



BIOLOGY

BOOKS - A2Z BIOLOGY (HINGLISH)

EXCRETORY PRODUCTS AND THEIR ELIMINATION

**Section A Topicwise Questions Topic 1 Human
Excretory System**

1. The following substances are the excretory products in animals. Choose the least toxic from among them

A. Urea

B. Uric acid

C. Ammonia

D. Carbon dioxide

Answer: B



Watch Video Solution

2. Find out the name of 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

A. a Planaria, (b)-duct of Bellini, (c)

Peritubular capillary

B. (a) Amphioxus, (b) collecting duct, (c) vasa recta

C. (a)-Lancelet, (b) columns of Bertini, (c) vasa recta

D. (a) Amphioxus, (b) columns of Bertini, (c) peritubular capillary

Answer: C



Watch Video Solution

3. Different types of excretory structure and animals are given below . Match them appropriately and mark the correct answer from among those given below .

Excretory structure/organ	Animals
A. Protonephridia	i. Prawn
B. Nephridia	ii. Cockroach
C. Malpighian tubules	iii. Earthworm
D. Green gland or Antennal gland	iv. Flatworms

A. (d)-(i), (c)-ii (b)-iii , (a)-iv

B. (b)-(i) , (c) - (ii) , (a) - (iii) ,(b) - (iv)

C. (d) - (i) , (c) - (ii) , (a) - (iii) , (b) - (iv)

D. (b)-(i) , (c)- (ii) , (b) - (iii) , (d) - (iv)

Answer: A



Watch Video Solution

4. Which one of the following statements is incorrect?

A. Birds and land snails are uricotelic animals

B. Mammals and frogs are ureotelic animals.

C. Aquatic amphibians and aquatic insects
are ammonotelic animals.

D. Birds and reptiles are ureotelic.

Answer: D



Watch Video Solution

5. Terrestrial amphibians and marine fishes are

A. Ammonotelic

B. Ureotelic

C. Uricotelic

D. Both A and B

Answer: B



Watch Video Solution

6. Major form(s) of nitrogenous wastes excreted by the animals is/ are

A. NH_3

B. Urea

C. Uric acid

D. All of the above

Answer: D



Watch Video Solution

7. Read the following statements and find out the incorrect statements.

(a) Kidney plays very significant role in the removal of NH_3

(b) Terrestrial adaptation necessitated the

production of more toxic nitrogenous wastes like urea and uric acid for conservation of water .

(c) Some amount of urea may be retained in the kidney matrix of some of the ureotelic animals to maintain a desired osmolarity.

(d) Uricotelic animals excrete nitrogenous wastes as uric acid in the form of pellet or paste with a minimum loss of water .

A. a and b

B. b and c

C. c and d

D. a and d

Answer: A



Watch Video Solution

8. Protonephridia or flame cells or solenocytes are the excretory structures in

A. platyhelminthes/flatworms

B. rotifers and some annelids

C. cephalochordate(branchiostoma)

D. all of the above

Answer: D



Watch Video Solution

9. In humans ,excretory system consists of

- a. Kidney
- b. Urinary bladder
- c. Ureters
- d. Urethra

A. a and b

B. a,b and c

C. a,b,c and d

D. a only

Answer: C



Watch Video Solution

10. which one of the following statements is incorrect?

