

Unit#2: Living Organisms

Answer the following questions. (Book Pg. 18).

1. (a) Cells: They are the building blocks of all living things.

Tissue: They are a group of similar cells which are specialized to perform a particular function.

Organ: Different types of tissues group together to form an organ.

Organ systems: Systems are made up of many organs which work together.

(b) In multicellular plants, materials are circulated in a system of tubes called the vascular system.

The vascular system of plants is composed of specialized tissues called xylem and phloem.

Xylem is made up of long, dead cells called vessels. Vessels have thick walls. They carry water from the roots, through the stem to the veins in the leaves.

Phloem is made up of long thin walled tubes called sieve tubes. Sieve tubes are made of living cells whose horizontal walls have tiny holes. Food flows from the leaves to other parts of the plant through the sieve tubes.

(c) Plants lose water vapour into the atmosphere by evaporation. The water passes through tiny holes called stomata which are found mainly on the lower side of leaves. This process is called transpiration. It is important because it helps in the transportation of water in plants and it also helps plants to keep cool in summer.

(d) Respiration is the process by which food is oxidized in the body cells to produce energy. The parts of the respiratory system of a mammal are nose, windpipe, bronchi, bronchioles, and air sacs.

(e) The heart is a muscular organ found in the centre of the chest. It has four chambers. The upper two chambers or atria are thin walled and the lower two chambers or ventricles are thick walled.

(f) The process by which insoluble food is broken down by the action of enzymes into soluble substances, is called digestion. Food is completely digested in the small intestine.

(g) Brain, spinal cord, and nerves are parts of nervous system.

(h) A reflex action is an involuntary response to a stimulus such as sneezing.

(i) Writing, reading and speaking are voluntary actions.

2. Fill in the blanks.

(a) vessels (b) sieve tubes (c) Transpiration (d) alveoli

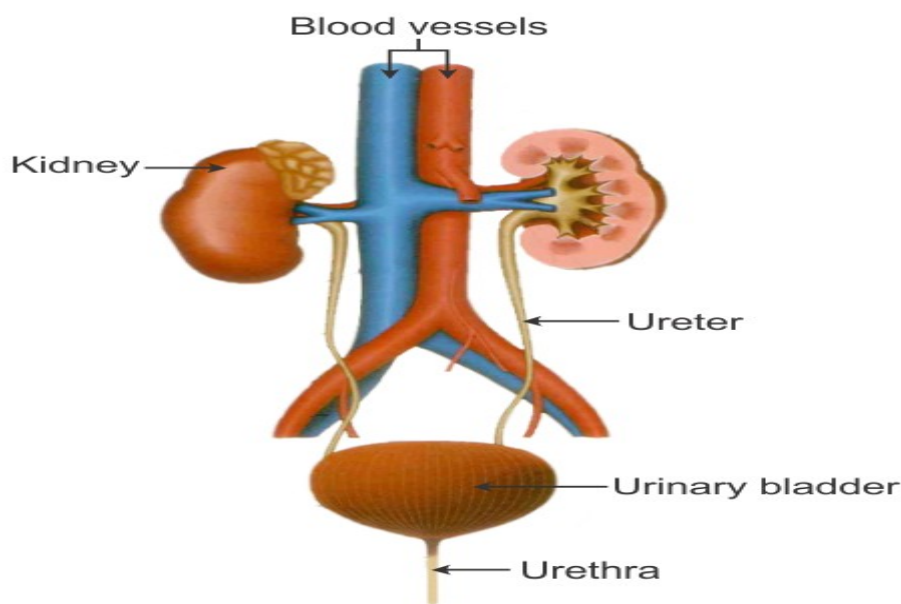
(e) capillary (f) enzymes (g) villi (h) kidneys (i) neurons

(j) reflex (k) reflex arc (l) involuntary or reflex action

3. Name the parts of digestive system.

(a) food pipe (b) stomach (c) small intestine (d) large intestine

4. Draw the excretory system and label it.



5. Write absent or present in the correct column.

	Plant Cell	Animal Cell
Cell wall	thick cell wall present	cell membrane present
Chloroplasts	chloroplasts present	chloroplasts absent
Vacuole	large central vacuole	small scattered vacuoles
