



# Quiz Time

Histology3

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# Histology 3

1. Why are stains necessary in histological studies?

- A. Tissues are naturally colored and need enhancement.
- B. To visualize and distinguish different parts of cells and tissues under the microscope.
- C. To increase the size of tissues for better observation.
- D. To preserve tissues for long-term storage.

Answer: B. To visualize and distinguish different parts of cells and tissues under the microscope.

2. Which stain is commonly used to identify acidic structures like the nucleus?

- A. Eosin
- B. Sudan III
- C. Hematoxylin
- D. Leishman stain

Answer: C. Hematoxylin

3. What color does eosin impart to basic components of the cell?

- A. Blue
- B. Red
- C. Green
- D. Yellow

Answer: B. Red

4. In the H&E staining process, what is the purpose of "clearing" the tissue?

- A. To remove water from the tissue
- B. To remove paraffin from the tissue
- C. To stain the tissue components
- D. To fix the tissue structures

Answer: B. To remove paraffin from the tissue

5. Which special stain is used to detect carbohydrates and mucin, imparting a magenta color?

- A. Sudan III
- B. Giemsa stain
- C. Periodic acid-Schiff (PAS)
- D. Masson trichrome

Answer: C. Periodic acid-Schiff (PAS)

6. What is the primary application of immunohistochemistry in histological studies?

- A. To stain lipids within tissues
- B. To visualize specific proteins using antigen-antibody reactions
- C. To enhance tissue dehydration
- D. To embed tissues in paraffin

Answer: B. To visualize specific proteins using antigen-antibody reactions

7. Which staining technique is used to identify elastic fibers, imparting a brown color?

- A. Orcein stain
- B. Silver stain
- C. Van Gieson stain
- D. Masson trichrome

Answer: A. Orcein stain

8. What is the purpose of "dehydration" in the staining process?

- A. To remove xylene from the tissue
- B. To remove water from the tissue
- C. To stain the tissue components
- D. To fix the tissue structures

Answer: B. To remove water from the tissue

9. Which stain is used to detect lipids, imparting an orange color?

- A. Sudan III
- B. Giemsa stain
- C. Periodic acid-Schiff (PAS)
- D. Masson trichrome

Answer: A. Sudan III

10. What is the characteristic of a "metachromatic stain"?

- A. It stains tissues with multiple colors using a single stain.
- B. It stains tissues with a color different from the original color of the stain.
- C. It stains living tissues inside the body.
- D. It stains living tissues outside the body.

Answer: B. It stains tissues with a color different from the original color of the stain.