A. The medullary zone of kidney is divided into a few conical masses called medullry

pyramids projecting into the calyces

B. Inside the kidney the cortical region extends in between the medullary pyramids as renal pelvis.

C. Glomerulus along with Bowman's capsule is called the renal corpuscle

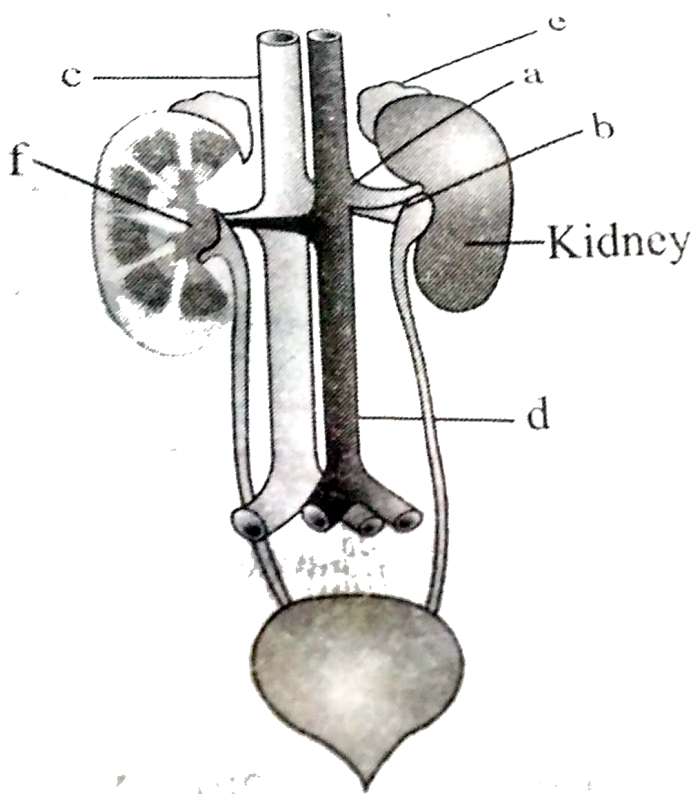
D. Renal corpuscle, proximal convoluted tubule (PCT) and distal convoluted tubule (DCT) of the nephron are situated in the cortical region of kidney

Answer: B



Watch Video Solution

11. Recognise the figure and find out the correct matching .



A. f-pelvis, e-adrenal gland, d-dorsal aorta, b-renal artery, c-inferior vena cava, a-renal vein

B. e-pelvis, f-adrenal gland, c-dorsal aorta, a-renal artery, d-inferior vena cava, b-renal vein

C. f-pelvis, e-adrenal gland, d-dorsal aorta, a-renal artery, c-inferior vena cava, b-renal vein

D. e-pelvis, f-adrenal gland, b-dorsal aorta, d-renal artery, a-inferior vena cava, c-renal vein

Answer: C



[Watch Video Solution](#)

12. Kidneys are reddish brown and

- A. Pear shaped structure
- B. Inverted pear shaped structure
- C. Bean shaped structure
- D. Flask shaped structure

Answer: C



[Watch Video Solution](#)

13. Kidneys are situated close to the dorsal inner wall of the abdominal cavity between the

A. Fifth thoracic and third lumbar vertebra

B. T_{12} and L_3 vertebra

C. Last thoracic and third lumbar vertebra

D. Both b and c

Answer: D



Watch Video Solution

14. Length, width and thickness of the adult human kidney are approximately.

A. 12-16 cm, 10-12 cm and 4-6 cm respectively

B. 10-12 cm, 5-7 cm and 2-3 cm respectively

C. 10-12 cm, 2-3 cm and 5-7 cm respectively

D. 12-16 cm, 5-7 cm and 2-3 cm respectively

Answer: B





Watch Video Solution

15. Average weight of kidney is about

A. 1.2 to 1.5 kg

B. 1.2 to 1.7 kg

C. 0.12 to 0.15 kg

D. 0.12 to 0.17 kg

Answer: D



Watch Video Solution

16. Towards the center of the inner concave surface of the kidney a notch is present which is called

A. Hilum

B. Renal pelvis

C. Column of Bertini

D. Calyx

Answer: A



Watch Video Solution

17. Each nephron has

A. Three parts-PCT, DCT and HL

B. Three parts-Glomerulus, PCT and DCT

C. Two parts-Glomerulus and Bowman's capsule

D. Two parts-Glomerulus and renal tubule

Answer: D



Watch Video Solution

18. Renal tubule begins with the

- A. Afferent arteriole
- B. Efferent arteriole
- C. Bowman's Capsule
- D. PCT

Answer: C



Watch Video Solution

19. The DCTs of many nephrons open into a straight tube called

- A. Renal pelvis
- B. Duct of Bellini
- C. Columns of Bertini
- D. Collecting duct

