

Class : XI<sup>th</sup>  
Date :

Subject : BIOLOGY  
DPP No. : 8

## Topic :- Excretory Products & Their Elimination

- Specific gravity of urine normally is  
a) 1.010-1.015                      b) 1.015-1.020                      c) 1.020-1.025                      d) Both (a) and (b)
- During hemodialysis process  
I. blood drained from a convenient artery and anticoagulant is added (heparin)  
II. removal of nitrogenous waste from blood  
III. blood is passed through a coiled porous cellophane membrane of tube bathing in dialysis fluid  
IV. blood is mixed with antiheparin and passed into vein  
Arrange the steps  
a) I→II→III→IV                      b) IV→III→II→I                      c) I→III→II→IV                      d) I→IV→II→III
- The renal fluid isotonic to the cortical fluid and blood is found in  
a) The collecting duct and ascending limb  
b) The distal convoluted tubule and ascending limb  
c) The proximal convoluted tubule and distal convoluted tubule  
d) The ascending limb and descending limb
- Which one of the following statements is false?  
a) Presence of albumin in urine is albuminuria  
b) Presence of glucose in urine is glycosuria  
c) Presence of ketone sugar in urine is Ketonuria  
d) Presence of excess urea in blood is uremia
- I. Reabsorption of water occurs passively in the initial segment of nephron  
II. Nitrogenous waste are absorbed by active transport  
III. Conditional reabsorption of  $\text{Na}^+$  and water takes place in DCT  
IV. DCT reabsorbs glucose  
V. DCT is capable of selective secretion of  $\text{H}^+$ ,  $\text{K}^+$  and  $\text{NH}_3$  to maintain pH and  $\text{Na}^+ - \text{K}^+$  balance in blood  
VI. Substances like glucose, amino acids,  $\text{Na}^+$ , etc, in the filtrate are reabsorbed actively  
Choose the option with incorrect statements  
a) I and II                      b) III and IV                      c) V and VI                      d) II and IV

6. Each nephron has two parts, which are  
 a) Bowman's capsule and P C T  
 b) Glomerulus and renal tubule  
 c) Glomerulus and Bowman's capsule  
 d) Bowman's capsule and renal tubule
7. Identify the correct statements  
 I. The outer layer of the kidney is called capsule  
 II. Cortex is divided into outer cortex and inner medulla  
 III. Medulla is divided into medullary pyramids  
 IV. The cortex extends in between the medullary pyramids which is called as columns of Bertini  
 Choose the correct option accordingly  
 a) I, III and IV      b) I and IV      c) I, II and III      d) I, II, III and IV
8. Out of the four parts given below, which parts play significant role in forming concentrated urine in human?  
 I. Loop of Henle  
 II. Glomerulus  
 III. Bowman's capsule  
 IV. Vasa recta  
 The correct option is  
 a) I and II      b) III and IV      c) II and III      d) I and IV
9. Aldosterone causes conditional reabsorption of ..... in the distal part of tubule  
 a)  $\text{CO}_2$       b)  $\text{Ca}^{2+}$       c)  $\text{Na}^+$       d)  $\text{Cl}^-$
10. Alkaptonuria is a condition in which  
 a) Accumulation of homogentestic acid in blood  
 b) Excretion of homogentestic acid in sweat  
 c) Excretion of homogentestic acid in urine  
 d) All of the above
11. Sweat produced by sweat glands is a watery fluid which contain  
 a) NaCl      b) Urea      c) Lactic acid      d) All of the above
12. GFR (Glomerular Filtration Rate) is the amount of filtrate formed by the kidney per  
 a) Hour      b) Second      c) Minute      d) 10 seconds
13. Ammonia produced by metabolism is converted into the ...A... in the ...B... in ureotelic and released into the blood, which is filtered and excreted out by ...C...  
 Choose the appropriate options for A, B and C to complete the given NCERT statement  
 a) A-uric acid, B-spleen, C-kidney      b) A-uric acid, B-liver, C-kidney  
 c) A-urea, B-liver, C-kidney      d) A-urea, B-spleen, C-kidney
14. How much percentage of the filtrate is reabsorbed in the renal tubules?  
 a) 5%      b) 25%      c) 90%      d) 99%

15. Which one of the following statements is correct with respect to salt water balance inside the body of living organisms?
- When water is not available camels do not produce urine but store urea in tissues
  - Salmon fish excretes lot of stored salt through gill membrane when in fresh water
  - Paramecium* discharges concentrated salt solution by contractile vacuoles
  - The body fluids of freshwater animals are generally hypotonic to surrounding water
16. Find the correct option regarding mechanism of urine formation in man.
- The glomerular filtration rate is about 125 mL/min
  - The ultra filtration is opposed by the colloidal osmotic pressure of plasma
  - Tubular secretion takes place in the PCT
  - Aldosterone induces greater reabsorption of sodium
17. pH of urine (average pH) is
- 7.0
  - 6.5
  - 7.5
  - 6.0
18. If one liter of water is introduced in human blood, then
- BMR increases
  - RBC collapses and urine production increases
  - RBC collapses and urine production decreases
  - BMR decreases
19. Large amount of water is ...A... from collecting duct to produce ...B... urine. This segment allows passage of small amounts of ...C... into interstitium of medulla to keep up the osmolarity. Here, A, B and C refers to
- A-secreted, B-dilute, C-sugar
  - A-secreted, B-dilute, C-NH<sub>3</sub>
  - A-secreted, B-dilute, C-urea
  - A-reabsorbed, B-concentrated, C-urea
20. I. Glucose  
 II. Amino acid  
 III. Na<sup>+</sup>  
 IV. Nitrogenous waste  
 Which of them reabsorbed actively in the nephron?  
 Choose the correct option
- I and II
  - I, II and III
  - I and III
  - Only I