BIOLOGY

BOOKS - KUMAR PRAKASHAN KENDRA

BIOLOGY (GUJRATI ENGLISH)

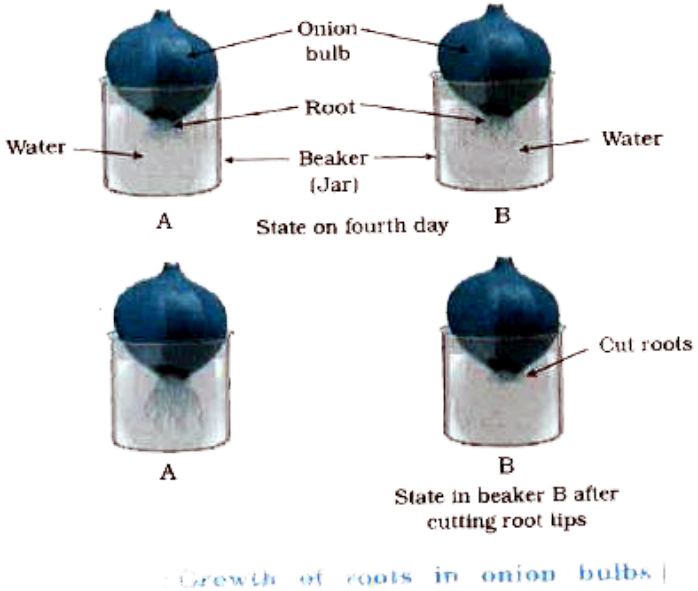
TISSUES

Activity

1. Take two glass jars and fill them with water.

Now, take tow onion bulbs and place one on

each jar, as shown in fig 6.1



Growth of roots in onion bulbs

Observe the growth of roots in both the bubls for a few days.

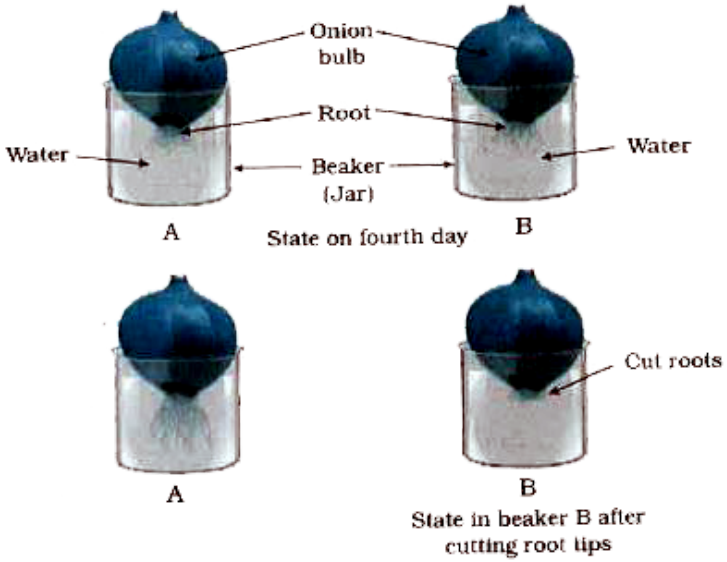
Measure the lenght of roots on day 1,2 and 3.

On day 4, cut the root tips of the onion bulb in jar 2 by about 1 cm. After this, ovbserve the growth of roots in both the jars and measure

their lengths each day for live more days and record the observations. Which of the two onions has longer roots ?

View Text Solution

2. Take two glass jars and fill them with water. Now, take tow onion bulbs and place one on each jar, as shown in fig 6.1



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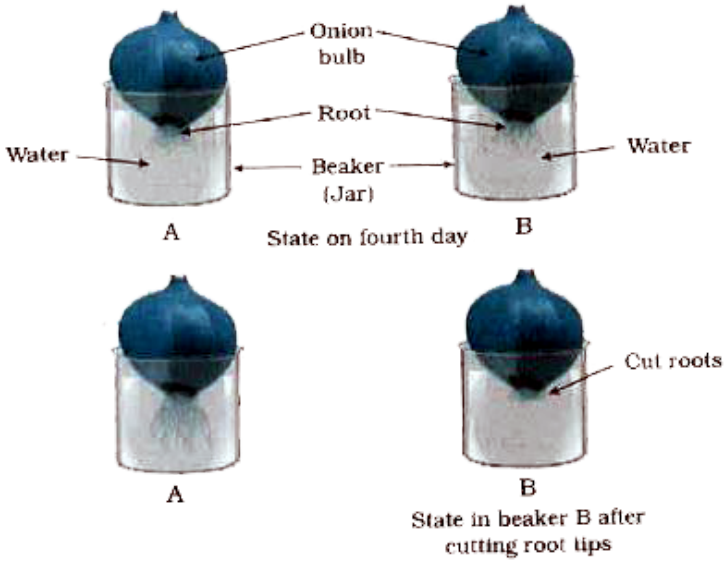
On day 4, cut the root tips of the onion bulb in jar 2 by about 1 cm. After this, ovbserve the growth of roots in both the jars and measure their lengths each day for live more days and

record the observations. Do the roots continue growing even after wehave removed their tips?

