# **CHAPTER 6**

### Tissues

#### 1. NCERT INTEXT QUESTIONS

1. What is a tissue?

Ans :

Tissue is a group of cells that are similar in structure and are organised together to perform a specific task.

2. What is the utility of tissues in multicellular organisms? Ans:

The different types of tissues perform different functions in multicellular organisms. Since a particular group of cells carry out only a particular function, they do it very efficiently. So, multicellular organisms exhibited a definite division of labour.

3. Name various types of simple tissues.

Ans :



4. Where is apical meristem found? Ans:

Apical meristem is present at the growing tips of stem and roots.

5. Which tissue makes up the husk of coconut? Ans:

Sclerenchyma tissue makes up the husk of coconut.

6. What are the constituents of phloem? Ans:

The constituents of phloem are :

- 1. Sieve tubes 2. Companion cells
- 3. Phloem parenchyma 4. Phloem fibres
- 7. Name the tissue responsible for movement in our body. Ans :

Muscular tissue.

8. What does a neuron look like? Ans :

Neuron looks like a star shaped cell with a tail.

**9.** Give three features of cardiac muscles.

Ans :

- (1) Cardiac muscles are involuntary muscles that contract quickly, but do not get fatigued.
- (2) The cells of cardiac muscles are cylindrical, branched, and having one nucleus.
- (3) They control the contraction and relaxation of the heart.
- 10. What are the functions of a reolar tissue?

Ans :

Functions of a reolar tissue :

- (1) It helps in supporting internal organs.
- (2) It helps in repairing the tissues of the skin and muscles.

#### 2. NCERT EXERCISE QUESTIONS

1. Define the term "tissue".

Ans :

Tissue is a group of cells that are similar in structure and are organized together to perform a specific task.

2. How many types of elements together make up the xylem tissue? Name them.

Ans :

Xylem is made up of following elements :

- 1. Tracheids
- 2. Vessels
- 3. Xylem parenchyma
- 4. Xylem fibres
- **3.** How are simple tissues different from complex tissues in plants?

Ans :

Simple Tissue	Complex Tissue
These tissues consist of only one type of cells.	These tissues are made up of more than one type of cells.
The cells are more or less similar in structure and perform similar functions.	Various types of cells perform various functions. For example : In the xylem tissue, tracheids help in water transport, whereas parenchyma stores food.

Three types of simple	Two types of complex
tissues in plants	permanent tissues in
are parenchyma,	plants are xylem and
collenchyma, and	phloem.
sclerenchyma.	

**4**. Differentiate between parenchyma, collenchyma and sclerenchyma, on the basis of their cell wall. Ans :

Parenchyma	Collenchyma	Sclerenchyma
Cell walls are relatively thin, and the cell in parenchyma tissues are loosely packed.	The cell wall is irregularly thickened at the corners, and there is very little space between the cells.	The cell walls are uniformly thickened, and there are no intercellular spaces.
The cell wall in this tissue is made up of cellulose.	Pectin and hemicellulose are the major constituents of the cell wall.	An additional layer of the cell wall composed mainly of lignin is found.

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5. What are the functions of the stomata? Ans :

The functions of stomata are :

- (1) Exchange of gases  $(CO_2 \text{ and } O_2)$  in atmosphere,
- (2) Transpiration that is the loss of excess water in the form of water vapour.
- 6. Diagrammatically show the difference between the three types of muscle fibres.

Ans :

The three types of muscle fibres are : Striated muscles, smooth muscles (unstriated muscle fibres), and cardiac muscles.



(b)



Figure: (a) Striated muscle fibres, (b) Unstriated muscle fibres, (c) Cardiac muscle fibres

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7. What is the specific function of the cardiac muscle? Ans :

The specific function of the cardiac muscle is to control the contraction and relaxation of the heart.

Differentiate between striated, unstriated and cardiac 8. muscles on the basis of their structure and site/ location in the body.

Ans :

Striated muscle	Unstriated muscle	Cardiac muscle
On the basis of structure : Cells are cylindrical.	Cells are long.	Cells are cylindrical.
Cells can have moire than one nucleus.	Cells have single nucleus.	Cells have single nucleus.
Cells are not branched.	Cells are not branched.	Cells are branched.
Its ends are blunt.	Its ends are tapering.	Its ends are flat and wavy.
On the basis of location : These muscles control the working of body parts such as hands, legs, tongue, etc.	These muscles control the movement of food in the alimentary canal, the contraction and relaxation of blood vessels, etc.	These muscles control the contraction and relaxation of the heart.