Answer: D



Watch Video Solution

20. Many collecting ducts converge and through medullary pyramids in the calyces open into the

- A. Renal pelvis
- B. Duct of Bellini
- C. Columns of Bertini
- D. Vasa recta

Answer: A



Watch Video Solution

21. In majority of nephrons the loop of Henle is too short and extends only very little into the medulla. Such nephrons are called

- A. Cortical nephrons
- B. Medullary nephrons
- C. Juxtamedullary nephrons
- D. Juxtaglomerular nephrons

Answer: A



Watch Video Solution

22. In majority of nephrons the loop of Henle is too short and extends only very little into the medulla. Such nephrons are called

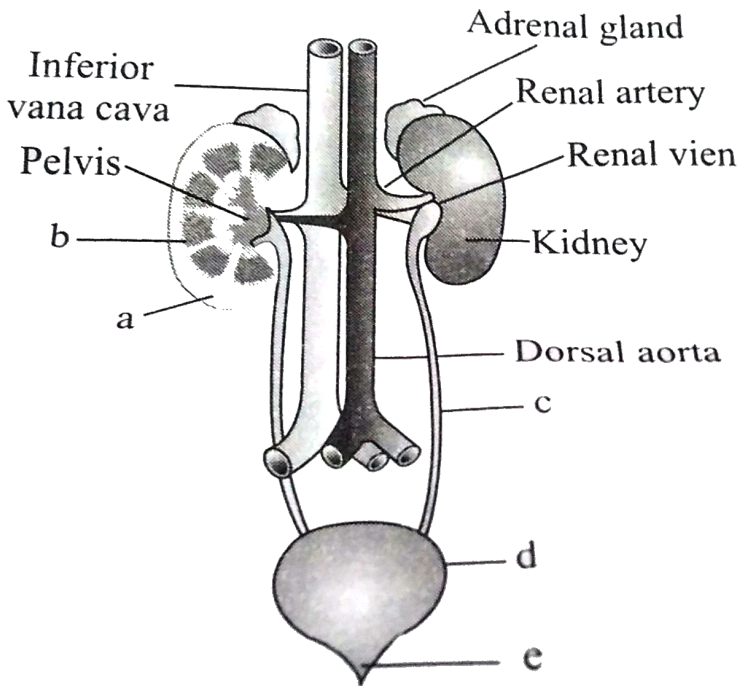
- A. Cortical nephrons
- B. Medullary nephrons
- C. Juxtamedullary nephrons
- D. Juxtaglomerular nephrons

Answer: C



Watch Video Solution

23. Recognise the figure and find out the correct matching .



A. a-cortex, b-medulla, c-ureter, d-urinary
bladder, e-urethra

B. b-cortex, a-medulla, e-ureter, d-urinary

bladder, c-urethra

C. a-cortex, b-medulla, d-ureter, c-urinary

bladder, e-urethra

D. b-cortex, a-medulla, c-ureter, e-urinary

bladder, d-urethra

Answer: A



Watch Video Solution

24. The efferent arteriole emerging from the glomerulus forms a fine capillary network around the renal tubule are called

A. Vasa recta

B. Paratubular capillaries

C. Counter-current mechanism

D. Peritubular capillaries

Answer: D



Watch Video Solution

25. Vasa recta is absent or highly reduced in

- A. Cortical nephrons
- B. Medullary nephrons
- C. Juxtamedullary nephrons
- D. Juxtaglomerular nephrons

Answer: A



Watch Video Solution

26. The shapes of Henle's loop and vasa recta are

A. C shaped and U shaped respectively

B. C shaped and U shaped respectively

C. Hairpin shaped and U shaped respectively

D. U shaped and hairpin shaped respectively

Answer: C



[Watch Video Solution](#)

27. Normal range of urea in 100 ml of human blood is

A. 56-79 mg

B. 40-80 mg

C. 6-20 mg

D. 4-16 mg

Answer: C



[Watch Video Solution](#)

