

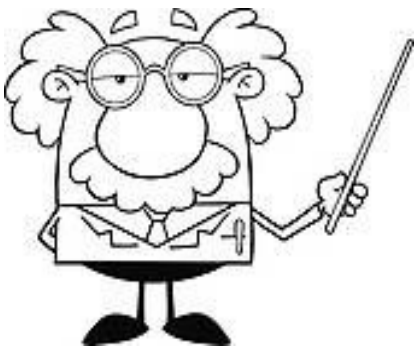
Practical Histology

Reproduction block

وَمَنْ يَتَوَكَّلْ عَلَى اللَّهِ فَهُوَ حَسْبُهُ

Things you need to know before the exam :

- The pictures in the exam will be the same as the ones included in the slides.
- Don't try to take short cuts during the exam so avoid using abbreviations so you don't lose marks.
- Please keep in mind that this work is done by students , so if there are any mistakes please inform us.
- This work is not by any means a reference.
- Please study hard and don't worry the exam will be easy!!



Overview:

- Females Reproductive system:

1. Ovary and its contents including the follicle
2. Fallopian tube
3. Uterus
4. Placenta
5. Mammary gland

- Males Reproductive system:

1. Testis
2. Seminiferous tubules
3. Epididymis
4. Vas Deferens
5. Prostate gland

Ovary

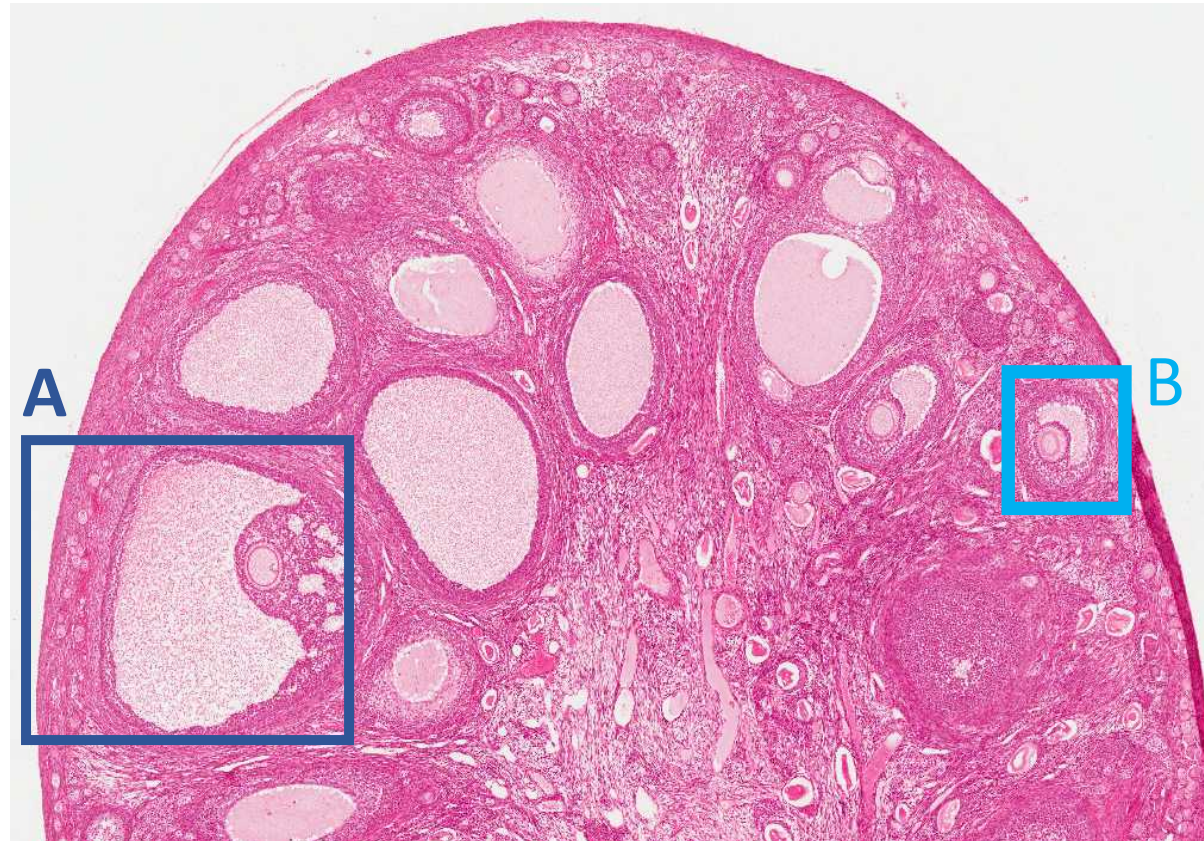
1- Identify the structure:

✓ ovary

2- Identify the structures marked by A and B:

A. Mature Graafian follicle

B. Secondary follicle



Cortex of the ovary

1- Identify the structures A&B :

✓ Cortex of the ovary

2- Mention the content of A&B:

A. Ovarian follicles

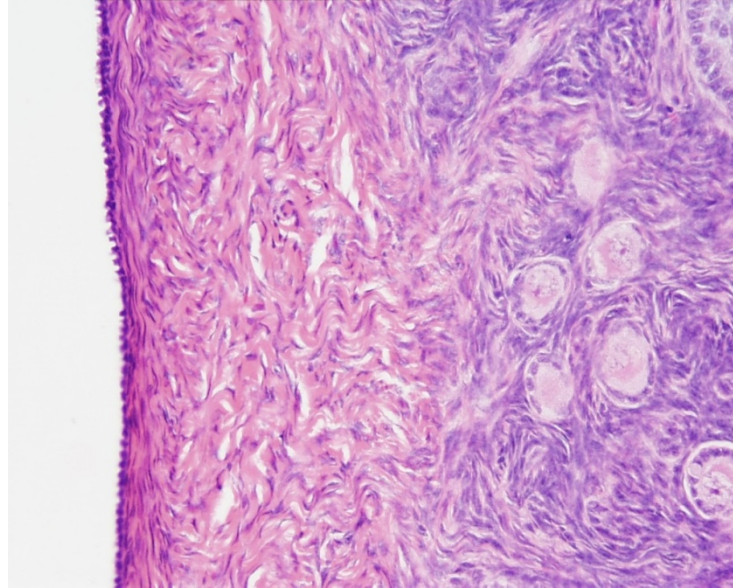
B. Interstitial cells

3-Identify the structure c:

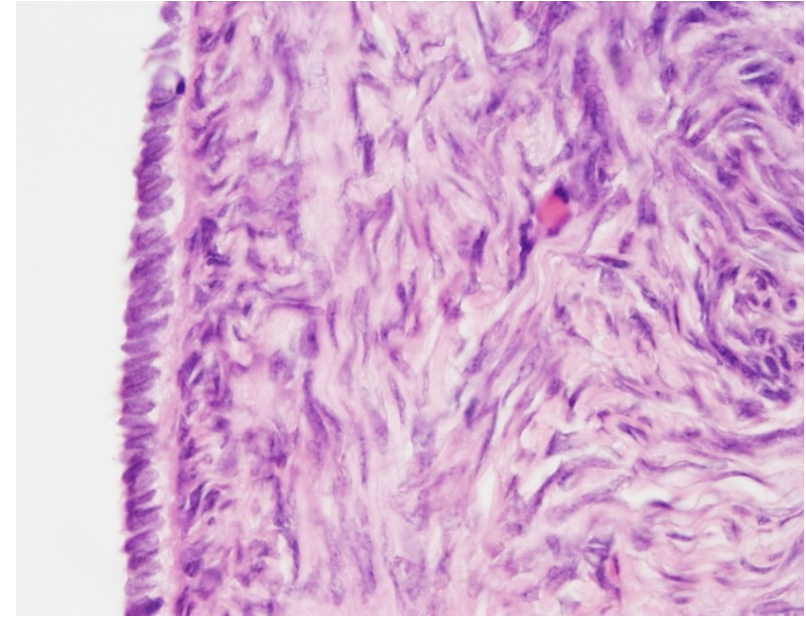
✓ Unilamellar primary follicle

4-Identify the structure D:

