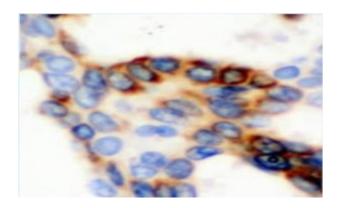


HISTOLOGY PAST PAPER (MED 020)

DONE BY:

LUGAIN RAMZI JANA ZAIDAN

1) what is the staining method that is used in this image:



- A) Hematoxylin stain only
- B) Immunofluorescence staining
- C) PAS stain
- D) H&E stain
- E) Immunohistochemistry and Hematoxylin stains

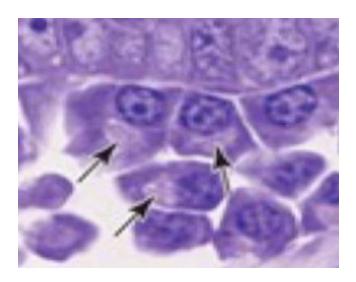
2) Dense regular connective tissue is seen in :

- A) The dermis
- B) Capsule of the kidney
- C) Cruciate ligament of the knee
- D) Perichondrium
- E) None of the above

3) The passage of ions between epithelial cells is facilitated by which type of junctions:

- A) Tight junctions
- B)Desmosomes
- C) Hemidesmosomes
- D) Gap junctions
- E) The statement is incorrect

4) The cells marked with arrows:



- A) Phagocytose bacteria
- B) Release histamin
- C) Are involved in hypersensitivity immune reaction
- D) All of the above
- E) None of the above

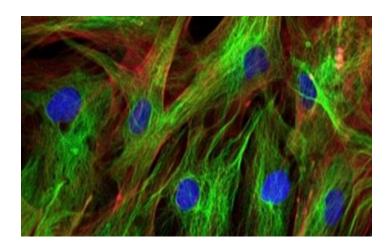
5) What is the most commonly used chemical for removing water from biological samples (dehydration) :
A) Xyline
B) Paraformaldehyde
C) Alcohol
D) We can air-dry samples instead
E) None of the above
6) Choose the correct statement about reticular fibers :
A) Consist mainly of collagen type ll
B) Is argyrophobic
C) Form delicate laminae
D) Present in all lymph nodes
E) All of the above
7) What is the most suitable microscope(s) to visualize the following: cultured cells, immunohistochemically stained sections, and H&E stained sections, respectively:
a) Bright-field microscope for all of them.
B) Bright-field microscope, phase contrast microscope, and bright-field microscope.

C) Phase-contrast microscope, b ght-field microscope, and bright-field microscope.

D) Bright-field microscope, immunofluorescence microscope, and TEM

E) Phase-contrast microscope, immunofluorescence microscope, and bright-field microscope.

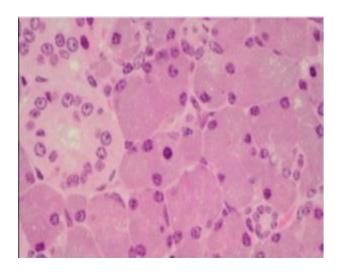
8-Which color indicate the nucleus:



- A) Red.
- B) Black.
- C) Green.
- D) Blue.
- E) The nucleus is not stained.
- 9- Which of the following apical structures is seen in the small intestinal epithelium:
- A) Cilia.
- B) Stereocilia.
- C) Microvilli.

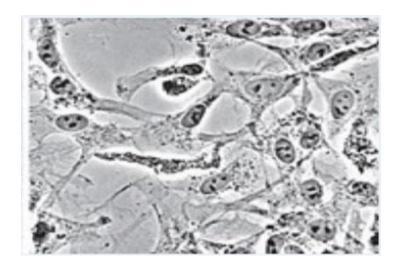
- D) Stereovilli.
- E) C&D

10- This image was most likely taken from:



- A) Simple alveolar gland.
- B) Simple tubular gland.
- C) Simple tubuloalveolar gland.
- D) Compound alveolar gland.
- E) None of the above.