28. Uriniferous tubules are mainly concerned with

A. Concentration of urine

B. Passage of urine

C. Reabsorption of useful substances from glomerular filtrate

D. Removal of urea from blood

Answer: D



29. Nitrogenous waste products are eliminated mainly as

A. Urea in tadpole and ammonia

B. Ammonia in tadpole and urea in adult frog

C. Urea in both tadpole and adult frog

D. Urea in tadpole and uric acid in adult frog

Answer: B



Watch Video Solution

30. Glomeruli are confined to

A. cortex

B. medulla

C. pelvis

D. pyramid

Answer: A



[Watch Video Solution](#)

31. Uric acid is nitrogenous waste in

- A. Mammals and molluscs
- B. Lizards and land snails
- C. Frog and cartilaginous fishes
- D. Insects and bony fishes

Answer: B



[Watch Video Solution](#)

32. Urea is formed in liver cells from

A. Ammonia and nitrogen

B. Ammonia and carbon dioxide

C. Ammonia, carbon dioxide and aspartic acid

D. Ammonia and carbon monoxide

Answer: C



Watch Video Solution

33. Which blood vessel takes blood away from kidney ?

A. Renal portal vein

B. Renal vein

C. Afferent arteriole

D. Efferent arteriole

Answer: B



Watch Video Solution

34. Excretion is removed of

A. Carbon dioxide

B. Harmful and useless ingredients

C. Extra water

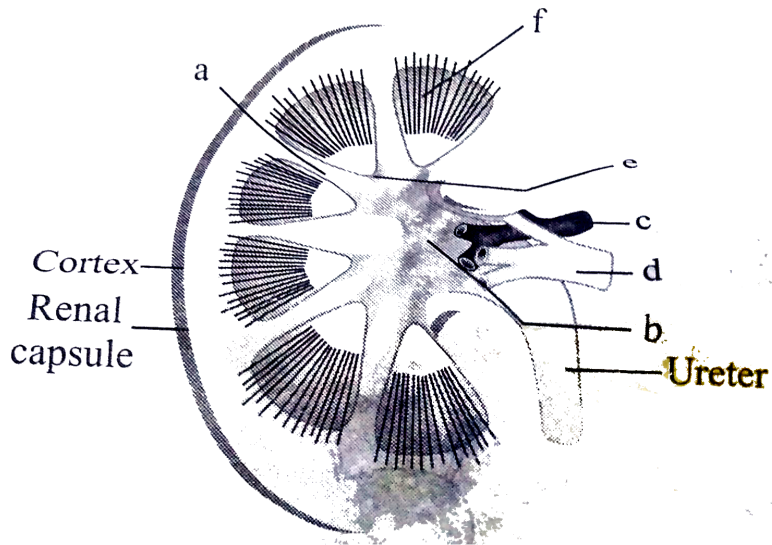
D. Metabolic waste products

Answer: B



Watch Video Solution

35. Recognise the figure and find out the correct matching.Â



A. d-renal artery, c-renal vein, f-calyx, e-
medullary pyramid, b-renal column, a-
renal pelvis

B. c-renal artery, d-renal vein, e-calyx, f-medullary pyramid, b-renal column, a-renal pelvis

C. d-renal artery, c-renal vein, e-calyx, f-medullary pyramid, a-renal column, b-renal pelvis

D. c-renal artery, d-renal vein, e-calyx, f-medullary pyramid, a-renal column, b-renal pelvis

Answer: D



Watch Video Solution

36. Ornithine cycle removes two waste products from blood in liver

- A. urea and carbon dioxide
- B. carbon dioxide and ammonia
- C. ammonia and uric acid
- D. ammonia and urea