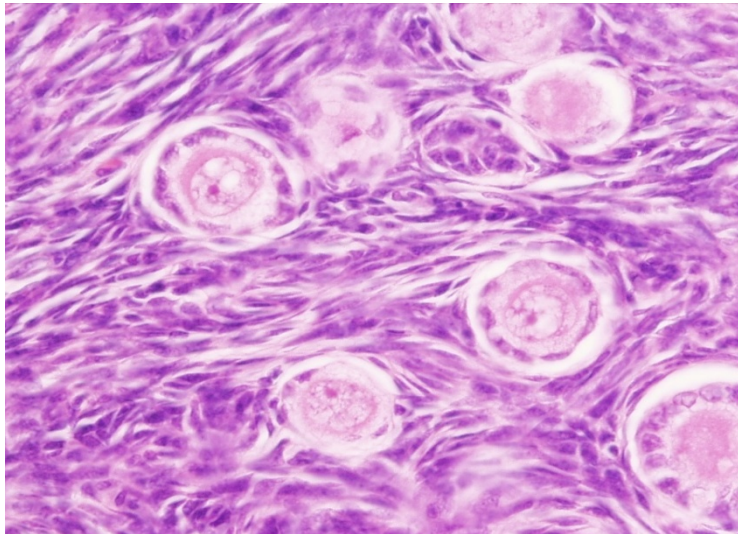
✓ Multilamellar primary follicle



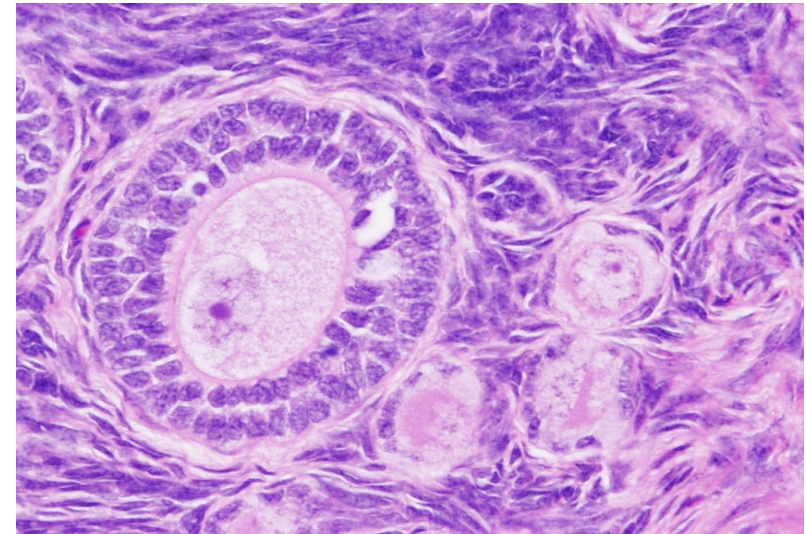
A



B



C



D

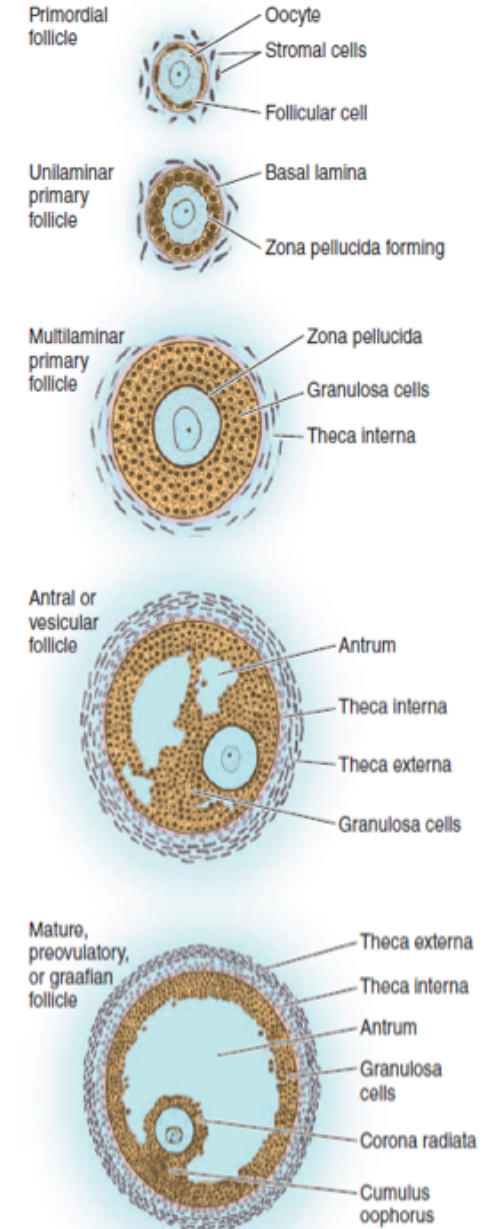
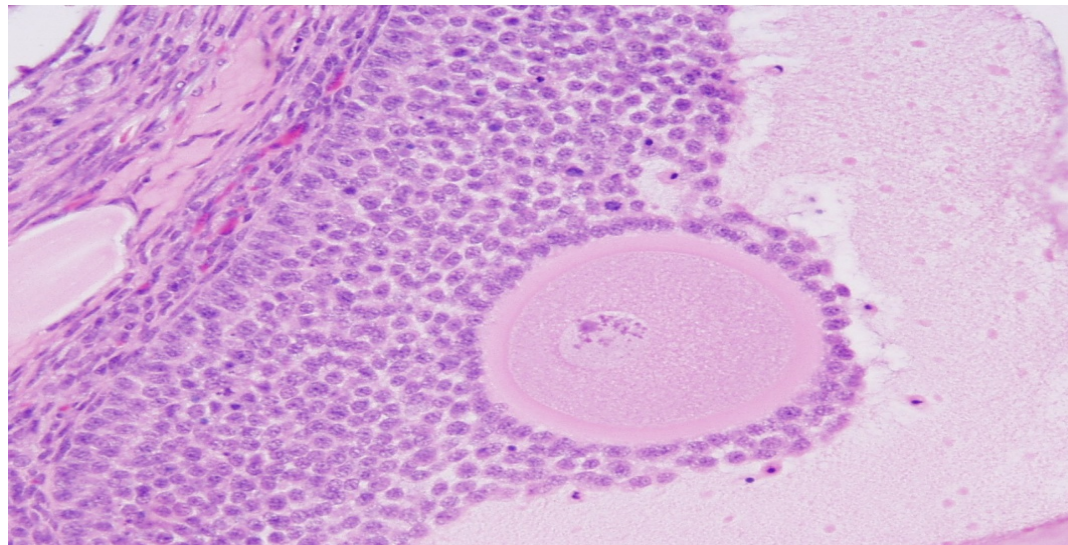
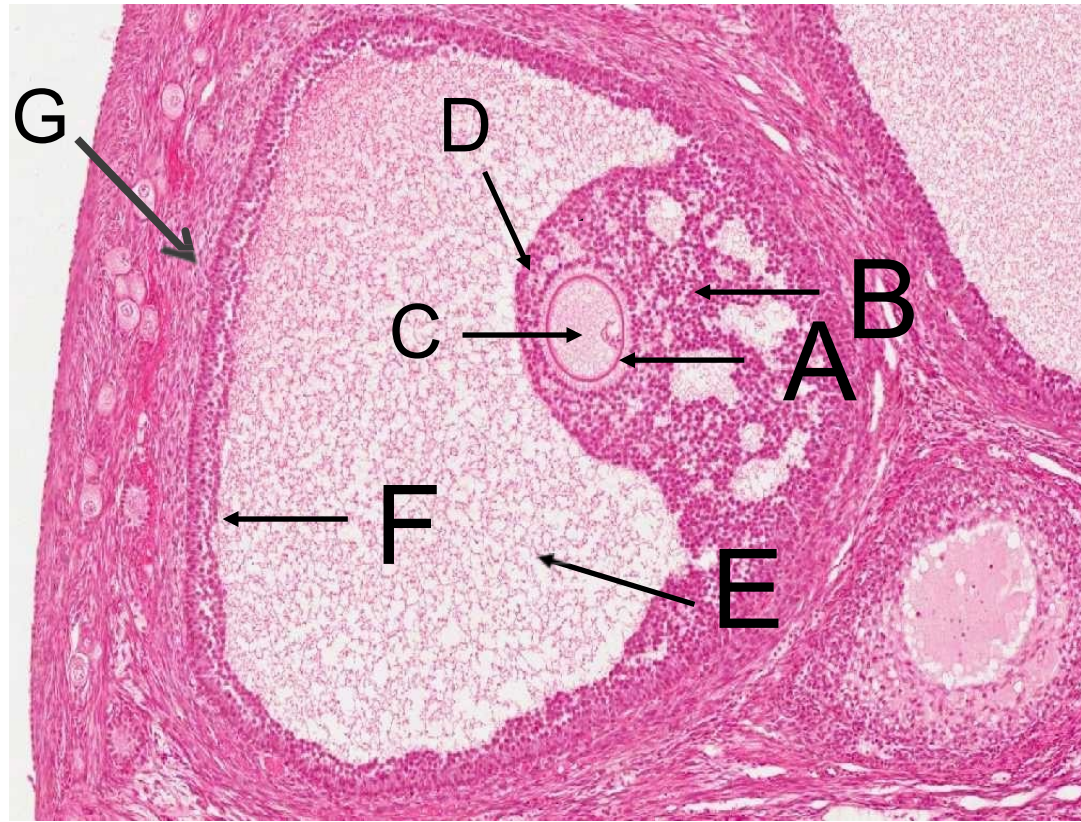
Graafian Follicle