11- This image was acquired using which type of microscopes:

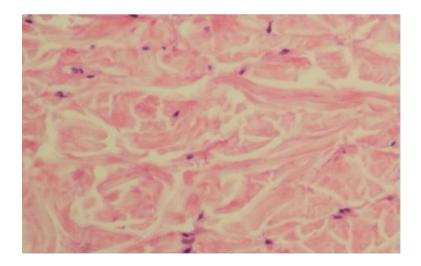


- A) Differential interference contrast microscope.
- B) Phase-contrast microscope.
- C) Bright-field Microscope.
- D) Fluorescence microscope.
- E) TEM.

12- Choose the correct statement about epithelic issues:

- A) All types have the same regeneration capacity.
- B) Capillaries penetrate them sometimes.
- C) Line all external and some internal surfaces of the body.
- D) Most substances that enter or leave an organ must cross an epithelial tissue.
- E) None of the above

13- The most abundant type of fibers in the tissue is/are:



- A) Collagen/fibroblasts.
- B) Reticular/reticular cells.
- C) Elastic/fibroblasts.
- D) A&B.
- E) A&C.

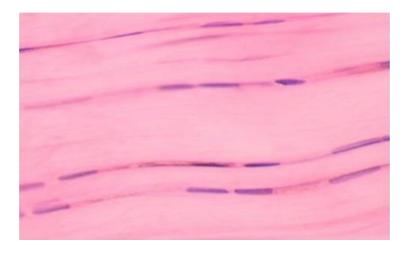
14- Stratified squamous nonkeratinized epithelium lines the following structures, Except:

- A) Oral cavity.
- B) Vagina.
- C) Esophagus.
- D) Pharynx.
- E) Large arteries.

15- Which of the following GAGs is not found in the skin:

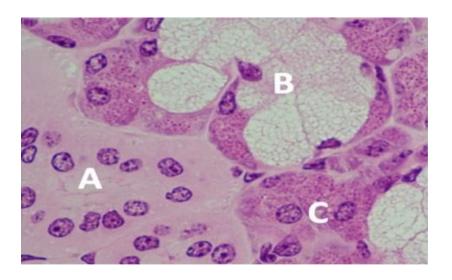
- A) Chondroitin 4- sulfate
- B) Chondroitin 6-sulfate
- C) Chondroitin 8- sulfate
- D) Dermatan sulfate
- E) None of the above

16-The main fiber in this tissue belong to which type:



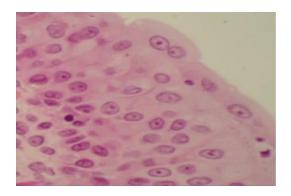
- A) Lamina-forming.
- B) Network or sheet-forming.
- C) Fibrillar.
- D) Linking.
- E) Anchoring.

17- The cells marked with A, B, and C letter are, respectively:



- A) Mucous, and ductal, and myoepithelial
- B) Serous, mucous, and myoepithelial.
- C) Serous, goblet, and myoepithelial.
- D) Ductal, mucous, and serous.
- E) Mucous, serous, and ductal.

18- Choose the incorrect statement about this tissue:



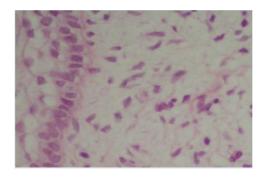
- A) It lines the urinary bladder.
- B) It is called urothelium.
- C) The apical layer are called umbrella cells.
- D) Binucleation is seen in this type.
- E) It is a stratified cuboidal.
- 19- Your colleague is planning to assess th abundance of myoepithelial cells in parotid glands of ats by staining (as precise and easy as possible), what do you ad ise her/him to do:
- A) H&E stain.
- B) TEM.
- C) PAS stain.
- D) Immunohistochemistry or immunofluorescence staining
- E) Any of the above.
- 20- Which of the following stains can be used to visualize collagen:
- A) Trichrome stain.

