

Class : XIth
Date :

Subject : BIOLOGY
DPP No. : 6

Topic :- Excretory Products & Their Elimination

- Choose the correct order of urine formation in human
 - PCT → ALH → DLH → DCT → CD
 - ACH → DLH → PCT → DCT → CD
 - PCT → DLH → ALH → DCT → CD
 - CD → DCT → ACH → DLH → PCT
- Consider the following statements
 - Flame cells are excretory structures in flatworms.
 - Green glands are excretory organs in annelids.
 - Columns of Bertini are the conical projections of renal pelvis into renal medulla between the renal pyramids.
 - I and II correct
 - II and III incorrect
 - I and III correct
 - I, II and III correct
- Arrange the following parts of the nephron in a sequential manner and select the correct option accordingly
 - Glomerulus
 - Bowman's capsule
 - Henle's loop
 - Proximal convoluted tubule
 - Collecting duct
 - Distal convoluted tubule
 - I→II→III→IV→V→VI
 - I→II→IV→III→VI→V
 - I→II→IV→III→V→VI
 - VI→III→II→I→VI→V
- The outline of principal event of urination is given below in unorder manner
 - Stretch receptors on the wall of urinary bladder send signal to the CNS
 - The bladder fills with urine and becomes distended
 - Micturition
 - CNS passes on motor messenger to initiate the contraction smooth muscles of bladder and simultaneous relaxation of urethral sphincterThe correct order of steps for urination is
 - II→I→IV→III
 - IV→III→II→I
 - II→I→III→IV
 - III→II→I→IV
- Malpighian tubules are the excretory structures of
 - Insects
 - Mammals
 - Birds
 - Reptiles
- The first step in the urine formation is the filtration of the blood, which is carried by the ...A... and is called

...B... . On an average ...C... . mL of blood is filtered by kidneys per minute, which constitutes ...D... of the blood pumped out by each ventricle of the heart in a minute.

Choose the correct options for the blanks A to D to complete the given NCERT statement

- a) A-glomerulus; B-filtration, C-800-900, D - $\frac{1}{4}$ th
- b) A-glomerulus; B-filtration, C-1100-1200, D - $\frac{1}{5}$ th
- c) A-glomerulus; B-filtration, C-1100-1300, D - $\frac{1}{6}$ th
- d) A-glomerulus; B-filtration, C-1100-1500, D - $\frac{1}{5}$ th

7. Choose the correct ones

- I. Vasa recta is lacking in cortical nephrons
- II. Maximum number of nephrons in kidney are juxta-medullary type
- III. DCT of many nephorns open into collecting tubule
- IV. During summer when body loses lot of water by evaporation, the release of ADH is suppressed
- V. When someone drinks lot of water, ADH release is suppressed
- VI. Exposure to cold temperature stimulates ADH release
- VII. An increase in glomerular blood flow stimulates formation of angiotensin II

The correct option is

- a) All except I and IV
 - b) All except V and VII
 - c) All except I and V
 - d) All except II and VI
8. All Bowman's capsules of the kidney are found in
- a) Pelvis
 - b) Medulla
 - c) Cortex
 - d) None of these
9. Human kidneys can produce urine nearly
- a) Three times concentrated than initial filtrate
 - b) Four times concentrated than initial filtrate
 - c) Five times concentrated than initial filtrate
 - d) Six times concentrated than initial filtrate
10. ANF (Anti Natriuretic Factor) is released by
- a) Lung
 - b) Kidney
 - c) Heart
 - d) All of the above
11. Mammals excrete
- a) Urea
 - b) Uric acid
 - c) Ammonia
 - d) All of these
12. Medullary gradient is mainly developed due to
- a) NaCl and urea
 - b) NaCl and glucose
 - c) Glucose and urea
 - d) Ammonia and glucose
13. An adult human excretes on an average
- a) 2-3 litres of urine per day
 - b) 1-1.5 litres of urine per day
 - c) 2-5 litres of urine per day
 - d) 4-5 litres of urine per day

14. Angiotensin-II activates theA.... and releaseB.....

Choose the correct option for A and B to complete the given statement

- a) A-adrenal cortex; B-aldosterone b) A-adrenal medulla; B-aldosterone
c) A-adrenal capsule; B-aldosterone d) A-adrenal medulla; B-oxytocin

15. I. Ureter II. Renal pelvis, III. Calyx IV. Urinary bladder V. Urethra

Choose the correct sequence of urine route to outside

- a) I→II→III→IV→V b) V→IV→III→II→I c) V→III→IV→I→II d) III→II→I→IV→V

16. Loop of Henle is associated with

- a) Excretory system b) Respiratory system c) Reproductive system d) Digestive system

17. For brain cells the ammonia is very toxic because

- a) Ammonia (NH_4^+ ions) affect the brain cell functioning by changing polarity of cell membrane
b) Ammonia is not very toxic to the other cell than brain cells
c) Ammonia is highly stable in brain cells
d) Ammonia penetrate the cell membrane of brain cells

18. NaCl is transported by ascending limb of Henle's loop, which is exchanged with

- a) DCT b) PCT
c) Ascending limb of vasa recta d) Descending limb of vasa recta

19. Which one is related to urine concentration in mammals?

- a) Testosterone hormone b) Antidiuretic hormone
c) Oxytocin hormone d) All of these

20. Characteristic common in frog and human

- I. Internal fertilisation
II. Nucleated RBC
III. Four chamber heart
IV. Ureotalic excretion
V. Lungs are organ of respiration

The correct option is

- a) I and III b) II and IV c) II and IV d) Only IV