



موضوعات بحثية (على الطالب إختيار موضوع واحد فقط)

1 – Properties of Colloids

(definition of solution - types of solutions - true solution - suspension - emulsion and colloidal solution - Properties of colloids)

2 – Role of diffusion in plant life

(definition of diffusion – bases of diffusion – Importance of diffusion for - Plant life - factors affecting rate of diffusion)

3 – Importance of Osmosis in water transport in plants

(definition of osmosis - plant cell as osmotic system - osmotic pressure - Forces affecting osmosis - types of external solution related to plant cell – Role of osmosis in water transport – plasmolysis)

4 - Permeability through living membranes

(chemical structure of plasma membrane - definition of permeability – types of membranes according to permeability – permeability of water , gases , electrolytes and organic compounds)

5 – Enzymes

(definition of enzymes - structure of enzymes - specificity of enzymes - mechanism of action - factors affecting rate of enzyme reaction)

- 6) General characters of viruses. Virus Covid-19 (general information, structure, origin, infection and transmission, symptoms, protection).**
- 7) General characters of viruses. Hepatitis C (general information, structure, origin, infection and transmission, symptoms, protection).**
- 8) General character of prokaryotic organisms and highlight on bacteria in food industry.**
- 9) General character of Mycota and highlight on Penicillium sp. is an effective source of antibiotic.**
- 10) General character of algae and highlight on Spirulina is a magic food.**