View Text Solution

3. Take two glass jars and fill them with water. Now, take tow onion bulbs and place one on each jar, as shown in fig 6.1



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On day 4, cut the root tips of the onion bulb in jar 2 by about 1 cm. After this, ovbserve the growth of roots in both the jars and measure their lengths each day for live more days and

record the observations. Why would the tips stop growing in jar 2 after we cut them?

View Text Solution

4. Take a plant stem and with the help of your teacher cut into very thin silces or sections.

Now, stain the slices with safranin. Place one neatly cut section on a slide and put a drop of glycerine.

Cover with a slip and observe under a microscope. Observe the various types of cells

and their arrangement. Are all cells similar in structure ?

View Text Solution

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Cover with a slip and observe under a microscope. Observe the various types of cells

and their arrangement. How many types of cells can be seen ?

View Text Solution

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Now, stain the slices with safranin. Place one neatly cut section on a slide and put a drop of glycerine.

Cover with a slip and observe under a microscope. Observe the various types of cells

and their arrangement. Can we think of reasons why there would be so many types of cells ?

View Text Solution

7. Take a freshyl plucked leaf of Rhoeo.

Strech and break it by applying pressure.

While breaking it. Keep it stretched gently so that some peel or skin projects out from the cut.

Remove this peel put it in a petri dish filled

with water.

Add a few drops of safranim.

Wait for a couple of minutes and then transfer in onto a slide. Gently place a cover slip over it.

Observe under microscope.

Observation :

A peel of Rhoeo leaf if mounted on the slide and observed under a microscope, it reveals the structure of a leaf. The cells of epidermis and stomata are seen when observed.

Structure of a leaf :

Outermost layer of the leaf is made - up of single layered cells called epidermis.

Epidermis layer does not have intercellular spaces. The cells are flat, with outer and side walls thicker than the inner wall.

Small pores, i.e., stomata are seen in the epidermal layer.

Stomata help in transpiration and gaseous exchange.

Desert plants have thicker epidermis for protection. In dry habitats, water loss is the critical problem. The entire surface of the plant is therefore covered over by epidermis.

Aerial parts of the plant are covered by epidermal cells. They secrete water - resistant,

waxy layer for the purpose of protection.

Epidermal cells also protect the plant from mechanical injury and parasitic invasion of fungi. Think about which gas may be required for photosynthesis.

View Text Solution

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Epidermal cells also protect the plant from mechanical injury and parasitic invasion of fungi. Find out the role of transpiration in plants.

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Next Questions And Answers

1. What is a tissue ?

View Text Solution

2. What is the utilly of tissue in multicelluar organisms ?

View Text Solution

3. Name types of simple tissues.

View Text Solution

4. Where is apical meristem found ?

View Text Solution

5. Which tissue makes up the husk of coconut ?

View Text Solution

6. What are constitunes of phloem ?

View Text Solution

7. Name the tissue responsible for movements in our body.

View Text Solution

8. What does a neuron look like ?

View Text Solution

9. Give three features of cardiac muscles.

View Text Solution

10. What are the functions of areolar tissue?

View Text Solution

Questions And Answers Answer The Following Questions In Very Short 1 Mark Each

1. Define the term tissue.

View Text Solution

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

View Text Solution

3. What is the function of vascular tissues in plants?

View Text Solution

4. What is the special character of cork tissue ?

View Text Solution

5. Which tissue is responsible for the increase in the girth of stem?

View Text Solution

6. What is differentiation ?

View Text Solution

7. What is the function of aerenchyma ?

View Text Solution

8. Which permanent tissue provides flexibility to the plant ?

View Text Solution

9. Which tissue makes the husk of the coconut?

View Text Solution

10. What is special characteristic of connective tissue ?

View Text Solution

11. In which type of matrix are bone cells embedded ?

View Text Solution

12. Which is the fibrous connective tissue having great strength but limited flexibility ?

View Text Solution

Questions And Answers Name The Following 1 Mark Each

1. Name the Tissue that forms the inner lining of our mouth.

View Text Solution

2. Name the Tissue that stores fat in our body.

View Text Solution

3. Name the Tissue present in the brain

View Text Solution

4. Name the Epithelial tissue containing thin, flat, irregular cells.

View Text Solution

5. Name the Epithelial tissue found in the ducts of salivary glands.

View Text Solution

6. Name the Epithelial tissue present in glands such as the thyroid and pituitary glands.

View Text Solution

Questions And Answer Identify The Type Of Tissue In The Following 1 Mark Each

1. Identify the type of Tissue

Skin

View Text Solution

2. Identify the type of Tissue

Bark of tree

View Text Solution

3. Identify the type of Tissue

Bone

View Text Solution

4. Identify the type of Tissue

Lining of kidney tubules

View Text Solution

5. Identify the type of Tissue

Vascular bundle

View Text Solution

Questions And Answer Answer The Followng Question In One Word Or One Sentence 1 Mark