Q1: Identify the structure

✓ Mature (Graafian) follicle.

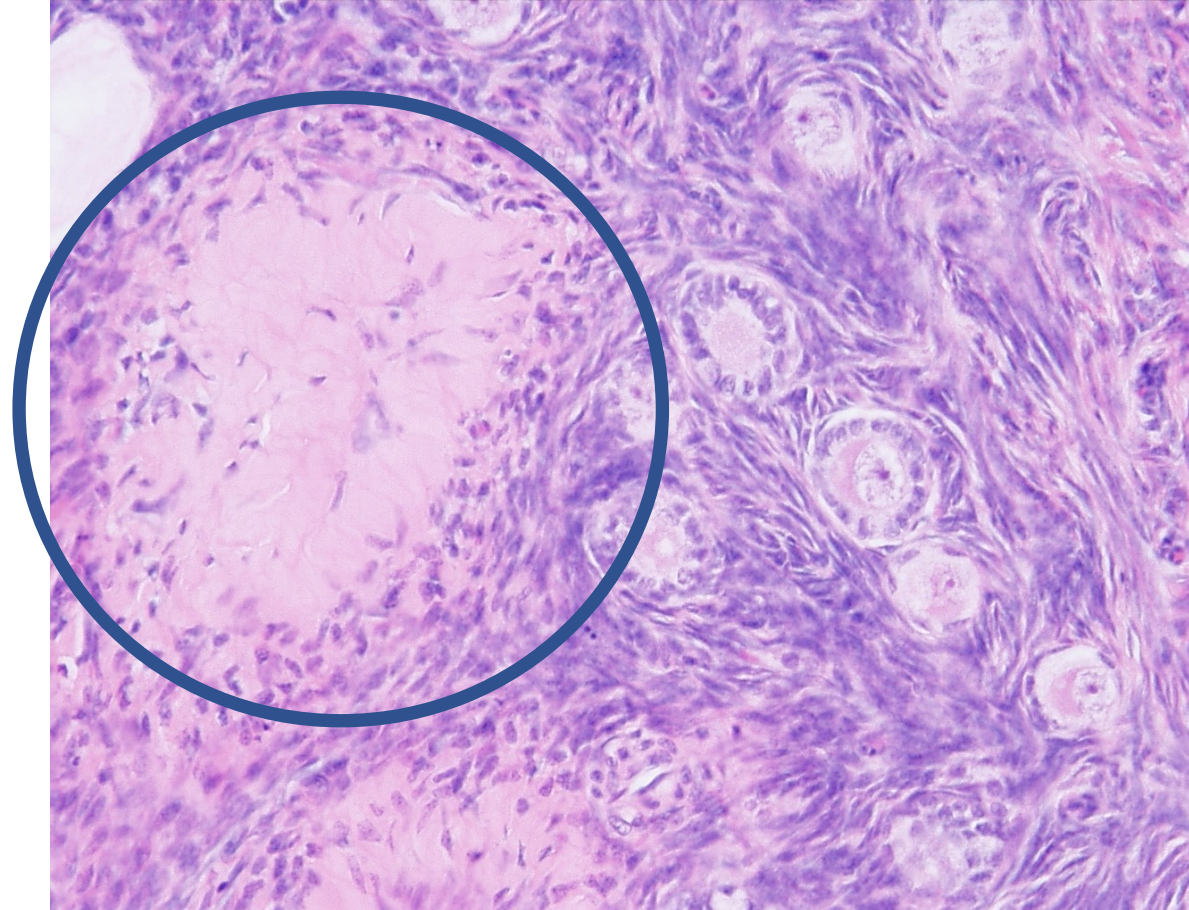
2-Identify the following structures (components)

- A: Zona pellucida
- B: Cumulus oophorus
- C: Primary Oocyte.
- D: Corona radiata.
- E: Follicular antrum.
- F: granulosa cells (Folliculi)
- G: Theca folliculi, internal & external



1- Identify the labelled structure

✓ Corpus albicans



Fallopian Tube

1- Identify the structure:

- ✓ Ampulla of fallopian tube.

