



**Write in only one research point of the following**

- 1- Effect of osmotic pressure of outer solution on absorption force of plant cell (concept of water potential-osmotic pressure-factors affect the rate of absorption).
- 2- The physiological significance of studying the phenomena of permeability of plant cell membranes with consideration of the effect of composition of outer solution (consider the membranes structure, balanced solution, antagonism, ...).
- 3- Imbibition is one of the effective physiological mechanisms for water absorption (concept of imbibition, factors affect the rate of imbibition, significance of imbibition in plant physiology,....).
- 4- Water transport process in plant and soil (consider the rate of diffusion, bulk flow, available water, aquaporine, ....).
- 5- Water loss from plant to environment through transpiration (consider; concept of transpiration, stomata structure, stomatal regulation, factors affect the rate of transpiration, different methods for measuring the rate of water loss,....).
- 6- Mendelian genetics
- 7- Epistatic interaction and lethal genes
- 8- Sex determination and linked interaction
- 9- All about DNA, the genetic material
- 10- The genetic code and protein synthesis