- B) H&E stain.
- C) Picrosirius stain.
- D) Immunofluorescence staining.
- E) All of the above.

21- Which of the following substances is not released by Mast cells:

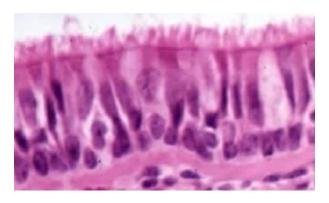
- A) Heparin.
- B) Histamin.
- C) Serine proteases.
- D) Cytokines.
- E) None of the above.

22-The tissue in the this image is:



- A) Wharton's jelly.
- B) Loose connective tissue.
- C) Reticular connective tissue.
- D) Mesenchymal connective tissue.
- E) None of the above.

23- Identify the type of epithelium in this image:



- A) Stratified columnar with goblet cells.
- B) Simple columnar with goblet cells.
- C) Stratified cuboidal with goblet cells.
- D) Ciliated pseudostratified columnar epithelium.
- E) Ciliated pseudostratified columnar epithelium with goblet cells.

24- Regarding Wharton's jelly, choose the correct statement:

- A) Is rich with collagen fibers.
- B) The ground substance is composed c dermatan sulfate mainly.
- C) The cells content is composed of mesenchymal stem cells (mostly) and some fibroblasts.
- D) Is the main component of the fetal umbilical cord.
- E) None of the above.

25- The tissue marked with the star is----, and stained with----:



- A) Dense regular connective tissue, Eosin stain.
- B) Dense regular connective tissue, H&E stain.
- C) Loose connective tissue, H&E stain. d. Loose regular connective tissue, H&E stain.
- D) Reticular connective tissue, H&E stain.

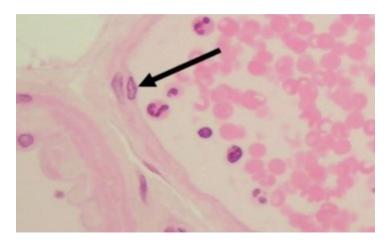
26- A student used the light microscope to acquire images for stained histological section, what is the final magnification of the images if she used the $40\mathrm{X}$ objective lens?

- A) 40
- B) 400
- C) 4000
- D) 1600
- E) 40000

27- Regarding the electron microscope, choose the correct statement:

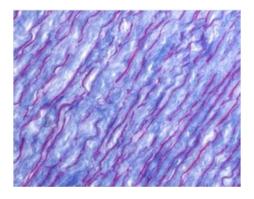
- A) TEM stands for transparent electron microscope.
- B) SEM type yields colored and three-dimensional images.
- C) Specimens are coated with metal atoms for both types
- D) The resolution is 0.003 micrometer in TEM.
- E) All are correct.

28- The black arrow points to:



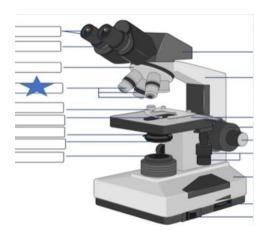
- A) Nucleus of an endothelial cell.
- B) Nucleus of a mesothelial cell.
- C) Nucleus of a fibroblast.
- D) Nucleus of a fibroblas.
- E) Nucleus of a fibrocyte.

29- Regarding the pink structure in this image, choose the correct statement of :



- A) Can also be stained with silver.
- B) Is present in the aorta.
- C) It usually forms bundles.
- D) Synthesized by fibroblasts.
- E) B&D

30- The structure marked with the blue star is/are:



- A) Ocular lenses.
- B) Condensers
- C) Objective lenses.

- D) Illuminators.
- E) None of the above.



1	2	3	4	5	6	7	8	9	10
Е	C	D	Е	С	C	С	D	С	D
11	12	13	14	15	16	17	18	19	20
В	E	A	Е	С	С	D	Е	D	Е
21	22	23	24	25	26	27	28	29	30
Е	D	Е	D	С	В	D	A	Е	С