2- Mention the layers:

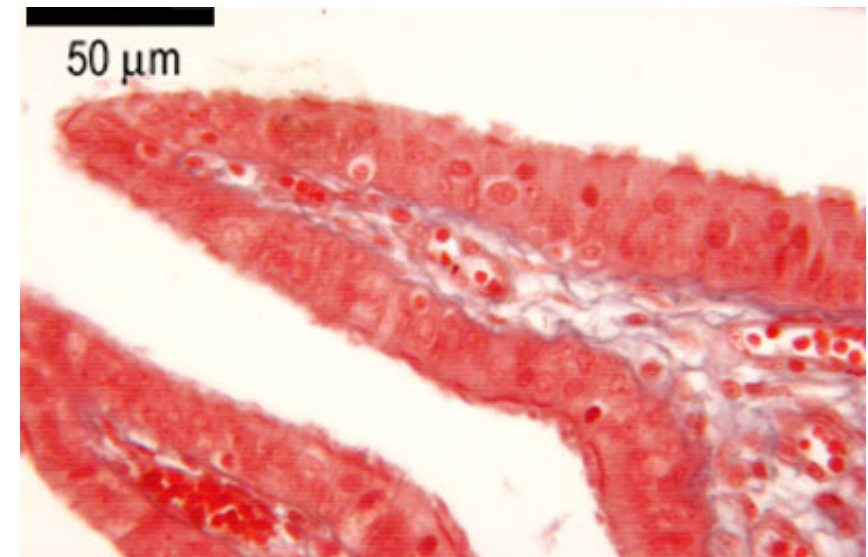
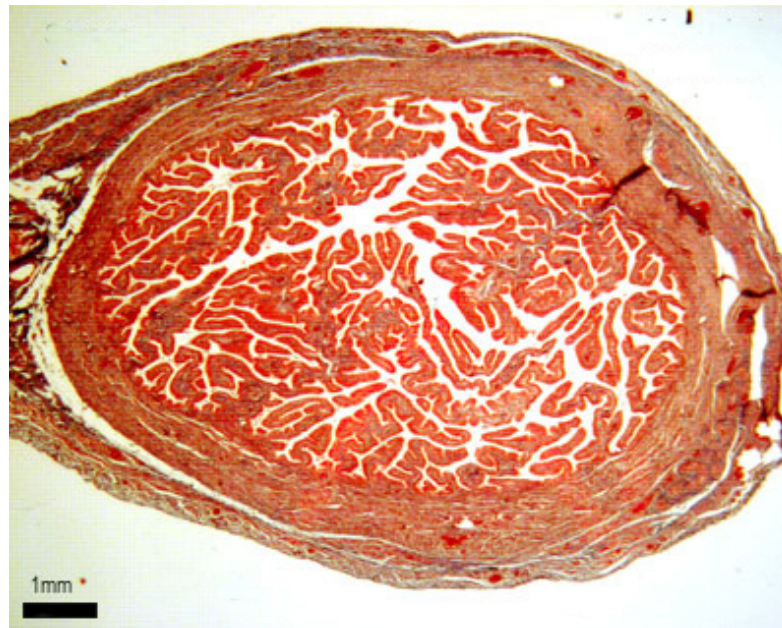
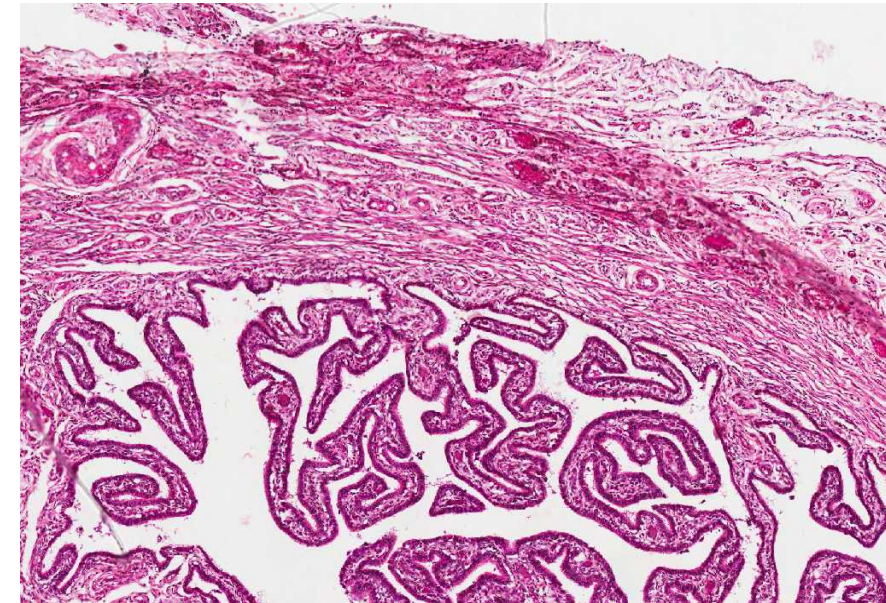
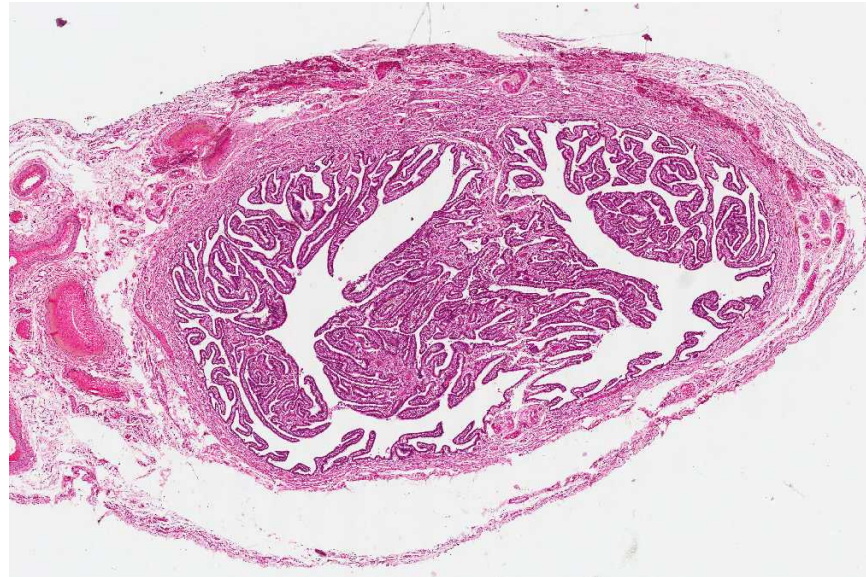
- ✓ Muscosa
- ✓ Muscularis.
- ✓ Serosa

3-Mention the type of lining epithelium:

- ✓ Simple columnar partially ciliated epithelium and partially secretory (Peg cells).

4- Mention the layers of musculosa in this structure :

- Inner circular.
- Outer longitudinal.



Uterus

Q1: Identify the structure:

Uterus.

Q2: Mention the lining epithelium:

- ✓ Simple columnar partially ciliated epithelium.

Q3: Mention the layers in this structure:

- ✓ Endometrium (mucosa).
- ✓ Myometrium (musculosa).
- ✓ Perimetrium (serosa).