9. Draw a labelled diagram of a neuron. Ans :



- 10. Name the following :
  - (a) Tissue that forms the inner lining of our mouth.
  - (b) Tissue that connects muscle to bone in human.
  - (c) Tissue that transports food in plants.
  - (d) Tissue that stores fat in our body.
  - (e) Connective tissue with a fluid matrix.
  - (f) Tissue present in the brain.

Ans :

- (a) Epithelial tissue
- (b) Tendon
- (c) Phloem
- (d) Adipose tissue
- (e) Blood
- (f) Nervous tissue

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- Identify the type of tissue in the following : skin, bark of tree, bone, lining of kidney tubule, vascular bundle. Ans :
  - 1. Skin : Stratified squamous epithelial tissue
  - 2. Bark of tree : Simple permanent tissue
  - 3. Bone : Connective tissue
  - 4. Lining of kidney tubule : Cuboidal epithelial tissue
  - 5. Vascular bundle : Complex permanent tissue
- 12. Name the regions in which parenchyma tissue is present.

Ans :

Leaves, fruits, and flowers are the regions in which parenchyma tissue is present.

13. What is the role of epidermis in plants?

Ans :

Epidermis is present on the outer surface of the entire plant body and responsible for following functions :

- (1) It protects tissue of the plant body.
- (2) It protects the plant against mechanical injury.
- (3) It allows exchange of gases through the stomata.
- 14. How does the cork act as a protective tissue? Ans :

The bark of a tree is known as the cork which is made up of dead cells. Thus, it protects the plant against injury, extreme temperature, etc. It also prevents the loss of water by evaporation.

#### 15. Complete the table :







#### 3. NCERT EXEMPLAR

#### **Objective Type Questions**

- Which of the following tissues has dead cells?
   (a) Parenchyma
   (b) Sclerenchyma
  - (c) Collenchyma (d) Epithelial tissue
  - **Ans** : (b) Sclerenchyma
- **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.

Ans: (c) Apical and intercalary meristems are permanent tissues.

- **3.** Girth of stem increases due to :
  - (a) apical meristem (b) lateral meristem
  - (c) intercalary meristem (d) vertical meristem
  - Ans: (b) lateral meristem
- 4. Which cell does not have perforated cell wall?
  - (a) Tracheids (b) Companion cells
  - (c) Sieve tubes (d) Vessels
  - **Ans** : (b) Companion cells
- 5. Intestine absorb the digested food materials. What type of epithelial cells are responsible for that?(a) Stratified squamous epithelium
  - (b) Columnar epithelium
  - (c) Spindle fibres
  - (d) Cuboidal epithelium
  - **Ans** : (b) Columnar epithelium
- 6. A person met with an accident in which two long bones of hand were dislocated. Which among the following

may be the possible reason?

- (a) Tendon break
- (b) Break of skeletal muscle
- (c) Ligament break
- (d) Areolar tissue break
- Ans: (c) Ligament break

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- 7. While doing work and running, you move your organs like hands, legs, etc. Which among the following is correct?
  - (a) Smooth muscles contract and pull the ligament to move the bones.
  - (b) Smooth muscles contract and pull the tendons to move the bones.
  - (c) Skeletal muscles contract and pull the ligament to move the bones.
  - (d) Skeletal muscles contract and pull the tendon to move the bones.

Ans: (d) Skeletal muscles contract and pull the tendon to move the bones.

- Which muscles act involuntarily? 8.
  - (i) Striated muscles
  - (ii) Smooth muscles
  - (iii) Cardiac muscles
  - (iv) Skeletal muscles
  - (a) (i) and (ii) (a)(b) (ii) and (iii)
  - (c) (iii) and (iv) (d) (i) and (iv)
  - **Ans** : (b) (ii) and (iii)
- Meristematic tissues in plants are : 9.
  - (a) localised and permanent
  - (b) not limited to certain regions
  - (c) localised and dividing cells
  - (d) growing in volume
  - Ans: (c) localised and dividing cells
- 10. Which is not a function of epidermis?
  - (a) Protection from adverse condition
    - (b) Gaseous exchange
    - (c) Conduction of water
    - (d) Transpiration

Ans: (c) Conduction of water

**11.** Select the incorrect sentence :

- (a) Blood has matrix containing proteins, salts' and hormones.
- (b) Two bones are connected with ligament.
- (c) Tendons are non-fibrous tissue and fragile.
- (d) Cartilage is a form of connective tissue.

