

## Midterm Histology exam of 2015

1. Which of the following is not a FIXED CELL?
  - a. Mast Cell
  - b. Plasma Cell**
  - c. Fibroblasts
2. Which of the following connects the cytoskeleton to the ECM?
  - a. Desmosomes
  - b. IM filaments
  - c. Actin Filaments
  - d. Integrins**
3. Which of the following is true about CT?
  - a. It is composed of MORE ECM than CELLS**
4. Which of the following is false regarding GAG's?
  - a. Negatively charged
  - b. Hyaluronic acid forms the backbone of sulfated GAG's
  - c. Hyaluronic acid forms proteoglycans**
  - d. Sulfated GAG's form proteoglycans

5. Which of the following is a wrong description of a MAST cell?
  - a. They are part of the Mononuclear phagocyte system
6. Which of the following is false about Plasma Cells under a LM?
  - a. Profuse RER
  - b. Negative Golgi image
  - c. Acidophilic cytoplasm
7. What is the electron dense layer seen in a section of a cell membrane?
  - a. Phospholipid-protein complex
  - b. Glycolipids
  - c. Sialic acid
8. How can the shape of a tissue be determined?
  - a. By the shape of the nucleus
9. Which of the following can be seen under a LM (H&E)?
  - a. Tight junctions
  - b. SER
  - c. Ribosomes
10. Why does the nucleus stain blue?
  - a. Hematoxylin stains nucleic acids blue
11. Sebaceous glands can be classified as?
  - a. Simple branched tubular
  - b. Simple alveolar
  - c. Simple branched alveolar
12. Which of the following is false about microscopes?
  - a. TEM scans the surfaces

- b. Live specimen can be seen using the phase-contrasting microscope
13. Which of the following is the least descriptive of a Mucous secreting cell?
- a. Flattened nucleus
  - b. Appears lighter than serous secreting cells under the microscope
  - c. Can form demilunes
14. Which of the following is mismatched?
- a. Lungs and transitional epithelium
  - b. Skin and keratinized stratified squamous
15. Which of the following counts for the ability to see the cells under a microscope?
- a. Staining
  - b. Slicing
  - c. Waxing
16. Which of the following is true of Macrophages?
- a. They are first called monocytes
  - b. They are characterized by metachromasia
17. Which of the following is true of CT and Epithelial tissues?
- a. CT can only be derived from one layer
  - b. Epithelial tissue can be derived from all 3 layers
  - c. A+B
18. Which of the following resembles the structure of basal bodies?
- a. Axoneme
  - b. Centrioles
  - c. Actin filaments
  - d. Flagella

19. What is the function of tight junctions?

a. Maintain the structure of the tissue by not allowing anything to diffuse between cells

20. What is true of Gap Junctions?

a. They are made of desmosomes

b. They allow passage of small molecules between cells

21. What is the difference between Desmosomes and Hemidesmosomes?

a. Desmosomes attach two neighboring cells together while hemidesmosomes attach the cell to the basal membrane

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