of the processes of transformation and transduction and how they used in genetic engineering
2. Show composition of cellular culture medium and functions of the essential nutrients
3. Describe the structure and functions of plasmodesmata

***Ticket 11***

1. Present concepts of compositions and functions of plant cell walls
2. Describe Structure and functions of Chlorophyll. Biosynthesis of chlorophill
3. What is structure and functions photosystem II (PSII) and its role in photosynthesis process

 ***Ticket 12***

1. Describe Structure and functions of Plasmodesmata
2. Give characterization of an electron transport chain (ETC) of photosynthesis
3. Present physiological significance of microelements (Fe, Zn, Mo)

***Ticket 13***

1. Describe structure and functions of vacuoles.
2. Show regulation of water movement in whole plant
3. Show the process of photosynthesis and characterize light and dark phases of photosynthesis

***Ticket 14***

1. Give characterization of Structure and functions Chloroplasts.
2. Show different types of Mechanisms of intracellular water movement
3. Present the use of A bacterial artificial chromosome (BAC) as cloning vector

***Ticket 15***

1. Present the Structure and functions of Goldgi
2. Show Conversion of Light energy into electrical Energy during photosynthesis
3. What is Plant Cell Water movement

***Ticket 16***

1. Give characterization of a Structure and functions of Peroxisomes
2. Explain mechanisms of photophosphorylation. Photoinduced synthesis of ATP. (Mitchel theory)
3. Describe the importance of Z scheme of photosynthesis

***Ticket 17***

1. Structure and functions endoplasmatic reticulum
2. Types of transport of substances through the membrane
3. Explain the importance of Calvin cycle

***Ticket 18***

1. Describe structure and functions of vacuoles.
2. Show regulation of water movement in whole plant
3. Show the process of photosynthesis and characterize light and dark phases of photosynthesis

***Ticket 19***

1. Determine the structure and functions of mitochondria
2. Describe methods of photosynthesis parameters measurement
3. Show the process of energetic yield of phases of respiration and respiration substrates

***Ticket 20***

1. Present concepts of compositions and functions of plant cell walls
2. Describe structure and functions of Chlorophyll. Biosynthesis of chlorophill
3. What is structure and functions photosystem II (PSII) and its role in photosynthesis process

***Ticket 21***

1. Characterize the structure of biological membranes
2. Analyze anaerobic phase of respiration. Glycolysis
3. Show physiological significance of microelements (Cu, Mn, Ni, Se)

***Ticket 22***

1. Determine the features of plant cells
2. Describe the mechanisms of intracellular water movement
3. Describe physiological significance of macroelements (C, P and S)

***Ticket 23***

1. Show concepts in Plant cell structure
2. Describe cell as osmotic system
3. Explain electron transport chain of respiration

***Ticket 24***

1. Characterize a structure and functions of cell plastids
2. Determine energetic yield of phases of respiration and respiration substrates
3. Describe plants mineral nutrition

***Ticket 25***

1. Determine the structure and functions of mitochondria
2. Analyze the cyclic photophosphorylation of photosynthesis
3. Show the process of energetic yield of phases of respiration and respiration substrates

***Ticket 26***

1. Describe Mechanisms of intracellular water movement
2. Analyze the noncyclic photophosphorylation of photosynthesis
3. Explain electron transport chain of respiration

***Ticket 27***

1. Analyze aerobic phase of respiration and the complexes of ETC of respiration
2. Describe structure and functions of Chlorophyll. Biosynthesis of chlorophill
3. Present the physiological significance of macroelements (C, P and S)