

UGS-Histology

Archive

Lecture 1

The Urinary System

Corrected by:

1) Choose the CORRECT match from the followings?

- a. Macula densa ///// columnar cells lacking basement membrane found in wall of proximal convoluted tubules.
- b. Mesangial cells ///// line parietal layer of Bowman's capsule.
- c. Juxtaglomerular cells ///// modified smooth muscles in the wall of afferent arteriole.
- d. Podocytes ///// separate from the basement membrane by capsular space.
- e. Intercalated cells ///// cuboidal cells line the wall of the distal convoluted tubules.

Answer: c

2) All of the following is true about the glomerular capillaries, EXCEPT?

- a. Low pressure capillary bed.
- b. Drain into efferent arteriole.
- c. Highly permeable with wide fenestrae.
- d. Provide wide surface area for filtration.
- e. Engulfed with Bowman's capsule.

Answer: a

3) Choose the INCORRECT statement from the followings?

- a. The juxta-medullary nephrons have long loop of Henle
- b. Lacis cells are key component in the blood renal barrier
- c. The afferent arterioles have larger diameter and thicker media.
- d. The glomerular capillaries lined with fenestrated endothelium.
- e. The distal convoluted tubules lining epithelium has no brush border.

Answer: b

- 4) Which one of the following statements is CORRECT?
- a. Podocytes line the visceral layer of Bowman's capsule and their cell body is separated from basement membrane by capsular space.
 - b. Distal convoluted tubules are lined by high cuboidal cells with apical brush border.
 - c. Juxtaglomerular cells are modified smooth muscle cells present in media of afferent arteriole.
 - d. Lacis cells are rich in renin granules.
 - e. The muscularis of the lower third of ureter is formed of two layers inner circular and outer longitudinal layers of smooth muscle.

Answer: c

- 5) Which of these is incorrect?

Podocytes secrete EPO

- 6) False match :
- a. podocyte // visceral layer of Bowman's // secondary pedicles encircle slits.
 - b. DCT / 8-5 cuboidal layers // has no brush border.
 - c. lacis cells // blood barrier.

Answer: c