Each

1. Which type of tissue is chlorenchyma in leaf?

View Text Solution

2. In which element of phloem, are the cell with perforated walls present ?

View Text Solution

3. Which tissue is living though it is irregularly thickened at the corners ?

View Text Solution

4. Which element of the xylem is not connected with the function of conduction ?

View Text Solution

5. Which plant tissue allows easy bending in various parts of a plant without breaking ?

View Text Solution

6. What is the main function of adipose tissue ?

View Text Solution

7. Which epithelial tissue protects inner parts of the body and prevent wear and tear?

View Text Solution

8. Which connective tissue is found between the skin and muscles ?

View Text Solution

9. Which epithelium tissue in the intestine is related with absorption and secretion ?

View Text Solution

10. Due to which component, the colour of blood is red?

View Text Solution

11. Which cells are embeded in a hard matrix that is composed of calcium and phosphorus ?

View Text Solution

12. In which type of muscle tissue, alternate light and dark bands (striations) are not seen?

View Text Solution

13. Which type of muscle tissue shows rhythmic contraction and relaxation throughout life?

View Text Solution

Question And Answers Choose The Correct Option From Those Given Below Each Question 1 Mark Each

1. A tissue made of more than one type of cells :

A. Collenchyma

B. Simple tissue

C. Parenchyma

D. Complex tissue

Answer: C

View Text Solution

2. Live mechanical tissue :

A. Parenchyma

B. Collenchyma

C. Sclerenchyma

D. Chlorenchyma

Answer: A::C

View Text Solution

3. Which tissue allows easy bending in parts of plant without breaking?

A. Collenchyma

B. Scelrenchyma

C. Aerenchyma

D. Xylem

Answer: A::C

View Text Solution

4. What is the main function of phloem in plants ?

A. Conductor of water

B. Transport of food

C. Photosynthesis

D. Ascent of sap

Answer: A::D

View Text Solution

5. Which element of the xylem stores food ?

A. Tracheid

B. Xylem fibre

C. Xylem parenchyma

D. Trachea

Answer: A::C

View Text Solution

6. Which is the dead element of the pholem ?

A. Sieve tube

B. Sieve cell

C. Phloem parenchyma

D. Phloem fibre

Answer: B

View Text Solution

7. What is the location of intercalary meristem?

A. At growing tips of stem or roots

B. . On the lateral side of plant organ

C. . Inside the trachea

D. . At the base of the leaves

Answer: A::B

View Text Solution

8. In which tissue, large intercellular spaces are found between the cells?

A. Meristematic

B. Parenchyma

C. Collenchyma

D. Sclerenchyma

Answer: A::C

View Text Solution

9. Which element is not included in phloem ?

A. Sieve cell

B. Companion cell

C. Collenchyma

D. Phloem parenchyma

Answer: A::C

View Text Solution

10. In which tissue is the thickening of lignin found?

A. Collenchyma

B. Sclerenchyma

C. Phloem

D. Xylem

Answer: A::C

View Text Solution

11. Which tissue provides support to the plants ?

A. Collenchyma

B. Parenchyma

C. Parenchyma

D. Arenchyma

Answer: A::C

View Text Solution

12. Which tissue provides mechanical support as well as flexibility to plants?

A. Parenchyma

B. Arenchyma

C. Collenchyma

D. Sclerenchyma

Answer: C

View Text Solution

13. Which tissue provides mechanical strength along with hardness to the plants ?

A. Parenchyma

B. Arenchyma

C. Collenchyma

D. Sclerenchyma

Answer: D

View Text Solution

14. Which element (component) possesses chlorophyll?

A. Tracheids

B. Guard cells

C. Phloem parenchyma

D. Companion cell

Answer: A::C::D

View Text Solution

15. What is lacking in the meristematic tissue from the following?

A. . Dense cytoplasm

B. Nucleus

C. Cellulose

D. Vacuole

Answer: A::C

View Text Solution

16. Which tissue is found in leaf stalks below the epidermis ?

A. Apical meristem

B. Collenchyma

C. Xylem

D. Phloe

Answer: A::C

View Text Solution

17. Which substance does the cell wall in the husk of a coconut possess?

A. Lignin

B. Cutin

C. Suberin

D. Pectin

Answer:

View Text Solution

18. Thickening of which chemical makes the bark impervious to gases and water ?

A. Cellulose

B. Lignin

C. Suberin

D. Pectin

Answer: C

View Text Solution

19. Which two cells enclose the stoma (plural-stomata)

A. . Companion cells

B. Complementary cells

C. Guard cells

D. Sclerenchyma cells

Answer: A::C::D

View Text Solution

20. Statement X: Both Xylem and Phloem together constitute a vascular bundle. Statement Y: Conducting tissues are complex permanent tissue. Which alternative is true for Statements X and Y?

