Ch#11, Homeostasis

Short Questions:

Q1: Why is excretion necessary?

Ans: The four primary functions of the excretory system include eliminating waste, eliminating unneeded byproducts excreted by cells, eradicating harmful chemical buildups, and maintaining a balanced and steady chemical concentration in the body.

Q2: Name some waste products of plants.
Ans: Carbon dioxide, excess water produced during respiration and nitrogenous compounds produced during protein metabolism are the major excretory products in plants. Certain plants produce secretory products like latex, resins and gums. These products are secreted by special cells or glands in the plant body.

Q3: How carbon dioxide and oxygen are removed from plants?

Ans: The process of excretion in plants occurs in the following ways: through the stomata of leaves and lenticles of stem, oxygen, carbon dioxide, and water vapour are expelled as gaseous wastes. Some waste materials gather in tree bark and leaves. The wastes are removed when the leaves ~~are~~ and bark are shed.

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Q4: What is the importance of Homeostasis?

Ans: Homeostasis helps maintain a stable internal environment in the human body. Body of living organisms can regulate their internal systems by adaptation. Our body keeps us cold by sweating on hot days and keeps us warm by shivering when we're cold.

Q5: Name the structures of urinary syst

Urinary System Parts:

(i) Kidneys
(ii) Ureter
(iii) Urinary Bladder
(iv) Urethra
(v) Renal Artery
(vi) Renal Vein
(vii) Aorta
(viii) Vena cava

Q6: Write functions of the following:

a) **KIDNEYS** remove waste products from the blood and produce urine. They control the levels of many substances in the blood.

b) **URETERS** role in the process is to carry urine from the kidneys to the urinary bladder.

c) **URINARY BLADDER** stores the urine or waste fluids that come out from the kidneys.

d) **URETHRA** is a tube which allows the urine pass~~out~~ outside the body.

e) PELVIS OF KIDNEY - collects the urine produced by the kidney and leading to a central "stem", the ureter.

f) CAPSULE OF KIDNEY helps to support the kidney mass and protect the vital tissue from injury.

g) DIALYSIS is a procedure to remove waste products and excess fluid from the blood when the kidneys stop working properly.

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Q1) Name the disorders of kidney.

Ans: **Disorders of Kidney:**

Some of the disorders of kidney are:

(a) Diabetes

(b) High blood pressure

(c) Infections

(d) Kidney stones

(e) Glomerular blockage.

Q8) Write the cause of formation of kidney stone.

Ans: **Causes of Kidney Stone:**

Some of the main causes are:

i) Presence of high level of calcium in the blood.

ii) Presence of higher level of oxalate in the blood results in the formation of calcium oxalate stones.

iii) A decrease in water intake.

iv) Age and family history.

Q9) Write any two similarities between dialysis machine and Kidney.

Ans: **Similarities blw kidney & dialysis machine:**

(i) Removing waste and extra fluids from your body.

(ii) Keeping safe levels of minerals in your body. Such as, K, Na, Ca etc.

(iii) Helping to regulate your blood pressure.

Q11) The right kidney is slightly lower than left kidney. Why?

Ans: **Reason:** The position of the right kidney is slightly lower than the left kidney due to the presence of the liver on the right side placed anterior to the kidney. So, in order to accomodate liver

, the right kidney is slightly lower than the left one.

(Q13) How is homeostasis maintained in plants?

Ans: Generally, there is no specialized excretory system in plants. Many organic waste products of plants are stored within dead permanent tissues such as "Pith" or within leaves or in bark which are removed periodically. Waste substances are not only eliminated through leaves but also through flower petals, fruits and seeds. Aquatic plants lose most of their metabolic wastes by diffusion directly into the water.