## CLASS: 9 SUBJECT – SCIENCE CHAPTER – TISSUE CONCEPT – PLANT TISSUE WORKSHEET MCQ

- Q1 What property does the meristematic tissue have that results in growth of the plants? (a) It is a large tissue.
  - (b) It is a dead tissue.
  - (c) It is a dividing tissue.
  - (d) It is a flexible tissue.
- Q2 A student did an experiment to study the role of meristematic tissue in onion roots. For the **1** experiment, an onion was kept in each of the four glasses that were filled with same amount of water.



The student measures the length of the roots in all the glasses on day 3. The student then cuts about a1 cm of the onion roots in glass B, C, and D every next day and measures the length of the root on day 10. The table shows the result of the experiment.

	Glass	Root Length Day 3 (cm)	Day on which Onion was Root Cut	Length of Root on Day 10 (cm)
l	А	2.0	-	6.0
	В	2.0	Day 4	1.0
	С	2.0	Day 5	3.5
1	D	2.0	Day 6	5.0

What can the student conclude from the experiment?

- (a) Roots develop meristematic tissue again when cut.
- (b) Roots grow faster after meristematic tissue is removed.
- (c) Roots stops growing when meristematic tissue is removed.
- (d) Roots with and without meristematic tissue had same growth.
- Q3 The image shows the stem of a plant.



Which type of meristematic tissue is present at the labelled part 'X'?

- (a) apical meristem
- (b)intercalary meristem
- (c) lateral meristem

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- (d) both apical and lateral meristem
- Q3 A student observes that the tree near his house is growing more in width than height. Which 1 tissue is responsible for this type of growth?
  - (a) apical
  - (b) intercalary
  - (c) lateral
  - (d) both apical and intercalary
- Q4 The image shows the transverse structure of a sclerenchyma tissue.



Which characteristic of sclerenchyma cells provides strength to the plant parts?

- (a) Presence of cells with regular shape
- (b) Presence of thin walls and dead cells
- (c) Presence of large spaces between the cell
- (d) Presence of thick walls and no internal space
- Q5 A class of students were shown a microscopic slide of a permanent tissue in plant for a test. 1



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Which statement made by the student is correct about the tissue shown?

(a) It is aerenchyma tissue as the large air spaces are present.

(b) It is parenchyma tissue as the cells have intercellular spaces and thin walls. (c) It is

sclerenchyma tissue as the cells are thick walled with no internal spacing.

- (d) It is collenchyma tissue as the cells are elongated with irregular thick corners.
- Q6 The image shows the transport of food after photosynthesis in parts of plant from leaves.



Which type of tissue is responsible for this transport?

- (a) collenchyma (b) phloem (c) sclerenchyma (d) xylem
- **Q7** The image shows a setup of an experiment.



A student takes a leafy green Balsam plant and places it in Eosin solution. The solution is a red coloured dye. After 4 hours, the student observes that the red colour appears on the parts of the plant body. Which type of tissue is responsible for these changes? (a) xylem as it helps in the movement of water from roots to stem and leaves

- (b) phloem as it helps in the movement of water from roots to stem and leaves
- (c) xylem as it helps in the movement of water from leaves to roots and stem
- (d) phloem as it helps in movement of water from leaves to roots and stem
- **Q8** Which of the following tissues has dead cells?
  - (a) Parenchyma
  - (b) Sclerenchyma
  - (c) Collenchyma
  - (d) Epithelial tissue
- **Q9** Which cell does not have perforated cell wall?
  - (a) Tracheids
  - (b) Companion cells
  - (c) Sieve tubes
  - (d) Vessels
- Q10 Meristematic tissues in plants are
  - (a) localised and permanent
  - (b) not limited to certain regions
  - (c) localised and dividing cells
  - (d) growing in volume
- Q11 Which is not a function of epidermis?
  - (a) Protection from adverse condition
  - (b) Gaseous exchange
  - (c) Conduction of water
  - (d) Transpiration
- Q12 A nail is inserted in the trunk of a tree at a height of 1 metre from the ground level. After 3 1 years the nail will
  - (a) move downwards
  - (b) move upwards
  - (c) remain at the same position
  - (d) move sideways
- Q13 Parenchyma cells are
  - (a) relatively unspecified and thin walled

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- (b) thick walled and specialised
- (c) lignified
- (c) none of these
- Q14 Flexibility in plants is due to
  - (a) collenchyma
  - (b) sclerenchyma
  - (c) parenchyma
  - (d) chlorenchyma

## Q15 Cork cells are made impervious to water and gases by the presence of

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

Q16 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
- Q17 The water conducting tissue generally present in gymnosperm is
  - (a) vessels
  - (b) sieve tube
  - (c) tracheids
  - (d) xylem fibres

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