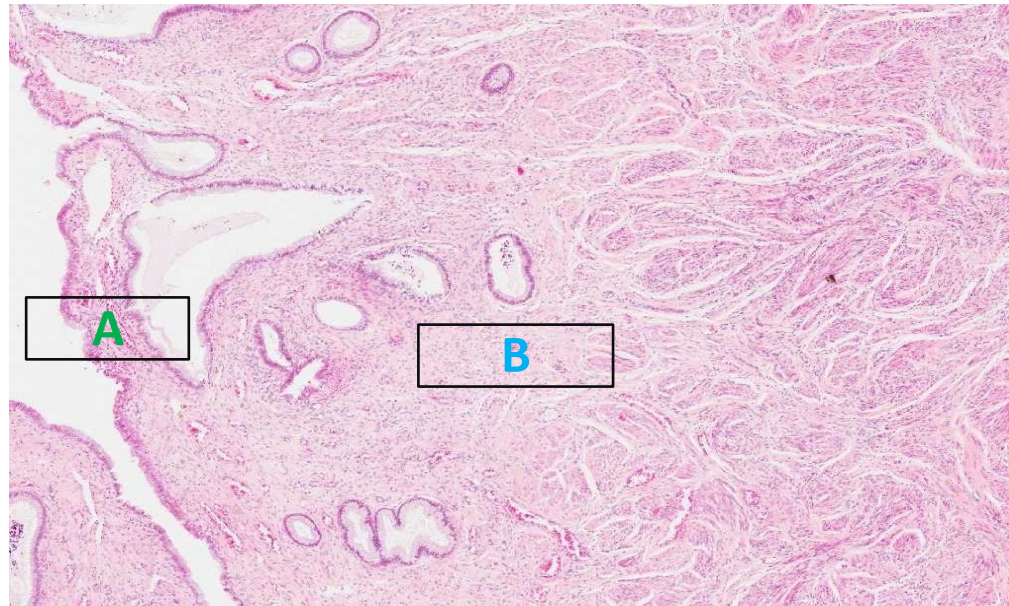
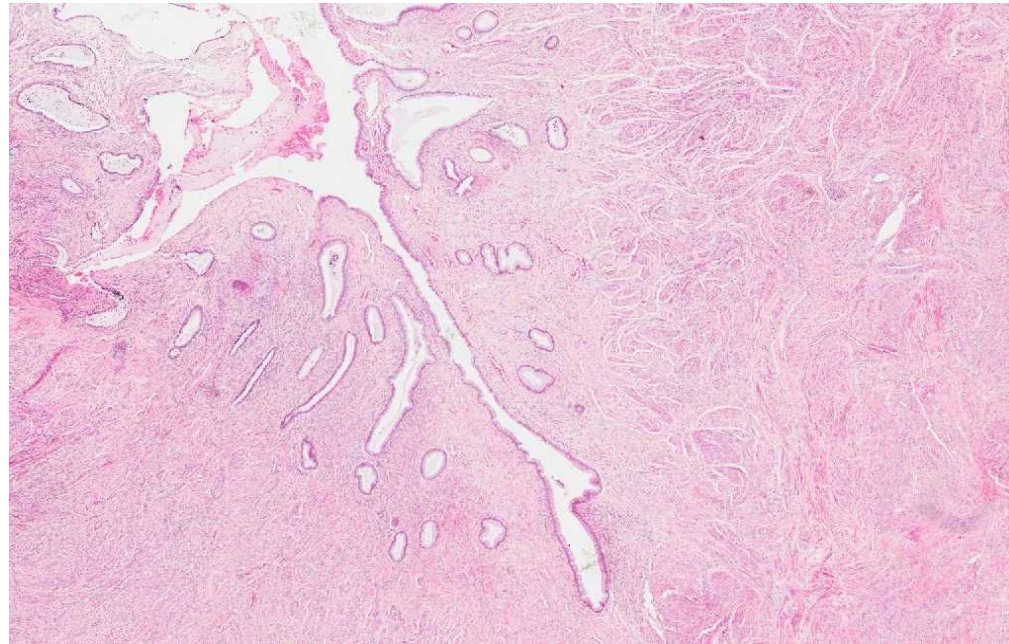
Q4: Mention the layers of Myometrium:

- ✓ Stratum submucosum (longitudinal).
- ✓ Stratum vasculare (Circular).
- ✓ Stratum supravasculare (longitudinal).

Q5: Identify labelled structures A,B:

A: Stratum functionalis of endometrium

B: Stratum Basalis of endometrium



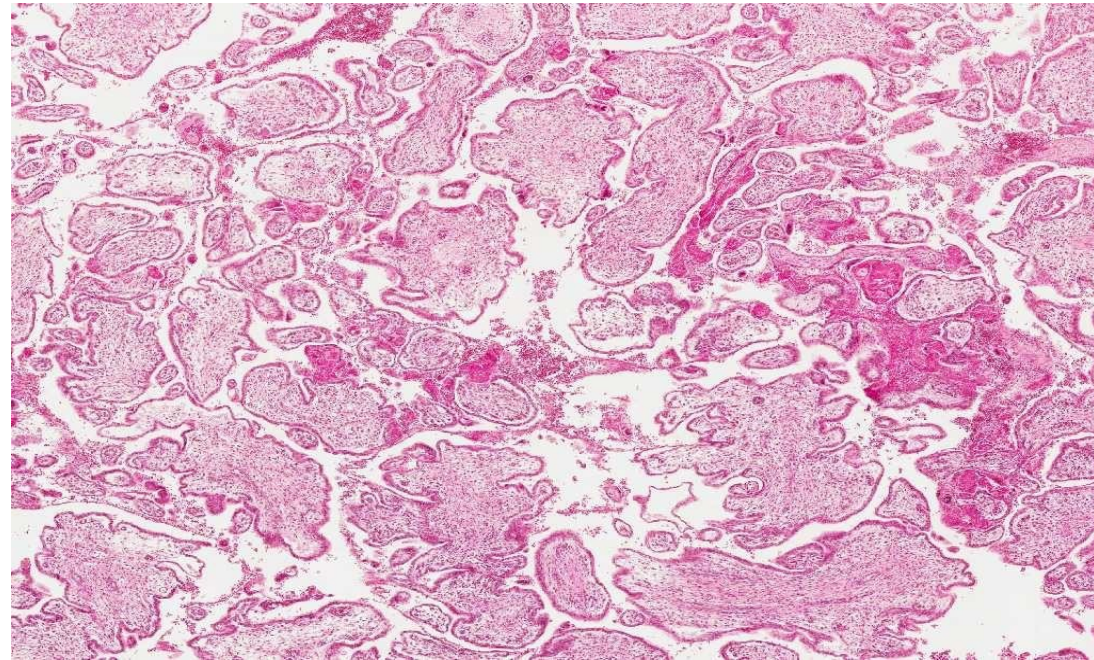
Placenta

Q1: Identify the structure

Placenta.

Q2: Mention layers of the placental barrier from outermost to innermost :

- ✓ Syncytiotrophoblast.
- ✓ Cytotrophoblast
- ✓ Basement membrane of trophoblast.
- ✓ Connective tissue of the villus.
- ✓ Basement membrane of fetal capillaries.
- ✓ The endothelium of fetal capillaries.