A. Statement X is true, statement Y is false.

B. Statement X is false, statement Y is true.

C. Both the statements X and Y are true.

D. . Both the statements X and Y are false.

Answer: A::B::D

View Text Solution

21. Where is cuboidal epithelium located ?

A. Lining of duct of salivary gland

B. Lining in the respiratory tract

C. Outer layer of skin

D. . Lining of oesophagus

Answer: A::C::D

View Text Solution

22. What is the characteristic of unstriatedmuscles?

A. Long, cylindrical, uninuclea

B. Long, spindle-shaped, uninucleate

C. Short, cylindrical, multinucleate

D. Long, spindle-shaped, multinucleate

Answer: A::C::D

View Text Solution

23. Which tissue forms the lining of the intestine where absorption and secretion occur

A. Squamous cepithelium

B. tratified epithelium

C. Columnar epithelium

D. Ciliated epithelium

Answer: A::C

View Text Solution

24. What is invalid for areolar tissue ?

A. Collagen fibre

B. Fibroblast

C. Macrophase

D. Harversion canal

Answer: A::C

View Text Solution

25. Which are the main elements whose compounds are found in the matrix of bone cells?

A. Sodium and chlorine

B. Sodium and potassium

C. Calcium and phosphorus

D. All the give

Answer: C

View Text Solution

26. Which of the following is not included in white blood corpuscles?

A. Neutrophil

B. Lymphocyte

C. Monocyte

D. Platele

Answer: A

View Text Solution

27. It is an involuntary muscle tissue possessing striations :

A. Skeletal muscle tissue (Striated muscle tissue)

B. Simple muscle tissue

C. Cardiac muscle tissue

D. Areolar connective tissue

Answer: A::C::D

View Text Solution

28. Which cell may be up to 1 metre long?

A. Nerve cell

B. Non-striated (Unstriated)

C. Cardiac muscle cell

D. Collagen fibre cell

Answer: C

View Text Solution

29. In human, muscle cells

A. . conduct the message from one part to the another part

B. contract and relax to cause movement

C. conduct the food

D. transports the oxygen

Answer: A::C::D

View Text Solution

30. Bone is a ..... tissue.

A. epithelial

B. muscle

C. connective

D. nerve

Answer: C

View Text Solution

Question And Answers Fill In The Blanks 1 Mark Each

1. Parenchyma containing chlorophyll is called ..... tissue.

View Text Solution

2. ..... tissue is present at shoot apex (tip of stem).

View Text Solution

3. In sclerenchyma tissue, the thickening of .....is seen

View Text Solution

4. Aerenchyma is a type of ..... tissue.

View Text Solution

5. Sieve tube is an important element of ..... tissue.

View Text Solution

6. The only dead element of phloem tissue is .....

View Text Solution

7. The tissue, whose cells undergo continuous cell division and produce new cells, is knownas ..... tissue.

View Text Solution

8. ....., which connects muscles to bones is a type of connective tissue.

View Text Solution

9. ....., which connects two bones to each other is a type of connective tissue.

View Text Solution

10. The ..... tissue, which is mostly attached to bones, is known a skeletal muscle tissue.

View Text Solution

11. All epithelium are separated from underlying tissue by an extracellular structure called .....

View Text Solution

12. A portion of the cuboidal epithelial tissue folds inward and form .....

View Text Solution

13. ..... is a fibrous tissue with great strength but limited flexibility

View Text Solution

14. ..... cells are cylindrical, branches and uninucleate.

View Text Solution

Question And Answers Fill In The Blanks By Selecting The Correct Alternative From Those

Given In The Bracket 1 Mark Each

1. Meristematic tissue is present in ..... of the plant.

View Text Solution

2. ..... tissue is not included in simple permanent tissues. (Parenchyma, Sclerenchyma, Xylem)

View Text Solution

3. ..... tissue conducts water and soluble salts along with providing mechanical strength. (Sclerenchyma, Xylem, Phloem)

View Text Solution

4. In ..... tissue, the cells become dead and without protoplasm. (parenchyma, sclerenchyma, collenchyma)

View Text Solution

5. ..... tissue stores the nutrients and water. (Collenchyma, Parenchyma, Sclerenchyma)

View Text Solution

6. ..... tissue is one of the types of parenchyma. (Chlorenchyma, Collenchyma, Sclerenchyma)

View Text Solution

7. The only live component ..... of xylem tissue is connected in the lateral transport of water. (tracheids, trachea, xylem parenchyma)

View Text Solution

8. ..... tissue is never found in the roots.

