

Chapter – 16 | Introduction to Excretory System**QUIZ
PART-03**

1. Urine formation mainly involves:

- A. Digestion, absorption and assimilation
- B. Filtration, reabsorption and secretion
- C. Respiration, circulation and digestion
- D. Diffusion, photosynthesis and osmosis (B)

Explanation : Urine formation occurs through glomerular filtration, reabsorption and tubular secretion.

2. The first step of urine formation is:

- A. Secretion
- B. Reabsorption
- C. Glomerular filtration
- D. Micturition (C)

Explanation : Blood is first filtered in the glomerulus.

3. The average blood filtered by kidneys per minute is about:

- A. 100–200 ml
- B. 300–400 ml
- C. 1100–1200 ml
- D. 2000–3000 ml (C)

Explanation : Around 1100–1200 ml of blood is filtered by the kidneys per minute.

4. Filtration in the glomerulus occurs through how many layers?

- A. Two
- B. Three
- C. Four
- D. Five (B)

Explanation : Filtration occurs through glomerular endothelium, basement membrane and Bowman's capsule epithelium.

5. The epithelial cells of Bowman's capsule are called:

- A. Nephridia
- B. Podocytes
- C. Osteocytes
- D. Erythrocytes (B)

Explanation : Podocytes form filtration slits in Bowman's capsule.

6. Filtration slits are also called:

- A. Slit pores
- B. Renal columns
- C. Calyces
- D. Collecting pores (A)

Explanation : Podocytes leave minute spaces called filtration slits or slit pores.

7. The process in which almost all plasma constituents except proteins enter Bowman's capsule is called:

- A. Osmoregulation
- B. Ultrafiltration
- C. Micturition
- D. Dialysis (B)

Explanation : Ultrafiltration allows plasma constituents except proteins to pass into Bowman's capsule.

8. The normal GFR of a healthy individual is approximately:

- A. 25 ml/min
- B. 75 ml/min
- C. 125 ml/min
- D. 250 ml/min (C)

Explanation : Normal glomerular filtration rate is about 125 ml/min.

9. About how much filtrate is formed by kidneys per day?

- A. 1.5 litres
- B. 18 litres
- C. 90 litres
- D. 180 litres (D)

Explanation : Kidneys form about 180 litres of filtrate per day.

10. During tubular secretion, which substances are secreted into the filtrate?

- A. H^+ , K^+ and ammonia
- B. Glucose, proteins and fats
- C. Oxygen and carbon dioxide
- D. Calcium, starch and vitamins (A)

Explanation : Tubular cells secrete H^+ , K^+ and ammonia to maintain ionic and acid-base balance.