

Chapter 6: Tissues Quiz

Introduction to Tissues

1. What is a tissue?

- A group of similar cells performing a specific function
- A single cell
- An organ system
- A type of organism

Answer: A group of similar cells performing a specific function

2. Which organism carries out all functions in a single cell?

- Amoeba
- Human
- Plant
- Fish

Answer: Amoeba

3. What is division of labour?

- Different groups of cells doing specific tasks
- Cells dividing rapidly
- Cells stopping work
- None of the above

Answer: Different groups of cells doing specific tasks

4. Which of these is an example of a tissue?

- Blood
- Stomach
- Heart
- Eye

Answer: Blood

5. Why are cells grouped into tissues?

- To increase efficiency
- To look better
- To decrease size
- To stop dividing

Answer: To increase efficiency

Plants vs. Animals Tissues

1. Why do plants need supportive tissue?

- Because they are stationary and need to stand upright
- Because they move a lot
- To store food
- To absorb water

Answer: Because they are stationary and need to stand upright

2. Most plant supportive tissues consist of?

- Dead cells
- Living cells
- Muscle cells
- Nerve cells

Answer: Dead cells

3. Which organisms consume more energy?

- Animals
- Plants
- Both equally
- Neither

Answer: Animals

4. Growth in plants is limited to?

- Certain specific regions
- All over the body
- No regions
- Roots only

Answer: Certain specific regions

5. Cell growth in animals is?

- More uniform
- Localised to tips
- Non-existent
- Only in bones

Answer: More uniform

Meristematic Tissue

1. What is meristematic tissue?

- Dividing tissue
- Dead tissue
- Storage tissue
- Protective tissue

Answer: Dividing tissue

2. Where is apical meristem found?

- Growing tips of stems and roots
- Base of leaves
- Sides of the stem
- In the bark

Answer: Growing tips of stems and roots

3. Which meristem increases the girth of the stem?

- Lateral meristem
- Apical meristem
- Intercalary meristem
- None

Answer: Lateral meristem

4. Cells of meristematic tissue lack?

- Vacuoles
- Nuclei
- Cytoplasm
- Cell walls

Answer: Vacuoles

5. Intercalary meristem is located?

- Near the node
- At the root tip
- In the bark
- In the flower

Answer: Near the node

Permanent Tissue

1. What is differentiation?

- Taking up a permanent shape, size, and function
- Continuous division
- Dying of cells
- Moving of cells

Answer: Taking up a permanent shape, size, and function

2. Permanent tissues are formed from?

- Meristematic tissue
- Dead cells
- Animal cells
- None of the above

Answer: Meristematic tissue

3. Do permanent tissues divide?

- No, they have lost the ability
- Yes, rapidly
- Sometimes
- Only in winter

Answer: No, they have lost the ability

4. Differentiation leads to?

- Various types of permanent tissues
- Meristematic tissue
- Seeds
- Fruits

Answer: Various types of permanent tissues

5. Cells in permanent tissue have?

- Specific roles
- No roles
- Random roles
- Only storage roles

Answer: Specific roles

Simple Permanent Tissue (Parenchyma)

1. What is the most common simple permanent tissue?

- Parenchyma
- Collenchyma
- Sclerenchyma
- Xylem

Answer: Parenchyma

2. What is a main function of parenchyma?

- Storing food
- Mechanical strength
- Transporting water
- Movement

Answer: Storing food

3. Parenchyma with chlorophyll is called?

- Chlorenchyma
- Aerenchyma
- Sclerenchyma
- Epidermis

Answer: Chlorenchyma

4. Aerenchyma helps aquatic plants to?

- Float
- Sink
- Dry out
- Reproduce

Answer: Float

5. Are parenchyma cells living?

- Yes
- No
- Half of them
- Only in roots

Answer: Yes

Collenchyma and Sclerenchyma

1. Which tissue provides flexibility to plants?

- Collenchyma
- Parenchyma
- Sclerenchyma
- Xylem

Answer: Collenchyma

2. Sclerenchyma cells are?

- Dead
- Living
- Dividing
- Photosynthetic

Answer: Dead

3. The husk of a coconut is made of?

- Sclerenchyma
- Collenchyma
- Parenchyma
- Epidermis

Answer: Sclerenchyma

4. What makes sclerenchyma walls thick?

- Lignin
- Suberin
- Pectin
- Cellulose

Answer: Lignin

5. Collenchyma is found in?

- Leaf stalks
- Root tips
- Bark
- Seeds

Answer: Leaf stalks

Protective Tissue

1. The outermost layer of plant cells is?

- Epidermis
- Cortex
- Pith
- Cambium

Answer: Epidermis

2. What are stomata?

- Pores in the leaf epidermis
- Cells in the root
- Hairs on the stem
- Waxy coating

Answer: Pores in the leaf epidermis

3. What is the function of cutin?

- Prevent water loss
- Allow gas exchange
- Absorb water
- Attract insects

Answer: Prevent water loss

4. Cork cells have what substance in their walls?

- Suberin
- Lignin
- Cutin
- Pectin

Answer: Suberin

5. Are cork cells living?

- No
- Yes
- Sometimes
- Only in young plants

Answer: No

Complex Permanent Tissue: Xylem

1. What does xylem transport?

- Water and minerals
- Food
- Air
- Hormones

Answer: Water and minerals

2. Which of these is NOT part of xylem?

- Sieve tubes
- Tracheids
- Vessels
- Xylem parenchyma

Answer: Sieve tubes

3. In which direction does xylem transport?

- Vertically (upwards)
- Downwards only
- Both directions
- Sideways

Answer: Vertically (upwards)

