

1) Which of following is false regarding GAGs?

- 1- Negatively charged
- 2- Hyaluronic acid forms the backbone of sulfated GAGs
- 3- Hyaluronic acid forms proteoglycans *
- 4- Sulfated GAGs form proteoglycans

2) All of the following characteristics of plasma cell, Except:

- 1- Centric nucleus*
- 2- Negative Golgi image
- 3- Basophilic cytoplasm
- 4- Profuse rER
- 5- None of the above

3) False about goblet cells?

They are found only in ciliated epithelium

4) Which is correct about euchromatin? It's found in active cells, lightly stained and dispersed

5) What is the wrong statement about collagen 1

- 1- The strongest type of collagen
- 2- Unstained with hematoxylin and eosin ✓
- 3- each third amino acid is glycine
- 4- Hydroxylation step needs Vitamin C

6) Connective tissue and epithelial tissue share all of these characteristics except: having large intercellular spaces/large amount of ECM ✓

7) The best microscope to observe living cells is

- 1- Compound light microscope
- 2- Phase contrast microscope ✓
- 3- TEM

4- SEM

8) The step that comes directly after preserving our tissue:

- 1- Slicing
- 2- Embedding
- 3- Dehydration ✓
- 4- Staining

9) Sebaceous glands are:

- 1- simple branched acinar glands
- 2- next to hair canals
- 3- Holocrine mode of secretion
- 4- all of the above*

10) **In paraffin wax technique, the step after preservation is?** Dehydration

11) What's wrong about the epithelial cells:

- 1- highly vascular*
- 2- highly cellular
- 3- high regeneration power
- 4- A+b
- 5- a+b+c

12) **If you want to study Lysosomes which cells do you observe:** Macrophages

13) **ciliated pseudostratified columnar epithelium is simple epithelium because:** all cells are resting on the basement membrane

14) **cells that produce anti-bodies:** plasma cells

15) which statement is wrong about macrophages: they originate from lymphocytes

16) staining cells using H&E the cytoplasm is stained pink this is mainly because: Eosin binds to cytoplasmic proteins

17) Connexon in which type of junction?
Gap junction

18) which statement is wrong about the basement membrane: the presence of cadherins
-sER is prominent in: steroid

19) synthesizing organs, liver, muscles (All of the above)

20) which statement is wrong about microvilli: they originate from basal body

- 1- What is wrong about simple epithelium
- 2- May have microvilli
- 3- May be keratinized *
- 4- May be ciliated
- 5- Composed of one layer of cells

21) What's wrong about epithelial cells:

- 1- The mitotic activity is limited to the basal layer
- 2- All of the cells are squamous *
- 3- كمان اشبي
- 4- None of the above

22) what's wrong about the Transitional epithelium??

- 1- Have strong junction
- 2- Called urinary epithelium

3- When stretched the apical layer is Dom shaped*

23) a method is often used to determine the shape of the cells?

- 1- The shape of basement membrane
- 2- From the shape of adjacent cells
- 3- Number of layers
- 4- the shape of nucleus*

24) what's right about serous secreting cells:

- 1- the apical surface of the cell contains zymogen granules*
- 2- Serous is more lightly stained than mucous
- 3- the basal layer is eosinophilic
- 4- the cytoplasm appears vacant

25) proper connective tissue is similar to epithelial tissue in these features except:

it has intercellular junction

26) Regarding cellular junctions, what junctions are responsible of:

- 1- controlling transport of particles from the extracellular space across the epithelium: tight junctions
- 2- integration between cells: Desmosomes
- 3- transport of particles between adjacent cells: gap junction

27) wrong statement regarding to Apical modifications: microvilli originates from basal body