Answer: B



37. Uric acid is excreted in

A. frog

B. rabbit

C. man

D. pigeon/crow

Answer: D



38. Number of nephrons in each kidney of man is

A. 0.07 million

B. 0.9 million

C. 1.0 million

D. 1.6 million

Answer: C



Watch Video Solution

39. Urine is always fluid except in

A. Reptiles and amphibians

B. Birds and mammals

C. Birds and reptiles

D. Reptiles and mammals

Answer: C



Watch Video Solution

40. In Housefly the excretory organs are

A. Nephridia

B. Flame cells

C. Malpighian tubules

D. Kidneys

Answer: C



Watch Video Solution

41. Which one is uricotelic ?

A. Frog and toads

B. Lizards and birds/Cockroach

C. Cattle, monkey and man

D. Molluscs and teleost fishes

Answer: B



Watch Video Solution

42. As compared to efferent arteriole, the afferent arteriole of kidney is

A. Shorter and wide

B. Shorter and narrower

C. Longer and wider

D. Longer and narrower

Answer: A



Watch Video Solution

43. What is wrong about kidney

A. Peripheral cortex and central

medulla

B. Blood enters glomerulus through efferent arterioles

C. Malpighian capsules occur in cortex

D. Concave part of kidney is called hilum

Answer: B



Watch Video Solution

44. What is true of urea biosynthesis

A. Uric acid is starting point

B. Urea is synthesized in lysosomes

C. Urea cycle enzymes are located inside mitochondria

D. Urea is synthesized in kidney

Answer: C



Watch Video Solution

45. For formation of urea which one of the following is required alongwith ammonia

A. Arginase, CO_2 and O_2

B. Arginase, CO_2 and water

C. Aspartate, CO_2 and water

D. Aspartate, CO_2 and O_2

Answer: B



Watch Video Solution

46. Number of nephrons of a kidney is equal to

A. Sum of Bowman's capsules and glomeruli

B. Sum of Bowman's capsules and malpighian corpuscles of Bowman's capsules

C. Double the number of Bowman's capsules

D. Equal to number of Bowman's capsules

Answer: D



[Watch Video Solution](#)

47. In Prawn, excretion is carried out by

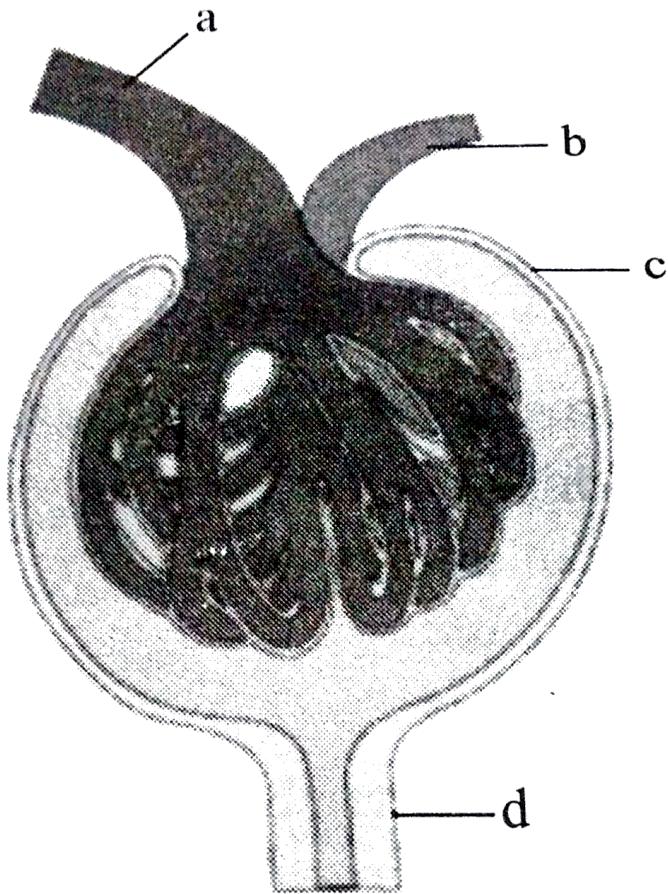
- A. nephrons
- B. malpighians tubules
- C. flame cell
- D. green glands

Answer: D



[Watch Video Solution](#)

48. Recognise the figure .



1. 'a' is the fine branch of renal Vein

2. 'b' carried blood towards the glomerulus

3. \hat{c} is the tuft of capillaries formed by the \hat{a}

4. \hat{d} is a highly coiled network of renal tubule.

Which of the following is correct?