Ans: (c) Tendons are non-fibrous tissue and fragile.

12. Cartilage is not found in :

(a)	nose	(b) ear
(c)	kidney	(d) larynx

Ans: (c) kidney

- 13. Fats are stored in human body as :
  - (a) cuboidal epithelium (b) adipose tissue
    - (d) cartilage
  - Ans: (b) adipose tissue
- 14. Bone matrix is rich in :

(c) bones

- (a) fluoride and calcium
- (b) calcium and phosphorus
- (c) calcium and potassium
- (d) phosphorus and potassium
- Ans: (b) calcium and phosphorus
- 15. Contractile proteins are found in :
  - (a) bones (b) blood
  - (c) muscles (d) cartilage
  - Ans: (c) muscles
- 16. Voluntary muscles are found in :
  - (a) alimentary canal (b) limbs (c) it is of the eye (d) bronchi of lungs Ans: (b) limbs
- 17. Nervous tissue is not found in :
  - (a) brain (b) spinal cord
  - (d) nerves (c) tendons
  - Ans: (c) tendons
- 18. Nerve cell does not contain :
  - (a) axon (b) nerve endings
  - (d) dendrites (c) tendons
  - Ans: (c) tendons
- 19. Which of the following helps in repair of tissue and fills up the space inside the organ?
  - (a) Tendon (b) Adipose tissue
    - (d) Cartilage
  - Ans: (c) Areolar

(c) Areolar

- 20. The muscular tissue which function throughout the life continuously without fatigue is :
  - (a) skeletal muscle (b) cardiac muscle
  - (d) voluntary muscle (c) smooth muscle
  - Ans: (b) cardiac muscle
- 21. Which of the following cells is found in the cartilaginous tissue of the body?
  - (a) Mast cells (b) Basophils
  - (c) Osteocytes
  - Ans: (d) Chondrocytes
- 22. The dead element present in the phloem is : (a) companion cells
  - (b) phloem fibres
  - (c) phloem parenchyma
- (d) sieve tubes

(d) Chondrocytes

Ans: (b) phloem fibres

- 23. Which of the following does not lose their nucleus at maturity?
  - (a) Companion cells (b) Red blood cells
  - (c) Vessel (d) Sieve tube cells
  - **Ans** : (a) Companion cells
- **24.** In desert plants, rate of water loss gets reduced due to the presence of :
  - (a) cuticle (b) stomata
  - (c) lignin (d) suberin
  - Ans: (a) cuticle
- 25. A long tree has several branches. The tissue that helps in the sideways conduction of water in the branches is :
  - (a) collenchyma (b) xylem parenchyma
  - (c) parenchyma (d) xylem vessels
  - **Ans** : (d) xylem vessels
- **26.** 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
  - Ans: (d) intercalary meristem
- 27. 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
  - (b) move upwards
  - (c) remain at the same position
  - (d) move sideways
  - Ans : (c) remain at the same position

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#### 28. Parenchyma cells are :

- (a) relatively unspecified and thin walled
- (b) thick walled and specialised
- (c) lignified
- (d) None of these

Ans: (a) relatively unspecified and thin walled

- **29.** Flexibility in plants is due to :
  - (a) collenchyma (b) sclerenchyma
  - (c) parenchyma (d) chlorenchyma

Ans: (a) collenchyma

- **30.** Cork cells are made impervious to water and gases by the presence of :
  - (a) cellulose (b) lipids
  - (c) suberin (d) lignin
  - Ans: (c) suberin

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- made possible by the presence of :
  - (a) intercalary meristem
  - (b) conducting tissue(c) apical meristem
  - (d) parenchymatous tissue
  - Ans : (b) conducting tissue
- **32.** Choose the wrong statement.
  - (a) The nature of matrix differs according to the function of the tissue.
  - (b) Fats are stored below the skin and in between the internal organ
  - (c) Epithelial tissues have intercellular spaces between them.
  - (d) Cells of striated muscles are multinucleate and unbranched.

