

General Histology Midterm Test

For Premed Year 2018/2019

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1- 1cm is equal to:

- a- 100mm.
- b- 10^5 μm .
- c- 10^7 nm.
- d- 10^3 μm .
- e- 10^9 nm.

2-Which of the following statements is true about myoepithelia?

- a-They rest on basement membrane.
- b-They contain a huge amount of ER.
- c-They have no processes.
- d-It is considered a part of the connective tissue.

3-An apical modification that can't be individually resolved under LM:

- a-Stereocilia.
- b-Microvilli.
- c-Cilia.
- d-Goblet cells.

4-Which of the following is true about transitional epithelium?

- a-It can be stratified or simple.**
- b-They all look like flattened cells.**
- c-It is found in the urinary system only.**
- d-All cells are in contact with basal lamina.**

5-How to calculate the total magnification of a light microscope?

- a-By multiplying the magnifying power of the ocular and objective lenses.**
- b- By dividing the magnifying power of the ocular and objective lenses.**
- c- By multiplying the resolving power of the ocular and objective lenses.**
- d- By multiplying the magnifying power of the ocular lens by 10.**
- e- By summing the resolving power of the ocular and objective lenses.**

6-Which of the following structures contain connexin subunits?

- a-Zonula occludens.**
- b-Macula adherens.**
- c-Zonula adherens.**
- d-Desmosomes.**
- e-Gap junction.**

7-An apical modification that is motile and has 9+2 axoneme core:

- a-Stereocilia.**
- b-Centriole.**
- c-Microvilli.**
- d-Cilia.**

8-You did a surgery and after it has finished you need a quick decision to make sure that there's no tumour at the borders of surgery site, which of the following would you order?

- a-Scanning electron microscopy.**
- b-Routine light microscopy.**
- c-Transmission electron microscopy.**
- d-Freezing technique.**
- e-Phase contrast microscopy.**

9-What is the shape of nucleus in simple cuboidal epithelium?

- a-Elongated.**
- b-Circular.**
- c-Flattened.**
- d-Ovoid.**
- e-Any of the above.**

10-Which epithelium lines the duct that is closest (nearest) to secretory units?

- a-Simple columnar.**
- b-Stratified squamous.**
- c-Simple cuboidal.**
- d-Stratified columnar.**
- e-Stratified cuboidal.**

11-Which structure is targeted by Helicobacter pylori?

- a-ZO-1 of zonula occludens.**

b-Laminin V of basal lamina.

c-Desmogleins of desmosomes.

d-Cadherins.

12-Which of the following is true about hemidesmosomes?

a-They are not associated with integrins.

b-Cytoplasmic plaque is attached to actin filaments.

c-They are only found in the basal side of the cell.

d-Mediates attachment to reticular lamina.

13-Which of the following structures function in influencing cell polarity?

a-Reticular lamina.

b-Basal lamina.

c-Cytoplasm.

d-Cilia and Microvilli.

14-What is the major component of lamina densa?

a-Collagen VII.

b-Laminin.

c-Collagen III.

d-Integrins.

e- Collagen IV.

15-Where is endothelium found?

a-Lining blood vessels.

b-Covering the external body.

c-In lungs.

d-Covering large cavities.

16-Which of these gland's secretion mode is apocrine?

a-All sweat glands.

b-Goblet cells.

c-Mammary glands.

d-Salivary glands.

e-Pancreas.

17-Which of these glands is mixed (seromucous)?

a-Parotid gland.

b-Pancreas.

c-Goblet cells.

d-Submandibular salivary gland.

18-Which of the following glands is an example of simple branched acinar?

a-Sebaceous glands.

b-Pancreas.

c-Salivary glands.

d-sweat glands.

19-Which of these is found most apically in TEM?

a-Gap junction.

b-Zonula occludens.

c-Zonula adherens.

d-Desmosomes.

20-Where are the non-classical cadherins found?

a-Zonula occludens.

b-Gap junction.

c-Zonula adherens.

d-Tight junction.

e-Macula adherens.

21-Which of the following is true about the basement membrane?

a-It is a real membrane lying under the epithelium.

b-Usually formed by the fusion of basal lamina and reticular lamina.

c-It is equivalent to basal lamina.

d-In skin, they're made of secretions of epithelia.