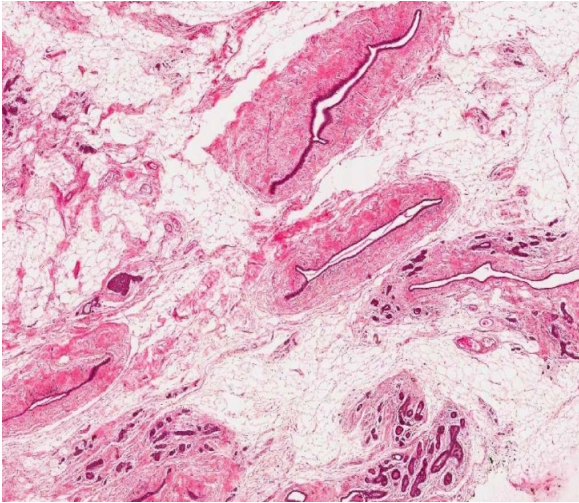


Q3: Identify the labeled structures A,B

A: chorionic villi.

B: Trophoblast.

Mammary Gland



Resting (Non-Lactating)

Q1: Identify the structure

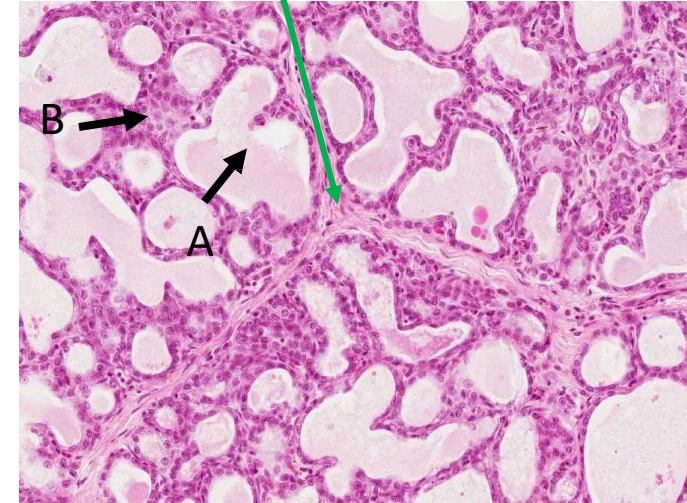
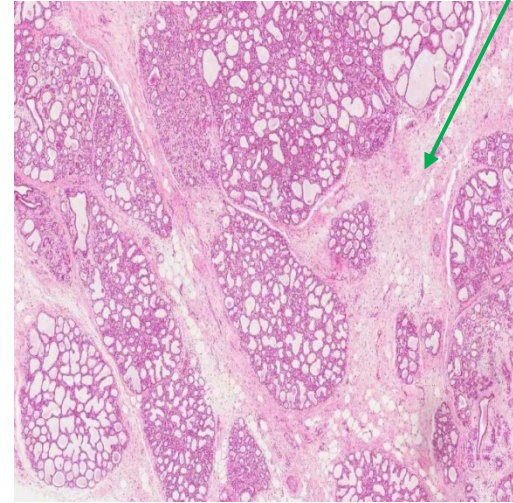
Resting (non-lactating) mammary gland.

Q2: Mention 2 structures seen in this picture

- Ducts. (A)
- Dense connective tissue with numerous fat cells (adipose C.T.).

Q3: What is the lining epithelium in this structure?

- Simple cuboidal,
- Stratified columnar in the areola
- Stratified squamous in the nipple.



Lactating:

Q1: Identify the structure

- Lactating mammary gland.

Q2: Mention 2 structures seen in the picture:

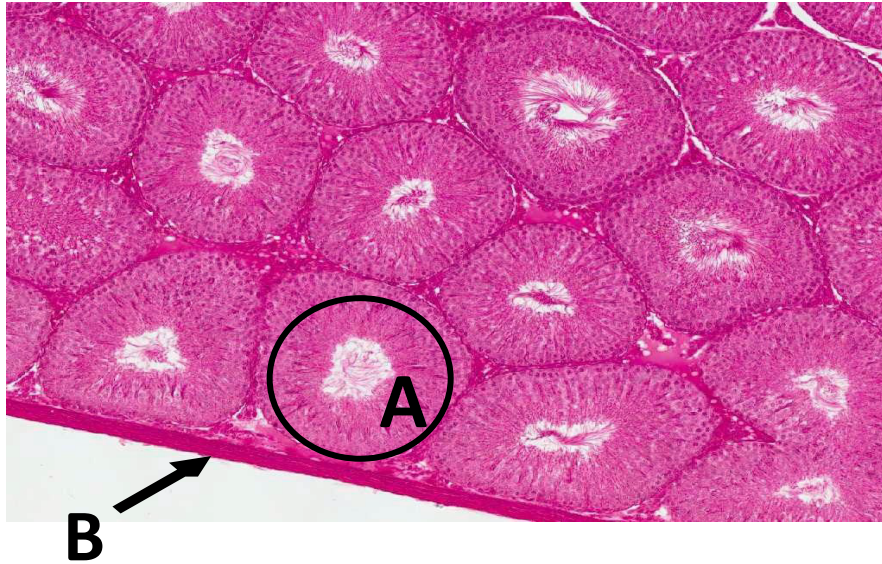
- Alveoli (A) (contains milk).
- Ducts (B)

Q3: What is the lining epithelium of the alveoli?

- Simple cuboidal epithelium
- myoepithelial cells.

Green arrow: Septa (C.T)

Testis



Q1: Identify the structure:

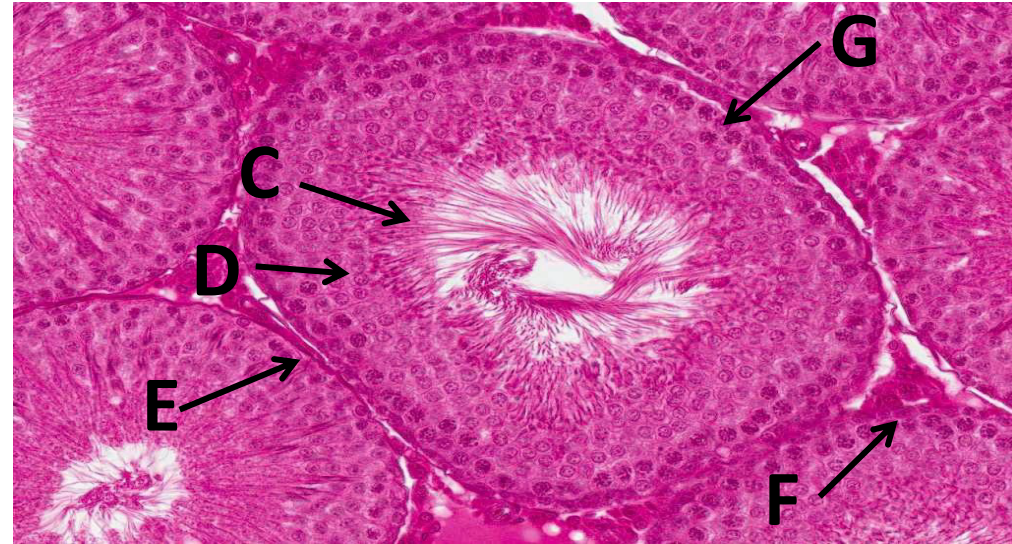
Testis.

Q2: Identify the labeled structure:

A: Seminiferous tubule.

B: Tunica Albuginea.

Seminiferous Tubules



Q1: Identify the structure

Seminiferous tubule: each tubule is lined with a stratified epithelium called seminiferous epithelium which is formed of 2 type of cells: 1- Sertoli cells 2-Spermatogenic cells

Q2: Identify the labeled structures:

- ✓ C: Spermatid and sperms.
- ✓ D: Primary Spermatocyte.
- ✓ E: Spermatogonia (larger and denser).
- ✓ F: Interstitial (Leydig) cell (secrete testosterone).
- ✓ G: Sertoli cells

Epididymis

Q1- Identify the structure

Epididymis.