A. 1 and 2

B. 2 and 3

C. 3 and 4

D. 4 only

Answer: D



49. Excretion of nitrogenous waster in semisolid form is found in

A. ammonotelic animals

B. uricotelic animals

C. ureotelic animals

D. aminotelic animals

Answer: B



50. A man takes large amount of protein. He is likely to excrete more amount of

A. Urea

B. uric acid

C. Sugar

D. Salts and water

Answer: A



Watch Video Solution

51. Occurrence of arginase confirms that

A. Urea cycle is operating

B. Urea cycle may be operating

C. Arginine is being converted into
citrulline

D. Arginine is being converted into
ornithine

Answer: D



Watch Video Solution

52. A terrestrial animal must be able to

A. Excrete large amounts of urine

B. Conserve water

C. Actively pump out salts through skin

D. Excrete large amount of salts in urine

Answer: B



Watch Video Solution

53. Which blood vessel contains the least amount of urea ?

- A. Hepatic vein
- B. Renal vein
- C. Hepatic portal vein
- D. Renal artery

Answer: B



Watch Video Solution

54. Malphigian body is constituted by

A. Glomerulus only

B. Glomerulus and Bowman's capsule

C. Glomerulus and efferent vessel

D. Glomerulus and afferent vessel

Answer: B



Watch Video Solution

55. If liver is removed, which component of blood will increase ?

A. ammonia

B. protein

C. uric acid

D. urea

Answer: A



Watch Video Solution

56. Antennary glands of crustaceans are meant for

- A. Gustatoreception
- B. Olfactoreception
- C. Tangreception
- D. Excretion

Answer: D



Watch Video Solution

57. Marine teleost fish excrete

A. Ammonia

B. Urea

C. Uric acid

D. Amino acids

Answer: B



Watch Video Solution

58. Glomerular hydrostatic hydrostatic pressure is present in

- A. Â Tubule of kidney
- B. Glomerulus of urinary tubule
- C. Malpighian tubule
- D. Bowmanâ€™s capsule

Answer: B



Watch Video Solution

59. Urea is produced in mammals from

A. Ammonia released by

oxidative deamination

B. Oxidative deamination of purines

C. Breakdown of ornithine

D. Breakdown of arginine

Answer: D



Watch Video Solution

60. Which is the best adapted for conservation of water ?

A. Ammonotelism

B. Ureotelism

C. Uricotelism

D. Hydrophobism

Answer: C



Watch Video Solution

61. The blood vessel taking blood/forming glomerulus into Bowman's capsule is

- A. Afferent arteriole
- B. Efferent arteriole
- C. Renal vein
- D. Renal portal vein

Answer: A



Watch Video Solution

62. Almost all aquatic animals excrete ammonia as nitrogenous waste. Which is wrong

A. Ammonia is highly toxic and requires elimination as and when formed

B. Ammonia is easily soluble in water

C. Ammonia is converted into less toxic form called urea from called urea

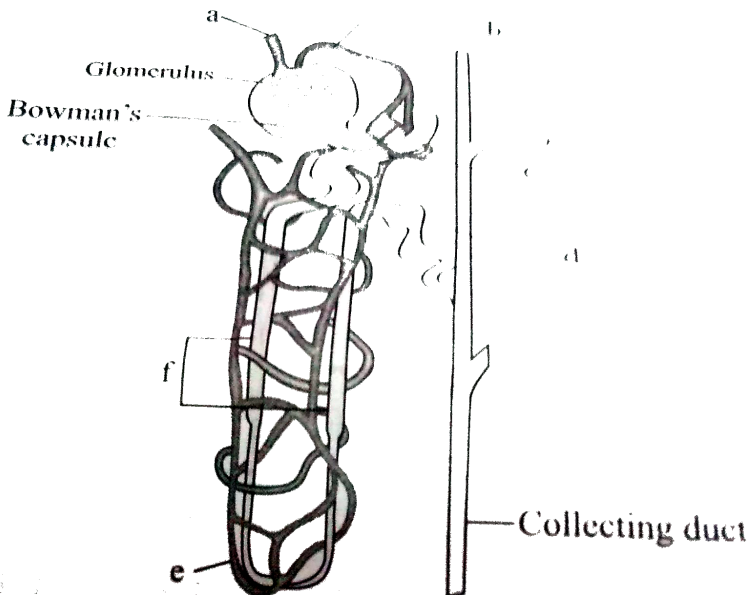
D. Ammonia is resealed from body in gaseous state

