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