Q2- What is the lining epithelium?

Pseudo-stratified columnar epithelium with stereocilia, It is surrounded by bundles of smooth muscle fibers

Q3- What is the function of this structure?

It stores and helps in maturation of spermatozoa.



Lumen filled with sperms

Vas Deferens

Q1: Identify the structure

Vas deferens.

Q2: Identify the layers of the wall of it.

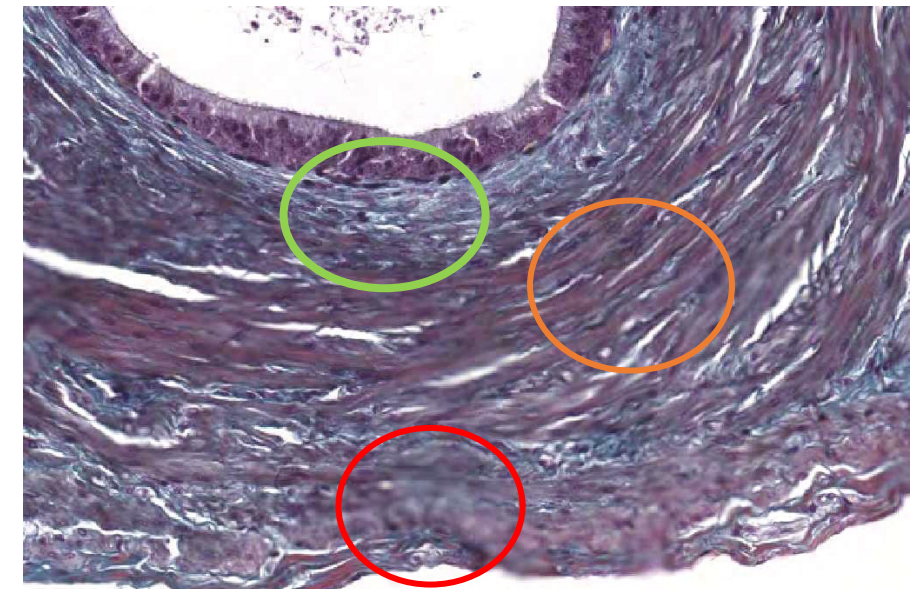
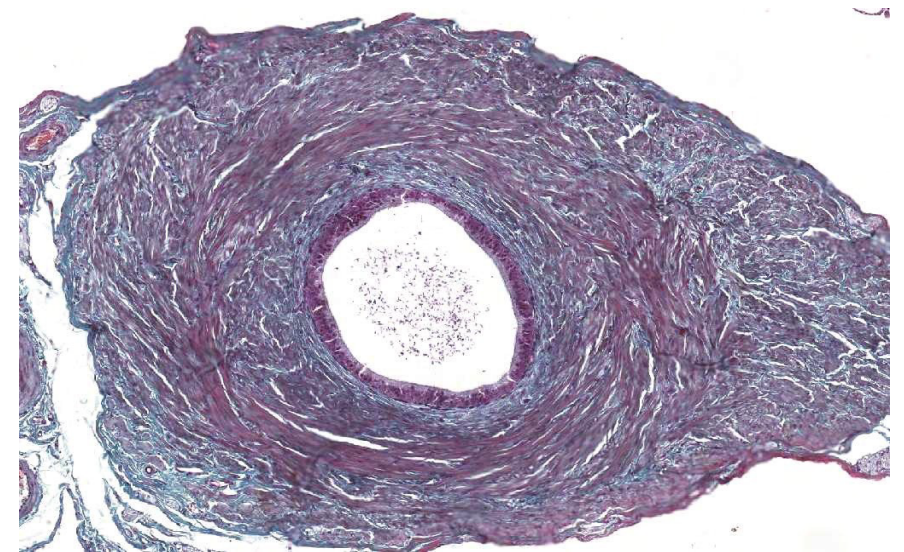
- ✓ Mucosa
- ✓ Muscularis.
- ✓ Adventitia.

Q3: What is the lining epithelium?

Pseudo-stratified columnar epithelium with stereocilia.

Q4: Mention the layers that can be seen in this structure.

- ✓ **Mucosa.**
- ✓ **Musculosa** (has 3 layers: Inner longitudinal, middle circular & outer longitudinal).
- ✓ **Adventitia.**



Prostate Gland

Q1: Identify the structure

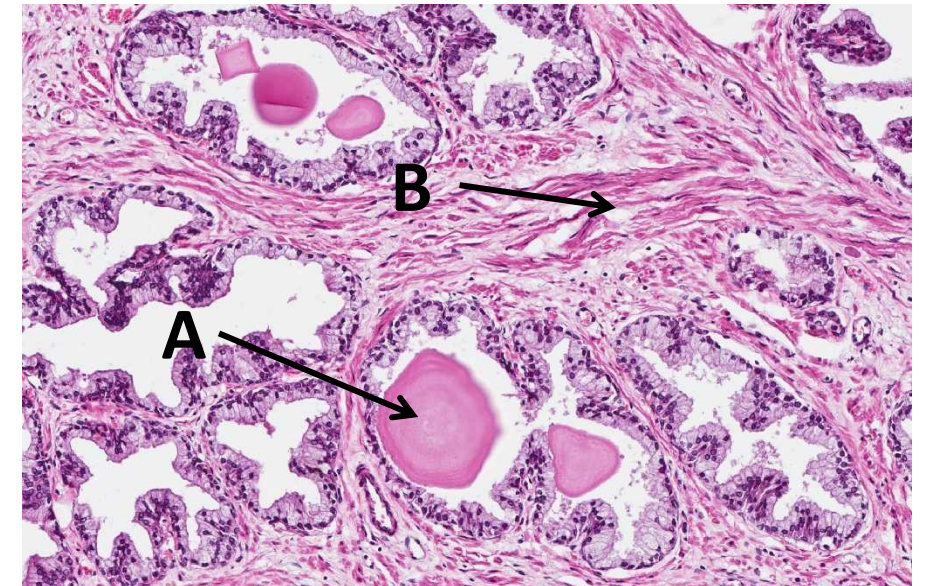
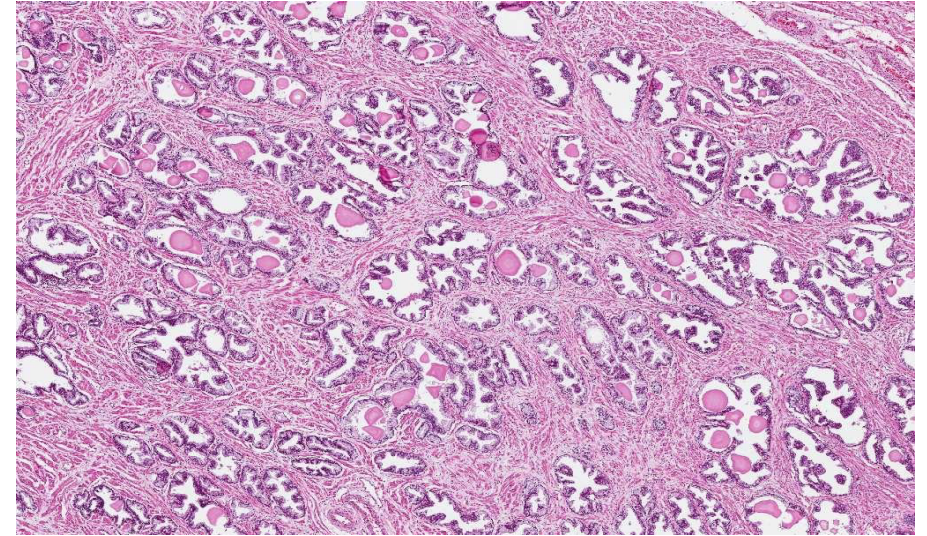
Prostate gland.