Answer: D



Watch Video Solution

63. Recognise the figure and find out the correct matching.



A. c-PCT, d-DCT, a-afferent arteriole, b-affrent arteriole, f-Henle's loop, e-Vasa recta

B. d-PCT, c-DCT , b-afferent arteriole, a-afferent arteriole, e-Henle's loop, f-vasa recta

C. c-PCT , d-DCT, b-afferent arteriole, a-afferent antriole, f-Henle's loop, e-vasa recta

D. d-PCT , c-DCT , a-affferent arteriole, b-afferent arteriole, e-Henle's loop, f-vasa

recta

Answer: A



Watch Video Solution

64. The first formed nitrogenous waste of vertebrates is

A. NH_2

B. Urea

C. NH_3

D. NH_4^+ ion

Answer: C



Watch Video Solution

65. which one is both osmoregulator as well as nitrogenous products

A. NH_3

B. Urea

C. uric acid

D. all of the above

Answer: B



Watch Video Solution

66. Urine flows into ureters from

A. Kidney pelvis

B. Urinary bladder

C. Urethra

D. Collecting ducts

Answer: A



Watch Video Solution

67. Which is not a part of nephron?

A. PCT

B. DCT

C. loop of henle

D. Collecting ducts

Answer: D



Watch Video Solution

68. Region of nephron found in renal medulla is

- A. Malpighian corpuscle
- B. Convoluted tubule
- C. Distal convoluted tubule
- D. Henle's loop

Answer: D



69. Ureter develops from funnel like structure called

- A. Hilum
- B. Renal pelvis
- C. Major calyx
- D. Minor calyx

Answer: B



70. The following substances are the excretory products in animals. Choose the least toxic from among them

A. Urea

B. Uric acid

C. Ammonia

D. Carbon dioxide

Answer: B



Watch Video Solution

71. Find out the name of 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

A. a Planaria, (b)-duct of Bellini, (c)

Peritubular capillary

B. (a) Amphioxus, (b) collecting duct, (c) vasa recta

C. (a)-Lancelet, (b) columns of Bertini, (c) vasa recta

D. (a) Amphioxus, (b) columns of Bertini, (c) peritubular capillary

Answer: C



Watch Video Solution

72. Different types of excretory structure and animals are given below . Match them appropriately and mark the correct answer from among those given below .

Excretory structure/organ	Animals
A. Protonephridia	i. Prawn
B. Nephridia	ii. Cockroach
C. Malpighian tubules	iii. Earthworm
D. Green gland or Antennal gland	iv. Flatworms

A. (d)-(i), (c)-ii (b)-iii , (a)-iv

B. (b)-(i) , (c) - (ii) , (a) - (iii) ,(b) - (iv)

C. (d) - (i) , (c) - (ii) , (a) - (iii) , (b) - (iv)

D. (b)-(i) , (c)- (ii) , (b) - (iii) , (d) - (iv)

Answer: A



Watch Video Solution

73. Which one of the following statements is incorrect?

A. Birds and land snails are uricotelic animals

B. Mammals and frogs are ureotelic animals.

C. Aquatic amphibians and aquatic insects
are ammonotelic animals.Â

D. Birds and reptiles are ureotelic.

Answer: D



Watch Video Solution

74. Terrestrial amphibians and marine fishes
are

A. Ammonotelic

B. Ureotelic

C. Uricotelic

D. Both A and B

Answer: B



Watch Video Solution

75. Major form(s) of nitrogenous wastes excreted by the animals is/ are

A. NH_3

B. \hat{A} Urea

C. \hat{A} Uric acid

D. All of the above

Answer: D



Watch Video Solution

76. Read the following statements and find out the incorrect statements.

(a) Kidney plays very significant role in the removal of NH_3

(b) Terrestrial adaptation necessitated the production of more toxic nitrogenous wastes like urea and uric acid for conservation of water .

