

## Long Answer Questions

**Q.1. Read the following terms given below.**

root hairs arteries atria ureter	xylem kidneys capillaries phloem	urethra veins heart urinary bladder
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**Group the terms on the basis of the categories given below.**

[NCERT Exemplar]

**Q. Circulatory system of animals**

**Ans.** Arteries, atria, capillaries, veins, heart.

**Q. Excretory system in human**

**Ans.** Ureter, kidneys, urethra, urinary bladder.

**Q. Transport of substances in plants**

**Ans.** Root hairs, xylem, phloem.

**Q.2. While learning to ride a bicycle Boojho lost his balance and fell. He got bruises on his knees and it started bleeding. However, the bleeding stopped after some time.**

- Why did the bleeding stop?**
- What would be the colour of the wounded area and why?**
- Which type of blood cells are responsible for clotting of blood?**

[NCERT Exemplar]

**Ans. (a)** The bleeding stopped because blood clot had formed.

**(b)** The colour of the wounded area would be dark red due to clotting of blood.

**(c)** Platelets are responsible for clotting of blood.

**Q.3. Give an experiment to show the upward movement of water in plants.**

**Ans.** Take a potted plant.

Cover it by polythene so that its roots along with soil get completely covered. This will prevent evaporation of water from the soil.

Put a bell jar over the potted plant.

Apply vaseline on the rim of the jar, this will prevent air from entering the jar from outside.

Keep this set-up in the sunlight for some time.

You will find drops of water on the inner side of the bell jar. These drops are due to the process of transpiration.

**Q.4. Distinguish between the following.**

**Q. Arteries and Veins**

**Ans.**

S. No.	Arteries	Veins
i.	They carry oxygenated blood from heart to different organs.	They carry deoxygenated blood from the organs to the heart.
ii.	They are usually deep-seated.	They are superficial in position.
iii.	They do not contain valves.	They contain valves at regular intervals.

**Q. Xylem and Phloem**

**Ans.**

S. No.	Xylem	Phloem
i.	It transports water from roots to different parts of plant.	It transports food from the leaves to different parts of plant.
ii.	The movement of water is unidirectional. It is a living tissue.	The movement of food is bidirectional.
iii.		It is non-living at maturity.

**Q.5. Distinguish between the following.**

**Q. Excretion and Transpiration**

**Ans.**

S. No.	Excretion	Transpiration
i.	Removal of waste in the form of solids, liquids or gases from the body of organisms.	The constant evaporation of water from the leaves to form water vapour.
ii.	It takes place in all living organisms.	It takes place only in plants.

**Q. Blood and Plasma**

**Ans.**

<b>S. No.</b>	<b>Blood</b>	<b>Plasma</b>
<b>i.</b>	It is the connective tissue in human body.	It is the watery fluid of blood.
<b>ii.</b>	It is red in colour.	It is pale yellow in colour
<b>iii.</b>	It contains two types of cells—white blood cells and red blood cells.	It does not contain any cells but is rich in nutrients.