

## EXERCISES

# Excretory Products and Their Elimination

1. Define Glomerular Filtration Rate (GFR)
2. Explain the autoregulatory mechanism of GFR.
3. Indicate whether the following statements are true or false :
  - (a) Micturition is carried out by a reflex.
  - (b) ADH helps in water elimination, making the urine hypotonic.
  - (c) Protein-free fluid is filtered from blood plasma into the Bowman's capsule.
  - (d) Henle's loop plays an important role in concentrating the urine.
  - (e) Glucose is actively reabsorbed in the proximal convoluted tubule.
4. Give a brief account of the counter current mechanism.
5. Describe the role of liver, lungs and skin in excretion.
6. Explain micturition.
7. Match the items of column I with those of column II :

**Column I**

- (a) Ammonotelism
- (b) Bowman's capsule
- (c) Micturition
- (d) Uricotelism
- (d) ADH

**Column II**

- (i) Birds
- (ii) Water reabsorption
- (iii) Bony fish
- (iv) Urinary bladder
- (v) Renal tubule

8. What is meant by the term osmoregulation?
9. Terrestrial animals are generally either ureotelic or uricotelic, not ammonotelic. why ?
10. What is the significance of juxta glomerular apparatus (JGA) in kidney function?
11. Name the following:
  - (a) A chordate animal having flame cells as excretory structures
  - (b) Cortical portions projecting between the medullary pyramids in the human kidney
  - (c) A loop of capillary running parallel to the Henle's loop.
12. Fill in the gaps :
  - (a) Ascending limb of Henle's loop is \_\_\_\_\_ to water whereas the descending limb is \_\_\_\_\_ to it.
  - (b) Reabsorption of water from distal parts of the tubules is facilitated by hormone \_\_\_\_\_.
  - (c) Dialysis fluid contain all the constituents as in plasma except \_\_\_\_\_.
  - (d) A healthy adult human excretes (on an average) \_\_\_\_\_ gm of urea/day.