Benha University
Faculty of science
Botany department

first year Exam.
2017

General Botany (105B)
Plant physiology

Complete the following questions:

Q1: a- Brownian movement is……..

…… (**2 marks**)

b- Plant regulators are……

…… (**2 marks**)

Q2: Compare between types of liquid systems. (1**2 marks**)

True solution	Suspension and Emulsions	Colloidal systems
1-……	……	…….
2-……	……	…….
3-…….	……...	…….
4-……	……...	……

Q3: Mention the important role of diffusion in the plant life (**8 marks**)

1-……..

2-……..

3-…….

4-……..

GOOD LUCK

Dr. Radwan R. Khalil

Answer

Q1: a- **Brownian movement**:-colloidal particles of the large size can be observed under the ultra-microscope in a continuous irregular dancing motion.

b- **Plant regulators** are organic compounds other nutrients, with small amounts promotes inhibit, or otherwise modify any physiological processes in plants.

Q2: Compare between types of liquid systems.

True solution	**Suspension and Emulsions**	**Colloidal systems**
1.Dispersed particles are molecules or ions	Dispersed particles are aggregates of molecules	Dispersed particles are aggregates of molecules
2.Diameter of particles is less than 0.001 micron	Diameter of particles is more than 0.1 micron	Diameter of particles is ranges between 0.001 and 0.1 micron
3.They are stable	3.They are unstable	3.They are relatively stable
4.Particles cannot be seen by any optical system	Particles can be seen by any ordinary micros cope	Particles can be seen by an ultra micros cope

Q3: M**ention the important role of diffusion in the plant life.**

1. Gaseous exchange between the plant and the atmosphere.
2. Water vapor passes out of the plant during the process of transpiration.
3. The absorption of water and ions of solutes from the soil solution by roots of plants is also based on diffusion
4. Translocation of food and other products from one part of the plant to the other.