Atomic Energy Education Society

Worksheet - CLASS IX (MODULE 1)

TISSUES

I. Multiple Choice Questions

- 1. Which of the following tissues has dead cells?
- (a) Parenchyma (b) Sclerenchyma
- (c) Collenchyma (d) Epithelial tissue
- 2. Find out incorrect sentence
- (a) Parenchymatous tissues have intercellular spaces
- (b) Collenchymatous tissues are irregularly thickened at corners
- (c) Apical and intercalary meristems are permanent tissues
- (d) Meristematic tissues, in its early stage, lack vacuoles
- 3. Girth of stem increases due to
- (a) apical meristem
- (c) intercalary meristem
- (b) lateral meristem
- (d) vertical meristem
- 4. Which cell does not have perforated cell wall?
- (a) Tracheids (b) Companion cells
- (c) Sieve tubes (d) Vessels
- 5. Meristematic tissues in plants are
- (a) localised and permanent
- (c) localised and dividing cells
- (b) not limited to certain regions
- (d) growing in volume
- 6. Which is not a function of epidermis?
- (a) Protection from adverse condition
- (c) Conduction of water

- (b) Gaseous exchange
- (d) Transpiration
- 7 The dead element present in the phloem is
- (a) companion cells (b) phloem fibres
- (c) phloem parenchyma (d) sieve tubes
- 8. In desert plants, rate of water loss gets reduced due to the presence of(a) cuticle(b) stomata

(c) lignin (d) suberin

9. A long tree has several branches. The tissue that helps in the side ways conduction of water in the branches is

- (a) collenchymas (b) xylem parenchyma
- (c) parenchyma (d) xylem vessels

10. If the tip of sugarcane plant is removed from the field, even then it keeps on growing in length. It is due to the presence of

(a) cambium (b) apical meristem

(c) lateral meristem (d) intercalary meristem

11 A nail is inserted in the trunk of a tree at a height of 1 metre from the ground level. After 3 years the nail will

- (a) move downwards
- (c) remain at the same position
- (b) move upwards
- (d) move sideways

- 12.. Parenchyma cells are
- (a) relatively unspecified and thin walled
- (c) lignified

(b) thick walled and specialised

(d) none of these

- 13. Flexibility in plants is due to
- (a) collenchymas (b) sclerenchyma
- (c) parenchyma (d) chlorenchyma

14. Cork cells are made impervious to water and gases by the presence of

- (a) cellulose (b) lipids
- (c) suberin (d) lignin

15. Survival of plants in terrestrial environment has been made possible by the presence of

- (a) intercalary meristem (b) conducting tissue
- (c) apical meristem

- (d) parenchymatous tissue
- 16. The water conducting tissue generally present in gymnosperm is
- (a) vessels (b) sieve tube
- (c) tracheids (d) xylem fibres

17.Xylem and phloem are examples of

- (a) epidermal cells
- (c)Protective tissue

(d) Complex tissue.

18. Sieve tubes and companion cells are present in

- (a) Xylem (c)cork (b) Phloem
 - (d) Cambium
- 19. Which of the following does not lose their nucleus at maturity?
- (a) Companion cells
- (c) Vessel

(b) Red blood cells (d) Sieve tube cells

(b)Simple tissue

II. Match the column (A) with the column (B)

(A)

(B)

(ii) Carbon fixation

- (a) Parenchyma
- (a) Parenonyme (b) Photosynthesis
- (c) Aerenchyma
- (d) Collenchyma
- (a) Collenchyma (e) Permanent tissue
- (iii) Localized thickenings (iv) Buoyancy
 - (v) Sclerenchyma

III. Fill in the blanks:

- (a) Cork cells pocesses ______on their walls that makes it impervious to gases and water.
- (b) have tubular cells with perforated walls and are living in nature
- (c) Bone possesses a hard matrix composed of——and ——.
- (d) ——are forms of complex tissue.
 (e) ——have guard cells.
- (f) Cells of cork contain a chemical called------
- (g) Husk of coconut is made of ——tissue.
- (h) ——gives flexibility in plants.
 (i) ——and——are both conducting tissues.
- (j) Xylem transports—and—from soil.
 (k) Phloem transport—from—to other parts of the plant

IV.Identify the type of tissue in the following:bark of tree, vascular bundle.

V.Give reasons for

- (a) Meristematic cells have a prominent nucleus and dense cytoplasm but they lack vacuole.
- (b) Intercellular spaces are absent in sclerenchymatous tissues.

(i) Thin walled, packing cells

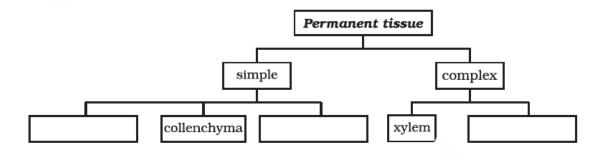
(c) We get a crunchy and granular feeling, when we chew pear fruit.

(d) Branches of a tree move and bend freely in high wind velocity.

(e) It is difficult to pull out the husk of a coconut tree.

V.

Complete the following chart:



- VI Answer the following Questions in brief:
- 1. If a potted plant is covered with a glass jar, water vapours appear on the wall of glass jar. Explain why?
- 2. Which structure protects the plant body against the invasion of parasites?
- 3.Water hyacinth float on water surface.Explain
- 4. Why is epidermis important for the plants?
- 5. Differentiate between sclerenchyma and parenchyma tissues.

BY Rinku Kumari, AECS-2,Hyd