View Text Solution

9. ..... tissue forms the bark of the tree. (Sclerenchyma, Xylem, Secondary meristem)

View Text Solution

10. Vascular bundle is constituted by ..... tissues. (meristematic, simple permanent,complex permanent)

View Text Solution

11. In cells lining lung alveoli, the transportation of substances occurs through a ..... (selectively permeable surface, semi-permeablesurface, solely permeable surface)

View Text Solution

12. In skin, stratified ..... epithelial tissues are arranged in many layers. (columnar, cuboidal, squamous)

View Text Solution

13. The cells of ..... epithelium often acquire additional specialisation as gland cell. (columnar, cuboidal, squamous)

View Text Solution

14. Cartilage tissue is absent in the structure of (tip of nose, pinna of ear, ligament)

View Text Solution

15. Astriated tissue is not present in ..... (stomach, heart, ureters)

View Text Solution

16. The bone cells are embeded rich in salts of (sodium, calcium, potassium)

View Text Solution

17. The intercellular material in the squamous epithelial tissue is known as .....(cementing

material.jelly, secreting material)

View Text Solution

Question And Answers State Whether The Following Statements Are Ture Of False 1 Mark Each

1. The cells of meristematic tissue undergo continuous cell division and produce new cells

View Text Solution

2. Apical meristem is present at tips of stems and roots.

View Text Solution

3. The inner wall of cell of collenchyma is made of lignin.

View Text Solution

4. There are sclerenchyma cell in the hard covering of seeds (bean, pea and green gram).

View Text Solution

5. Sclerenchyma is a dead mechanical tissue.

View Text Solution

6. Parenchyma tissue is also known as chlo renchyma

View Text Solution

7. Lateral meristem (cambium) increases the girth of the root and stem.

View Text Solution

8. All the cells of xylem tissue are dead cells.

View Text Solution

9. All the cells of phloem are living cells.

View Text Solution

10. Phloem tissue transports water and salts from roots to leaves in upward direction.

View Text Solution

11. The outer layer of skin and lining of mouth is covered with squamous epithelium.

View Text Solution

12. Ciliated columnar epithelium forms the lining of kidney tubules and duct of salivary glands.

View Text Solution

13. Ciliated epithelium is a type of transformed columnar epithelium.

View Text Solution

14. A neuron has a single axon and many dendrites.

View Text Solution

15. The intercellular matrix of connective tissue may be jelly like fluid, dense or rigid.

View Text Solution

16. Bones and cartilages are two types of ciliated epithelium tissue.

View Text Solution

17. Blood is a connective tissue.

View Text Solution

18. Cardiac muscles are cylindrical, branched anduninucleate.

View Text Solution

19. Striated muscles are spindle-shaped, uninucleate, flat and narrow at ends.

View Text Solution

20. Nerve impulses do not allow us to move our muscles when we want to move.

View Text Solution

Question And Answers Answer The Following Question In Short 2 Marks Rech

1. Name the regions in which parenchyma tissue is present.

View Text Solution

2. What are the functions of the stomata?

View Text Solution

3. Mention two functions of stomata.

View Text Solution

4. Why does the growth of a plant occur in specific regions ? Where are the following found ? (a) Intercalary meristem (b) Lateral meristem

View Text Solution

5. What is the role of epidermis in plants?

View Text Solution

6. How does the cork act as a protective tissue ?

View Text Solution

7. How are simple tissues different from complex tissues in plants ?

View Text Solution

8. What is the specific function of the cardiac muscle ?

View Text Solution

9. Where are stratified squamous epithelium tissues present ? What is their function ?

View Text Solution

Question And Answers Give Scientific Reasons For The Following Statements 2 Marks Each

1. Give scientific reason for The meristematic tissue is chiefly connected with the function of growth in plants.

View Text Solution

2. Give scientific reason for The cells of sclerenchyma and most of the components of xylem tissue are dead.

View Text Solution

3. Give scientific reason for Xylem is a complex tissue.

View Text Solution

4. Give scientific reason for Sclerenchyma tissue provides mechanical strength to the plant parts.

View Text Solution

5. Give scientific reason for Parenchyma tissue is formed in the plants for various functions.

View Text Solution

6. Give scientific reason for In the function of the epidermal cells of the roots and stem variety is seen.

View Text Solution

7. Give scientific reason for The bark cells of a tree are dead

View Text Solution

8. Give scientific reason for Various organs of the body are connected through the blood.

View Text Solution

Question And Answers Match The Following Property 2 Marks Each

1. Match the following

Column I	Column II
1. Apical meristem	a. Provides support
2. Lateral meristem	b. Increase in length of root
3. Parenchyma	c. Hardness and stiffness
4. Sclerenchyma	d. Responsible for increase in girth of stem

View Text Solution

2. Match the following

Column I	Column II
1. Collenchyma	a. In husk of coconut
2. Sclerenchyma	b. Helps in sideway conduction of water
3. Xylem parenchyma	c. In leaf stalks below the epidermis
4. Sieve tube	d. Tubular cells with perforated walls

View Text Solution

3. Match the following

Column I	Column II
1. Skeletal muscle tissue	a. Parenchyma
2. Packing tissue	b. Striated muscles tissue
3. Live mechanical tissue	c. Sclerenchyma
4. Dead tissue	d. Collenchyma

View Text Solution

4. Match the following

Column I	Column II
1. Mucillaginous canal	a. Cells of the bark
2. Cuticle	b. Sclerenchyma
3. Lignin	c. Cortex
4. Suberin	d. Epidermis