**Ans** : (c) Epithelial tissues have intercellular spaces between them.

- **33.** The water conducting tissue generally present in gymnosperm is :
  - (a) vessel (b) sieve tube
  - (c) tracheids (d) xylem fibres
  - Ans: (c) tracheids

#### **Short Answer Questions**

34. Why animals of colder regions and fishes of cold water have thicker layer of subcutaneous fat?Ans :

During cold climate fat present in the subcutaneous layer in animals act as an insulator to prevent the loss of heat from internal body. It also helps in reserving food during the periods of food scarcity.

**35.** Match the column (A) with the column (B).

	Column (A)		Column (B)
(1)	Parenchyma	(1)	Thin walled, packing cells
(2)	Photosynthesis	(2)	Carbon fixation
(3)	Aerenchyma	(3)	Localized thickenings
(4)	Collenchyma	(4)	Buoyancy
(5)	Permanent tissue	(5)	Sclerenchyma

Ans :

Parenchyma — Thin walled, packing cells Photosynthesis — Carbon fixation Aerenchyma — Buoyancy Collenchyma — Localized thickenings Permanent tissue — Sclerenchyma

**36.** If a potted plant is covered with a glass jar, water vapours appear on the wall of glass jar. Explain, why? Ans :

The water droplets show the deposition of condensed water vapour because of loses through the process of transpiration.

**37.** Name the different components of xylem and draw a living component.

Ans:

The main four components involved in xylem are as follows:

- 1. Tracheids
- 2. Vessels
- 3. Xylem parenchyma (only living component)
- 4. Xylem fibres



Figure: Xylem Parenchyma

38. Draw and identify different elements of phloem. Ans:



39. Differentiate between voluntary and involuntary muscles. Give one example of each type.

Ans :

Voluntary Muscles	Involuntary Muscles
Function according to one's own will	Function not according to one's own will
Brain regulates the functions	Work itself
Fatigued after working	No change with time
E.g. Skeletal muscles	E.g. Cardiac muscles

- **40.** Write true (T) or false (F) :
  - (a) Epithelial tissue is protective tissue in animal body.
  - (b) The lining of blood vessels, lung alveoli and kidney tubules are all made up of epithelial tissue.
  - (c) Epithelial cells have a lot of intercellular spaces.
  - (d) Epithelial layer is permeable layer.
  - (e) Epithelial layer does not allow regulation of

materials between body and external environment. Ans :

(a)—T, (b)—T, (c)—F, (d) —T, (e)—F.

- 41. Differentiate the following activities on the basis of voluntary or involuntary muscles :
  - (a) Jumping of frog
  - (b) Pumping of the heart
  - (c) Writing with hand
  - (d) Movement of chocolate in your intestine Ans :
  - (a) Voluntary (b) Involuntary
  - (c) Voluntary (d) Involuntary
- 42. Fill in the blanks :
  - (a) Lining of blood vessels is made up of \_\_\_\_\_
  - (b) Lining of small intestine is made up of \_\_\_\_\_
  - (c) Lining of kidney tubules is made up of \_\_\_\_\_
  - (d) Epithelial cells with cilia are found in \_\_\_\_\_ of our body.

Ans :

- (a) squamous epithelium (b) columnar epithelium
- (c) cuboidal epithelium (d) respiratory tract
- 43. Explain, why water hyacinth float on water surface? Ans :

Water hyacinth plant has aerenchyma tissue present in them which enfolded air in its spongy petioles which makes the plant lighter than water allowing it to float on the water surfaces.

44. Name the structure that protects the plant body against the invasion of parasites?

Ans :

Epidermis tissue covers the entire body of plant. Cells in epidermis are similar in structure to parenchyma but are tightly packed. They protect plant from injury, germs, parasitic invasions and water loss.

- 45. Fill in the blanks :
  - (a) Cork cells possesses \_\_\_\_\_ 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 \_\_\_\_\_.

- (a) suberin
- (b) Sieve tubes
- (c) calcium and phosphate
- **46.** Why is epidermis important for the plants?