Q2: What is the lining epithelium?

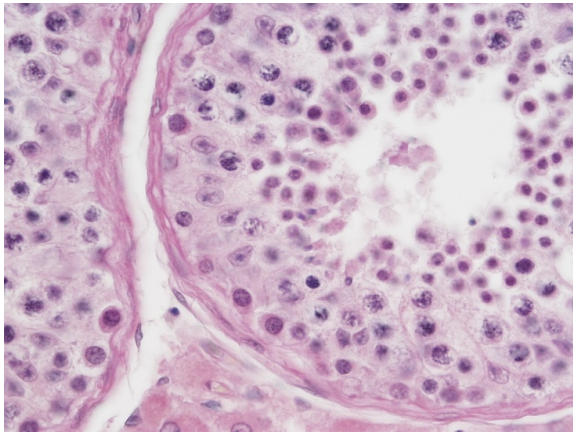
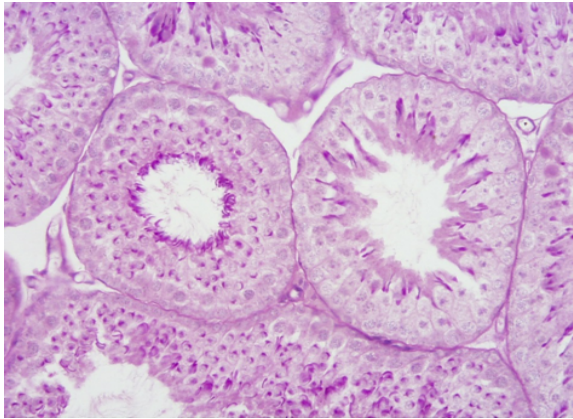
Simple columnar or pseudostratified columnar epithelium.

Q3: Identify the labeled structures

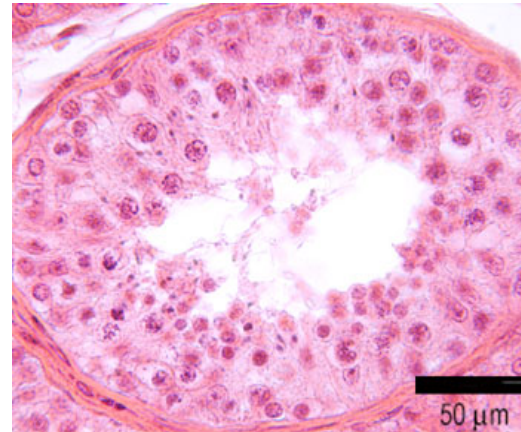
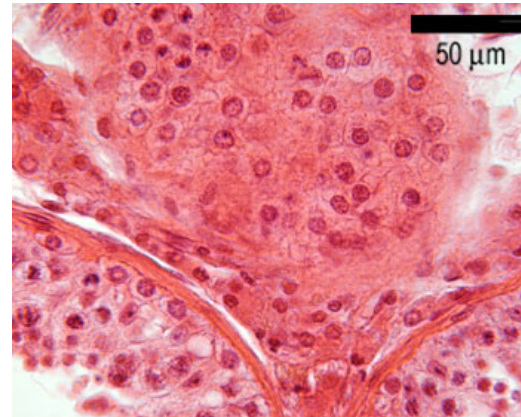
- ✓ A: Corpora amylacea.
- ✓ B: Fibromuscular band.



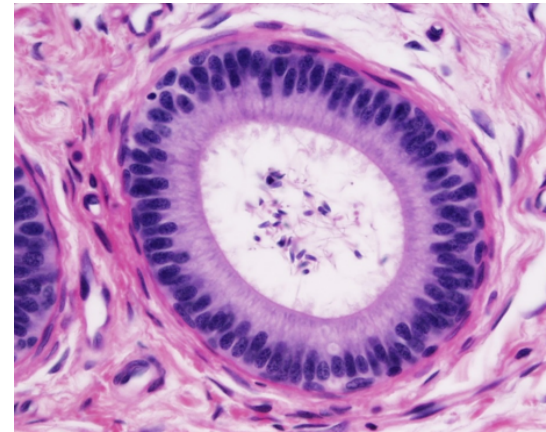
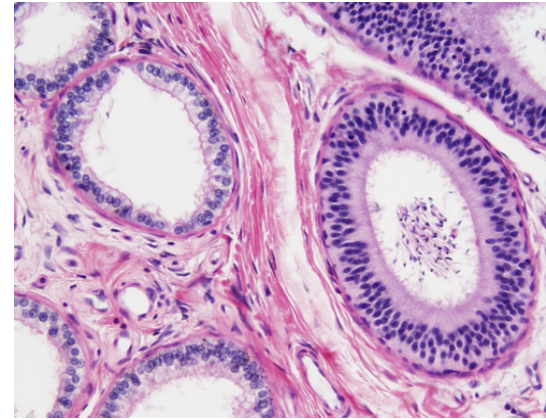
Testis & Seminiferous Tubules:



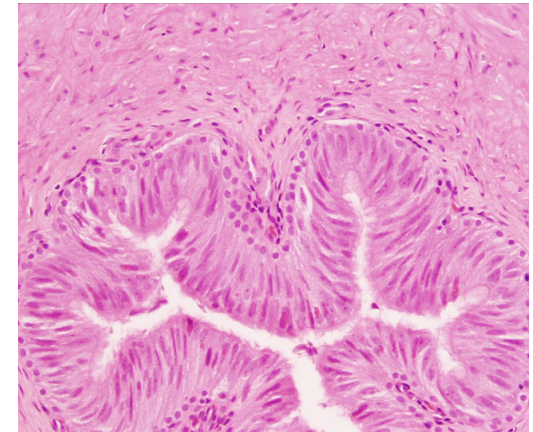
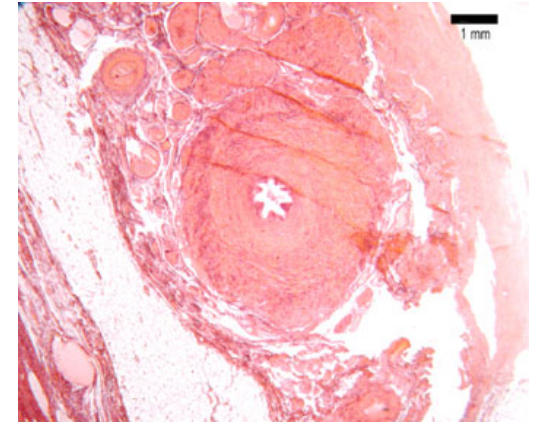
Leydig Cells:



Epididymis



Vas Deferens





Thank you & good luck

- Histology team

Team leaders:

- ✓ Rana Barasain
- ✓ Faisal Alrabaii