View Text Solution

5. Match the following

Column I	Column II
1. Gland cells	a. Columnar epithelium
2. Ciliary cells	b. Blood
3. Layered cells	c. Cuboidal epithelium
4. Suspended cells	d. Stratified epithelium

View Text Solution

6. Match the following

Column I	Column II
1. Repair of tissue	a. Adipose tissue
2. As an insulator	b. Areolar tissue
3. Support to main organs	c. Cartilage
4. Smoothens the bone surface	d. Bone

View Text Solution

Question And Answers Distinguish Between The Following 2 Or 3 Mark Each

1. Distinguish between Meristem tissue and permanent tissue

View Text Solution

2. Distinguish between Parenchyma and Sclerenchyma

View Text Solution

3. Distinguish between Collenchyma and Sclerenchyma

View Text Solution

4. Distinguish between xylem and Phloem

View Text Solution

5. Distinguish between Bone and Cartilage

View Text Solution

6. Distinguish between Striated muscie and Smooth muscle

View Text Solution

7. Distinguish between Columnar epithelium and Cuboidal epithelium

View Text Solution

8. Distinguish between Epithelial tissue and Connective tissue

View Text Solution

9. Distinguish between Tendon and Ligament

View Text Solution

10. Distinguish between Parenchyma, Collenchyma and Sclerenchyma on the pasis of

their cell wall Give three distinguishing character of collenchyma and parenchyma.

View Text Solution

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

View Text Solution

12. Differentiate between three types of muscular tissue.

View Text Solution

13. Diagrammatically show the difference between the three types of muscle fibres.

View Text Solution

Question And Answer Answer The Following Question In Brief 3 Marks Each

1. Describe the structure and functions of xylem.

View Text Solution

2. Decribe the structure and function of phloem.

View Text Solution

3. Describe the functions of epithelial tissues

View Text Solution

4. What is a connective tissue ? State it's any two basic components. Differentiate between ligament and tendon.

View Text Solution

5. (5) What are the different types of connective tissues ?

View Text Solution

6. (6) Describe the structure and functions of areolar connective tissue.

View Text Solution

7. Sketch and label adipose connective tissue

View Text Solution

8. Mention one region in the body where adipose tissue is present and state its one function.

View Text Solution

9. Draw a labelled diagram of striated muscle. Give its location and function.

View Text Solution

10. Answer the following :

. Draw a labelled diagram of neuron with two labelling.

View Text Solution

11. Answer the following :

Identify the tissue which is made-up of these cells.

View Text Solution

12. Answer the following :

Name one organ that is made of this tissue.

View Text Solution

Question And Answers Answer The Following Question In Detail 4 Marks Each

1. Why the tissues of plants and animals different from each other? Explain.

View Text Solution

2. Describe the structure of meristematic tissue and their locations in plant body,

View Text Solution

3. (3) What are the different types of epithelial tissues ? Describe functions of each in brief

View Text Solution

4. Why bone and cartilage are called connective tissues ? Describe the structure of bone and cartilage.

View Text Solution

5. Complete the table

View Text Solution

6. Make a chart to show all the animal tissues.

View Text Solution

7. Mention the different components of blood in the following diagram :

View Text Solution

8. Write a brief account of structure of neuron.

View Text Solution

Questions And Answers Draw The Labelled Diagram

1. Draw the labelled diagram Location of meristematic tissue in plant body

View Text Solution

2. Draw the labelled diagram Parenchyma - Transverse and longitudinal

View Text Solution

3. Draw the labelled diagram Collenchyma - Transverse and longitudinal sections

View Text Solution

4. Draw the labelled diagram Seclerenchyma - Transverse and longitudinal sections

View Text Solution

5. Draw the labelled diagram Structure of stomata in lateral view and surface view

View Text Solution

6. Draw the labelled diagram Section of phloem

View Text Solution

7. Draw the labelled diagram Elements of xylem

View Text Solution

8. Draw the labelled diagram

Types of epithelial tissues - Squamous, cuboidal, columnar and stratified

View Text Solution

9. Draw the labelled diagram

Types of connective tissues - Areolar, adipose, cartilage bone and blood cells

View Text Solution

10. Draw the labelled diagram

Types of muscular tissue - Striated smooth and cardiac muscles

View Text Solution

Value Based Questions With Answers

1. Smita had an accident and broke her knee ligament and fractured her forearm. Doctor set the fracture but advised her a surgery for knees and complete rest for 4 weeks. She cannot attend the school due to doctor's advice

Why Doctor has to perform surgery on knees?

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2. Smita had an accident and broke her knee ligament and fractured her forearm. Doctor set the fracture but advised her a surgery for knees and complete rest for 4 weeks. She cannot attend the school due to doctor's advice

) What is ligament?

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3. Smita had an accident and broke her knee ligament and fractured her forearm. Doctor set the fracture but advised her a surgery for knees and complete rest for 4 weeks. She cannot attend the school due to doctor's advice

How will you help Smita in her studies ?