Ans :

The importance of epidermis is as follows :

- 1. It is the outer protective layer which prevents the pathogenic invasions.
- Water loss is also controlled through the aerial 2. parts.
- 3. The presence of stomata helps in gaseous exchange

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Ans :

- 4. The root epidermis go deeper in search of water and minerals.
- 5. The dense root hair fibres increase the surface area of absorption.
- 47. Fill in the blanks :
  - (a) \_\_\_\_\_ are forms of complex tissue.
  - (b) \_\_\_\_\_ have guard cells.
  - (c) Cells of cork contain a chemical called \_\_\_\_\_
  - (d) Husk of coconut is made of \_\_\_\_\_ tissue.
  - (e) \_\_\_\_\_ gives flexibility in plants.
  - (f) \_\_\_\_\_ and \_\_\_\_\_ are both conducting tissues.
  - (g) Xylem transports \_\_\_\_\_ and \_\_\_\_\_ from soil.
  - (h) Phloem transport \_\_\_\_\_ from \_\_\_\_\_ to other parts of the plant.

Ans :

- (a) Xylem and phloem
- (b) Stomata
- (c) suberin
- (d) sclerenchyma
- (e) Collenchyma
- (f) Xylem and phloem
- (g) water and minerals
- (h) food and leaves

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#### Long Answer Questions

**48.** Differentiate between sclerenchyma and parenchyma tissues. Draw well labelled diagram.

Ans :

Differences between parenchyma and sclerenchyma :

	Parenchyma	Sclerenchyma
(1)	Cells are thin walled and unspecialised.	Cells are thick walled and lignified.
(2)	These are living cells.	Tissues are made up of dead cells.
(3)	Cells are usually loosely packed with large intercellular space.	No intercellular spaces between the cells are found.
(4)	Stores nutrient and water in stem and roots.	Provides strength to the plant parts.
(5)	Some cells contain chlorophyll called chlorenchyma and perform photosynthesis. Other cells have large air cavities called aerenchyma which provide buoyancy to the hydrophytic plants	The cells are long and narrow, make the plant hard and stiff. The tissue is present in the stem around vascular bundles, in veins of leaves and hard covering of seeds and nuts.



Figure: Types of simple permanent tissues
: (a) Parenchyma cells in transverse section
(b) Parenchyma cells in longitudinal section
(c) Sclerenchyma cells in TS (d) Sclerenchyma cells in LA

**49.** Describe the structure and functions of different types of epithelial tissues with diagram.

Ans :

The body is covered with the epithelial tissue. This tissue consists of cells which are arranged in one or more layers. It also covers both the internal and external lining of our body surfaces.

(i) **Squamous Epithelium :** Squamous epithelium is mostly found as the outer as well as the inner lining of the cavities of mouth, blood vessel, heart and lungs. These cells tend to have flattened horizontal elliptical shaped nuclei.



 $Figure: {\bf Squamous \ epithelium}$ 

(ii) Cuboidal Epithelium : Cuboidal epithelium cells are mostly found in ducts of glands (salivary) and also in the lining of the kidney tubules. These cells provide mechanical support to the organ. They consist of the germinal epithelium which is responsible to produce the egg cells of the ovary (females) and the sperm cells of testes (males).



#### Figure: Cuboidal epithelium

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(iii) **Columnar Epithelium :** Columnar epithelium cell forms the internal as well as the external linings of stomach and intestines. Some of them are specialised for sensory receptions like that in nose, ears and taste buds of tongue. They are capable in secreting mucus which plays as a lubricating substance to maintain smooth surface.





(iv) Ciliated Columnar Epithelium : Ciliated columnar epithelium are similar to that of the columnar epithelial cells which comprises fine hair like outgrowths (cilia) in addition to the surfaces. Such cells are usually found in nose (air passage), uterus and the fallopian tubes (females) which facilitate the ovum movement.



Figure: Ciliated columnar epithelium

(v) Glandular Epithelium : Glandular epithelial cells are epithelial cells which are able of synthesize and secrete certain substances such as milk, enzymes, mucous, etc. at the surface.



Figure: Glandular epithelium

50. Draw well labelled diagrams of various types of muscles found in human body.

Ans :



- **51.** Give reasons for :
  - (i) Meristematic cells have a prominent nucleus and dense cytoplasm but they lack vacuole.
  - (ii) Intercellular spaces are absent in sclerenchymatous tissues.
  - (iii) We get a crunchy and granular feeling, when we chew pear fruit.
  - (iv) Branches of a tree move and bend freely in high wind velocity.
  - (v) It is difficult to pull out the husk of a coconut tree.