22-Which one of these organelles makes the cytoplasm acidophilic?

a-ER.

b-Golgi.

c-Ribosomes.

d-Nucleus.

e-Mitochondria.

23-What is the process name of replacing the dehydrating fluid with one that is totally miscible with both the dehydrating fluid and embedding medium?

a-Clearing.

b-Embedding.

c-Impregnation.

d-Fixation.

24-What makes the nucleus stain blue when using H&E?

- a-Presence of negatively charged nucleic acids in the nucleus.**
- b-Presence of positively charged proteins.**
- c-Presence of negatively charged proteins which are acidophilic.**
- d-Presence of negatively charged structures which attract eosin.**

25- Which stain is most used in routine light microscopy?

- a-PAS stain.**
- b-Orcein.**
- c-Masson's trichrome.**
- d-H&E.**
- e-Silver stain.**

26-What provides controlled communication between nucleus and cytoplasm?

- a-Outer membrane.**
- b-Inner membrane.**
- c-Nuclear pores.**
- d-Perinuclear space.**
- e-Chromatin.**

27-Which fixative is most commonly used in electron microscopy?

- a-Glutaraldehyde.**
- b-Xylene.**
- c-Alcohol.**
- d-Formalin.**

28-Which of the following is true about heterochromatin?

- a-Abundant in active cells.**
- b-Appears dark dense under EM.**
- c-Cannot be distinguished under LM.**
- d-Pale and loose form of chromatin.**

29-Which of the following appears under EM as uniformly granular dense structure?

- a-Secondary lysosomes.**
- b-Centrioles.**
- c-Primary lysosomes.**
- d-Nucleus.**

30- In which of these cells the nucleus is eccentric and clock-face?

- a-Fibroblast.**
- b-Mast cell.**
- c-Plasma cell.**
- d-Monocyte.**
- e-Neutrophils.**

31-Which of the following is responsible for the immediate hypersensitivity reaction?

- a-Mast cell.**
- b-Macrophage.**
- c-Plasma cells.**
- d- Monocytes.**

32-If you want to make a research about intracellular lipid metabolism, which organelle would you choose?

- a-rER.**
- b-Golgi.**
- c-Mitochondria.**
- d-sER.**

33-What produces a negative image in H&E stain?

- a-Nucleus.**
- b-sER.**
- c-Ribosomes.**
- d-Golgi.**

34-Which of the following is a fixed cell in the connective tissue?

- a-Adipocytes.**
- b-Plasma cells.**
- c-Monocytes.**
- d-Neutrophils.**
- e-Macrophages.**

35-Which of the following is true about epithelium?

- a-Can be derived from ectoderm and endoderm only.**
- b-It is highly polarized.**
- c-It is highly vascular.**
- d-Contains much intercellular material.**

36-Where is non-keratinized stratified squamous epithelium found?

- a-Skin.**
- b-Lungs.**

c-Oral cavity.

d-Intestine.

37-The name of stratified epithelium depends on:

a-Size of the apical layer.

b-Stain of the basal layer.

c-Shape of the basal layer cells.

d-Size of the apical layer.

e-Shape of the apical layer cells.

38-Which of the following is true about goblet cells?

a-They secrete mucous and serous.

b-They are found in the respiratory tract.

c-They are not polarized.

d-They use the apocrine mode of secretion.

e-They have no well-developed golgi.

39-What macrophages are found in the liver?

a-Dust cells.

b-Dendritic cells.

c-osteoclasts.

d-Langerhans cells.

e-Kupffer cells.

40-Which of the following statements describes inactive fibroblast (fibrocyte)?

a-Has few processes.

b-Has euchromatin and a prominent nucleolus.

c-Has prominent golgi.

d-Has a prominent rER.

ANSWER KEY

1	c	21	b
2	a	22	e
3	b	23	a
4	c	24	a
5	a	25	d
6	e	26	c
7	d	27	a
8	d	28	b
9	b	29	c
10	c	30	c
11	a	31	a
12	c	32	d
13	b	33	d
14	e	34	a
15	a	35	b
16	c	36	c
17	d	37	e
18	a	38	b
19	b	39	e
20	e	40	a

GOOD LUCK