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4. . Mahesh had planted a mango tree. As soon as its shoot grew to some height, someone from the road came and chopped off its shoot. As a result the mango tree was not growing tall. Mahesh kept a watch and grabbed the person who was plucking the tip. What must have been explained by Mahesh to this man in order to save his tree? What values do you see in Mahesh?

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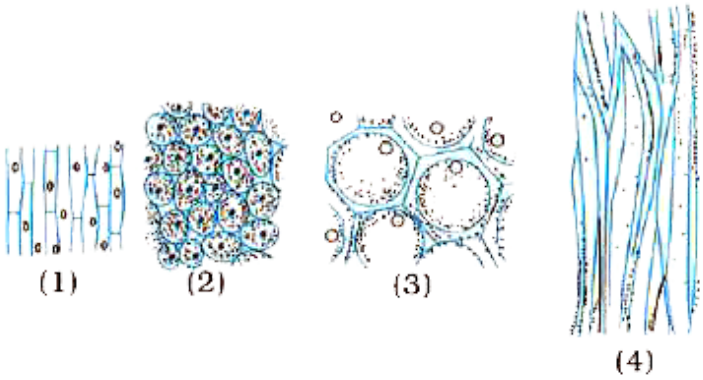
Question Based On Practical Skills With Answers Select The Appropriate Option And Complete The Sentence

1. The correct figure of sclecrenchyma tissume is .....



A. 1

B. 2

C. 3

D. 4

Answer: D

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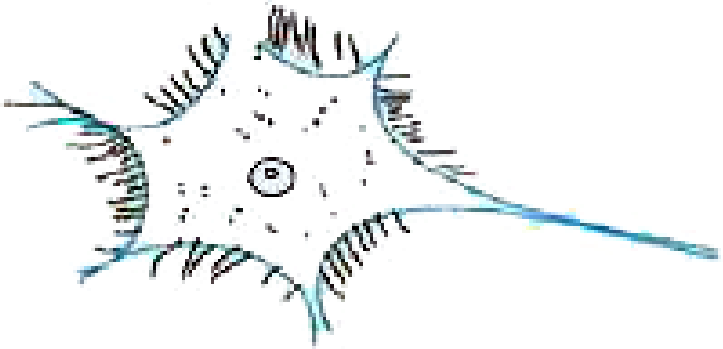
2. Raj observed nerve cells under the microscope and made the following sketch.

The mistake in his drawing is cyton with ....



A. cilia

B. dendrites

C. nucleus

D. cytoplasm

Answer: A::C

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3. A slide given to you for identification consists of long narrow dead cells which have thick boundaries. Under which tissue would you place them?

A. Sclerenchyma tissue

B. Collenchyma tissue

C. Parenchyma tissue

D. Meristematic tissue

Answer: A::C

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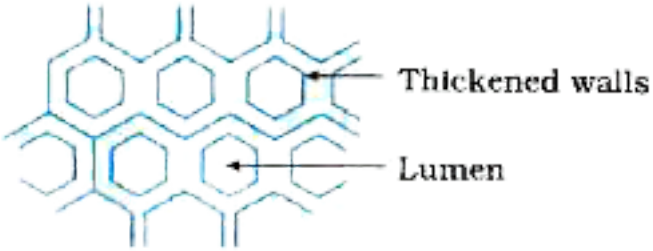
4. A student observed the empty spaces in side of sclerenchyma. It shows .....



A. Protoplasm is dead at maturity

B. Intercellular spaces

C. Cytoplasm is thin

D. Lumen in cell

Answer: A::D

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5. The characterstic features to identify a nerve cell are :

A. Round or oval cells with bilobed nucleus and cytoplasmic granules.

B. Cell body with branched cytoplasmic extensions at one end and a long

projection at the other end.

C. Spindle-shapped cell with a big central nucleus.

D. Red coloured, biconcave disc-shaped enucleated cells.

Answer: A::B::C::D

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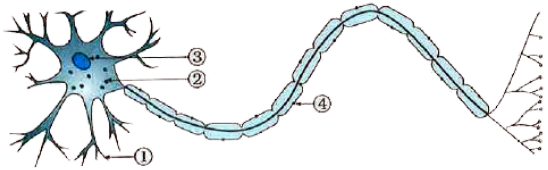
6. Figure depicting the parts of a neuron is given below :



The correct identification of the labels 1,2,3,4 respectively is .....

A. dendrite, cytoplasm, nucleus, nerve Abre

B. cilia, endoplasmic reticulum, nucleus, nerve fibre

C. dendrite, cell body, nucleus, axon

D. dendrite, cyton, nucleus, axo

Answer: A::B::C::D

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7. Which out of the following is not a parenchyma ?

A. Collenchyma

B. Mesophyll cells

C. Chlorenchyma

D. Aerenchyma

Answer: A

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8. Which of the following has lots of sclerenchymatous tissue?

A. Cucumber

B. Bottle gourd

C. Coconut

D. Cashewnut

Answer: C

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9. The triceps muscle is joined to a humerus bone by means of tendon. What kind of a muscle fibre must be present in this muscle?