4. Are most xylem cells dead or living at maturity?

- Dead
- Living
- Dividing
- Dormant

Answer: Dead

5. Complex tissues are made of?

- More than one type of cell
- Only one type of cell
- Only dead cells
- Only living cells

Answer: More than one type of cell

Complex Permanent Tissue: Phloem

1. What is the function of phloem?

- Transport food
- Transport water
- Support
- Protection

Answer: Transport food

2. Phloem transport is in which direction?

- Both directions
- Upwards only
- Downwards only
- None

Answer: Both directions

3. Which phloem component is dead?

- Phloem fibres
- Sieve tubes
- Companion cells
- Phloem parenchyma

Answer: Phloem fibres

4. Sieve tubes have?

- Perforated walls
- Thick lignified walls
- No cytoplasm
- No nucleus

Answer: Perforated walls

5. Phloem is an example of?

- Complex permanent tissue
- Simple permanent tissue
- Meristematic tissue
- Protective tissue

Answer: Complex permanent tissue

Animal Tissues Overview

1. Which is NOT a type of animal tissue?

- Meristematic tissue
- Epithelial tissue
- Connective tissue
- Muscular tissue

Answer: Meristematic tissue

2. Tissue responsible for movement is?

- Muscular
- Nervous
- Epithelial
- Connective

Answer: Muscular

3. Tissue responsible for protection is?

- Epithelial
- Muscular
- Connective
- Nervous

Answer: Epithelial

4. Blood belongs to which category?

- Connective tissue
- Epithelial tissue
- Muscular tissue
- Nervous tissue

Answer: Connective tissue

5. The brain is made of?

- Nervous tissue
- Muscular tissue
- Connective tissue
- Epithelial tissue

Answer: Nervous tissue

Epithelial Tissue

1. What type of epithelium lines the mouth?

- Squamous epithelium
- Cuboidal epithelium
- Columnar epithelium
- Glandular epithelium

Answer: Squamous epithelium

2. Which epithelium has hair-like cilia?

- Ciliated columnar
- Stratified squamous
- Cuboidal
- Simple squamous

Answer: Ciliated columnar

3. Where is cuboidal epithelium found?

- Kidney tubules
- Skin
- Lungs
- Stomach

Answer: Kidney tubules

4. The skin is made of?

- Stratified squamous epithelium
- Simple squamous epithelium
- Columnar epithelium
- Cuboidal epithelium

Answer: Stratified squamous epithelium

5. What is the main function of glandular epithelium?

- Secretion
- Movement
- Support
- Conduction

Answer: Secretion

Connective Tissue: Blood and Bone

1. The liquid matrix of blood is called?

- Plasma
- Serum
- Lymph
- Water

Answer: Plasma

2. Bone cells are embedded in a matrix of?

- Calcium and phosphorus
- Proteins and sugars
- Fats
- Silica

Answer: Calcium and phosphorus

3. Is bone flexible?

- No, it is nonflexible
- Yes, very flexible
- Slightly flexible
- Only when young

Answer: No, it is nonflexible

4. What does blood transport?

- Gases, food, and hormones
- Only oxygen
- Only waste
- Nothing

Answer: Gases, food, and hormones

5. RBCs are found in?

- Blood
- Bone
- Cartilage
- Muscle

Answer: Blood

Other Connective Tissues

1. Ligaments connect?

- Bone to bone
- Muscle to bone
- Muscle to muscle
- Skin to muscle

Answer: Bone to bone

2. Tendons connect?

- Muscle to bone
- Bone to bone
- Nerve to muscle
- Skin to bone

Answer: Muscle to bone

3. Cartilage is found in?

- Nose and ear
- Teeth
- Hair
- Nails

Answer: Nose and ear

4. Adipose tissue stores?

- Fat
- Water
- Protein
- Starch

Answer: Fat

5. Areolar tissue is found?

- Between skin and muscles
- In bones
- In teeth
- In hair

Answer: Between skin and muscles

Muscular Tissue

1. Which muscles are voluntary?

- Striated muscles
- Smooth muscles
- Cardiac muscles
- All of them

Answer: Striated muscles

2. Heart muscles are called?

- Cardiac muscles
- Striated muscles
- Smooth muscles
- Skeletal muscles

Answer: Cardiac muscles

3. Which muscles are found in the alimentary canal?

- Smooth muscles
- Striated muscles
- Cardiac muscles
- Voluntary muscles

Answer: Smooth muscles

4. Striated muscles are attached to?

- Bones
- Skin
- Organs
- Nerves

Answer: Bones

5. Muscle cells are called?

- Fibres
- Neurons
- Osteocytes
- Chondrocytes

Answer: Fibres

Nervous Tissue

1. The unit of nervous tissue is?

- Neuron
- Nephron
- Cell body
- Axon

Answer: Neuron

2. The long part of a neuron is called?

- Axon
- Dendrite
- Cell body
- Nucleus

Answer: Axon

3. Branched parts of a neuron are?

- Dendrites
- Axons
- Nerve endings
- Synapses

Answer: Dendrites

4. What passes along the nerve fibre?

- Nerve impulse
- Blood
- Hormones
- Water

Answer: Nerve impulse

5. Nervous tissue allows us to?

- Respond to stimuli
- Digest food
- Transport blood
- Photosynthesize

Answer: Respond to stimuli