Ans :

- (i) Meristematic cells have a prominent nucleus and dense cytoplasm but they lack vacuole because the meristimatic cell undergoes cell division and have no requirement to store food.
- (ii) Intercellular spaces are absent in sclerenchymatous tissues because the walls have lignin deposition which provides mechanical strength.
- (iii) We get a crunchy and granular feeling, when we chew pear fruit because the fruit contains stone cells commonly known as sclereids (sclerenchyma).
- (iv) Branches of a tree move and bend freely in high wind velocity because the presence of collenchyma adds the property of flexibility.
- (v) It is difficult to pull out the husk of a coconut tree because it is composed of sclerenchyma fibres which are very closely packed.

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**52.** List the characteristics of cork. How are they formed? Mention their role.

Ans :

Characteristics of cork :

- (i) Outer rough surface of older stem and roots.
- (ii) Impermeable cells are arranged in layers due to the presence of suberin in the walls.
- (iii) Cells become dead on maturity and store resins, and tannins.
- (iv) It is usually formed by secondary lateral meristematic tissues, i.e. cork cambium. As plant grow older, a strip of secondary meristem replaces the epidermis of the stem. Cells cut on the outer side by this meristem are called cork.
- Importance of corks :
- a. Prevent water loss.
- b. Protected against the mechanical injuries.
- c. Facilitates the gaseous exchange due to presence of lenticels.
- d. For household usage.
- 53. Why are xylem and phloem called complex tissues? How are they different from one another?

Ans :

A group of cells which have common origin and perform common functions is called complex permanent tissue. Xylem and phloem both are considered to be the complex tissue because they both are conducting tissues and are responsible for the vascular system of the plant body.

Phloem	Xylem
Transports food	Transports minerals and water
Comprised of mostly living elements	Comprised mostly of dead elements
Transport material from leaves to other parts of plants.	Transport material from roots to other parts of plants.
It consist of sieve tubes, phloem parenchyma, companion cells, and phloem fibres.	It consist of tracheids, xylem fibres, xylem parenchyma, vessel.

- 54. (a) Differentiate between meristematic and permanent tissues in plants.
  - (b) Define the process of differentiation.
  - (c) Name any two simple and two complex permanent tissues in plants.

Ans :

(a)

	Meristematic tissues	Permanent tissues	
1.	These tissues have the capacity to divide.	These tissues have lost the capacity of division.	
2.	They have thin cellulose wall.	They have thick cellulose wall/lignin/ suberin.	
3.	They do not have intercellular spaces.	They have large intercellular spaces.	
4.	They contain dense cytoplasm with prominent nucleus.	They contain thin cytoplasm with normal nucleus.	
5.	They contain many small vacuoles in their cytoplasm.	They contain a single large vacuole in their cytoplasm.	
6.	They produce permanent tissues.	They are produced by meristemic tissues.	
7.	They are responsible for the primary and secondary growth of the plants.	These tissues add to the various growths.	



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# Sclerenchyma cells Collenchyma cells Collenchyma cells Parenchyma cells

Meristematic Tissues

Permanent Tissues

- (b) Differentiation is the process in which the ability to divide is lost at the stage of maturity by obtaining permanent shape and function.
- (c) Examples :
  - (i) Simple Permanent Tissues : Parenchyma and sclerenchyma.
  - (ii) Complex : Phloem and xylem.

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NCERT_Text_7	NCERT_Sol_7	Objective_7	QUES_BANK_7
NCERT_Text_8	NCERT_Sol_8	Objective_8	QUES_BANK_8
NCERT_Text_9	NCERT_Sol_9	Objective_9	QUES_BANK_9
NCERT_Text_10	NCERT_Sol_10	Objective_10	QUES_BANK_10
NCERT_Text_11	NCERT_Sol_11	Objective_11	QUES_BANK_11
NCERT_Text_12	NCERT_Sol_12	Objective_12	QUES_BANK_12
NCERT_Text_13	NCERT_SOL_13	Objective_13	QUES_BANK_13
NCERT_Text_14	NCERT_Sol_14	Objective_14	QUES_BANK_14
NCERT_Text_15	NCERT_Sol_15	Objective_15	QUES_BANK_15