A. Cardiac

B. Smooth

C. Voluntary

D. Non - straited

Answer: A

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10. Which tissue has longest cells ?

A. Epithelial tissue

B. Muscular tissue

C. Connective tissue

D. Nervous tissue

Answer:

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11. Which of the following has aerenchyma in its leaves ?

A. Lotus

B. Cactus

C. Hibiscus

D. Deodar

Answer:

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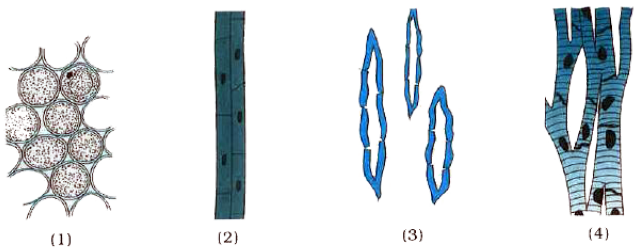
12. Which one of the following is odd one but ?



A. 1

B. 2

C. 3

D. 4

Answer: D

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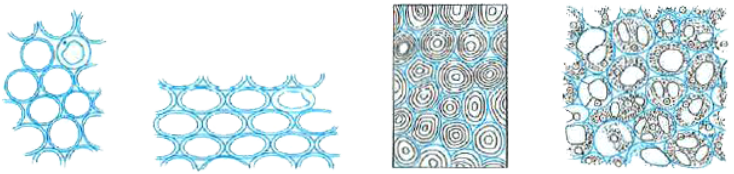
13. Match the diagrams with their correct labellings from the given column :



(1) (2) (3) (4)

(1)	(2)	(3)	(4)
(a) Adipose connective	Areolar connective	Parenchyma	Bone
(b) Bone	Cartilage	Xylem vessel	Phloem
(c) Parenchyma	Companion cells	Sieve tubes	Collenchyma
(d) Parenchyma	Collenchyma	Sclerenchyma	Aerenchyma

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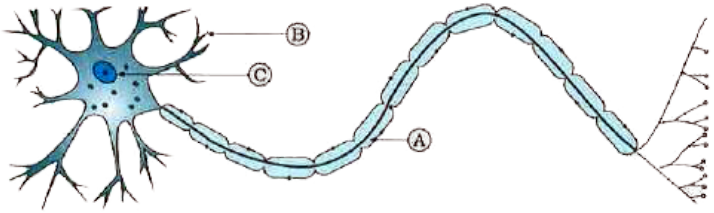
14. In a diagram of a neuron , A, B and C are marked.



Match the functions of A, B, C

A. A. Picking up the impulse B. Transmitting the impulse C. Helping conduction

B. A. Transmitting the impulse B. Picking up the impulse C. Control of cell

C. A. Governing the cell B. Controlling nerves C. Cell division

D. A. Connecting neurons B. Spreading message C. Destroying cells

Answer: B

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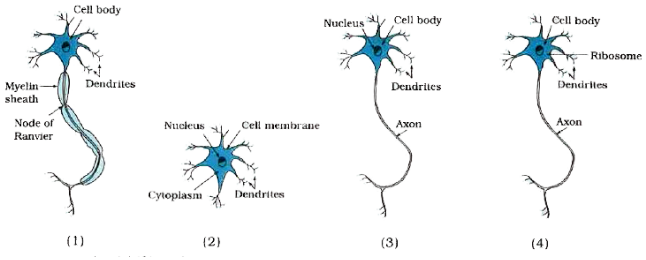
15. Which one of the following is the correct diagram of neuron?



A. 1

B. 2

C. 3

D. 4

Answer: A

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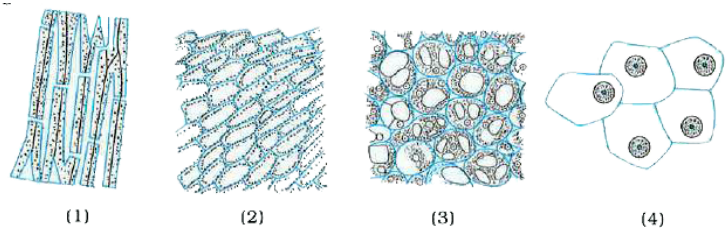
16. Which diagram shows sclerenchyma ?



A. 4

B. 3

C. 2

D. 1

Answer: A

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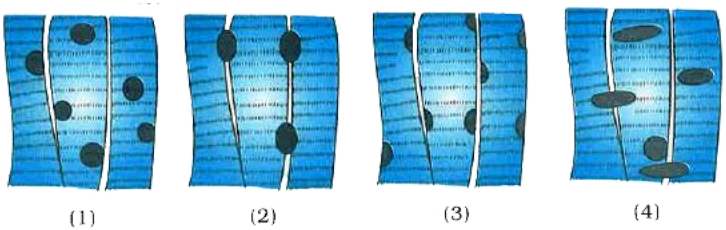
17. Which of the following correct diagra of skeletal muscler fibre ?



A. 1

B. 2

C. 3

D. 4

Answer: C

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