Biology - 12th Class Biology Chapter 15 Short Questions Preparation

Q1. Why leaves are said to be excretophore?

Ans 1: The falling of yellow leaves in autumn is the seasonal time for the plants to get rid of the accumulated wastes and because of this reason leaves are said to be excretophore.

Q2. What are juxtamedullary nephrons?

Ans 1: Nephrons are arranged along the border of cortex so that their tubular system looping deep in inner medulla are called juxtamedullary nephrons.These juxtamedullary nephrons are specifically involved in the production of concentrated urine.

Q3. Define dialysis.Give its types.

Ans 1: When the kidneys of a patient are failed then nitrogenous wastes are removed by filtering blood through dialysis.Dialyzing machine is called artificial kidney machine.
It has two types:

1. Peritoneal dialysis
2. Hemodialysis

Q4. Define Homeostasis.

Ans 1: The protection of internal environment from the harms of fluctuation in external environment is called homeostasis.The homeostasis keeps the internal fluctuation in a narrow range with various control systems compared to wider external fluctuation. The control system would not let the body flooded with water in abundant supply of water.

Q5. What are Xerophytes?Give its examples.

Ans 1: Plant which grow under drought or in extreme shortage of water theses plants are called xerophytes. E.g, Cacti, Opuntia, Calatropis.

Q6. Write a short note on kidney transplantation.

Ans 1: Dialysis is used temporerily.In high degree renal failure also called uremia or end stage renal disease.The dialysis is replaced by surgical transplantation of kidney of a matching donor kidney is the only option left as the permanent treatment. Kidney Should be of nearest to avoid tissue rejection.

Q7. What are heat-shock proteins?

Ans 1: Most plants have adopted to survive in heat stress as the plants of temperate regions face the stress of 40°C and above

temperature.The cells of these plants synthesize large quantities of special proteins called heat shock proteins.These proteins embrace enzymes and other proteins thus help to prevent denaturation.

Q8. What is counter-current multiplier.

Ans 1: This mechanism causes gradual osmotic out flow from the filtrate back to kidneys as it passes downward in the descending loop of Henle.Furthermore, ascending loop of henle does not allow out flow of water from its filtrate,instead actively transport sodium ions into kidney interstitium to sustain its high concentration.

Q9. Give adaptation of marine fish for its survival in cold environment.

Ans 1: These fishes have a thick layer of insulting fat called blubber, which prevent excess heat loss from the body.

Q10. Give four adaptation of xerophytes.

Ans 1: Xerophytes have following adaptations.

1. Reduced leaves
2. Hidden stomata
3. Thick cuticle
4. Water storing tissues