(c) Some amount of urea may be retained in the kidney matrix of some of the ureotelic animals to maintain a desired osmolarity.

(d) Uricotelic animals excrete nitrogenous wastes as uric acid in the form of pellet or paste with a minimum loss of water .

A. a and b

B. b and c

C. c and d

D. a and d

Answer: A



Watch Video Solution

77. Protonephridia or flame cells or solenocytes are the excretory structures in

A. platyhelminthes/flatworms

B. rotifers and some annelids

C. cephalochordate (branchiostoma)

D. all of the above

Answer: D



Watch Video Solution

78. In humans, excretory system consists of

a. Kidney

b. Urinary bladder

c. Ureters

d. Urethra

A. a and b

B. a,b and c

C. a,b,c and d

D. a only

Answer: C



Watch Video Solution

79. which one of the following statements is incorrect?

A. The medullary zone of kidney is divided into a few conical masses called medullary pyramids projecting into the calyces

B. Inside the kidney the cortical region extends in between the medullary pyramids as renal pelvis.

C. Glomerulus along with Bowman's capsule is called the renal corpuscle

D. Renal corpuscle, proximal convoluted tubule (PCT) and distal convoluted tubule

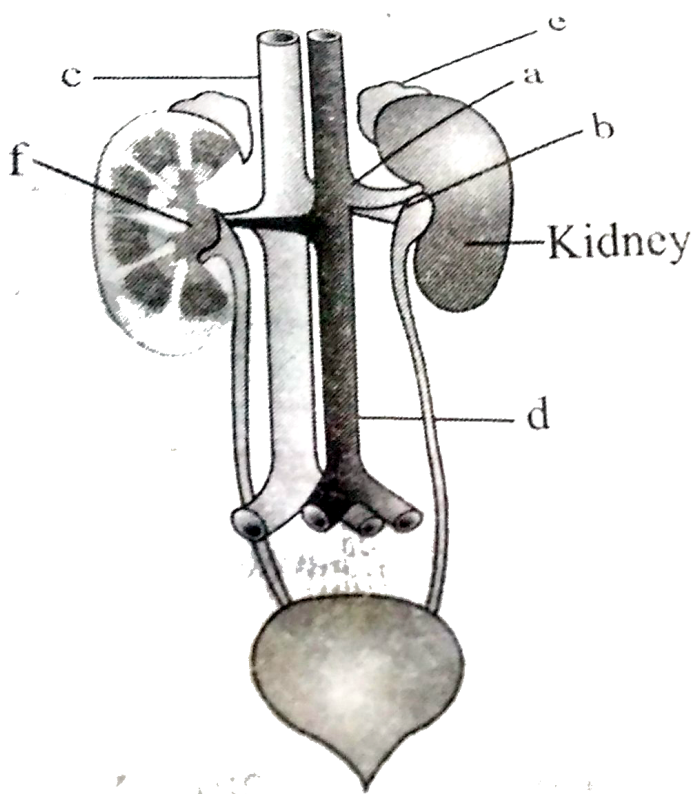
(DTC)of the nephron are situated in the cortical region of kidney

Answer: B



Watch Video Solution

80. Recognise the figure and find out the correct matching .



A. Â f-pelvis, e-adrenal gland, d-dorsal aorta, b- renal artery, c-inferior vena cava, b-renal vein

B. e-pelvis, f-adrenal gland, c-dorsal aorta, a-renal artery, d-inferior vena cava, b-renal vein

C. f-pelvis, e-adrenal gland, d-dorsal aorta, a-renal artery, c-inferior vena cava, b-renal vein

D. e-pelvis, f-adrenal gland, b-dorsal aorta, drenal artery, a-inferior vena cava, c-renal vein

Answer: C



[Watch Video Solution](#)

81. Kidneys are reddish brown and

- A. Pear shaped structure
- B. Inverted pear shaped structure
- C. Bean shaped structure
- D. Flask shaped structure

Answer: C



[Watch Video Solution](#)

82. Kidneys are situated close to the dorsal inner wall of the abdominal cavity between the

A. Fifth thoracic and third lumbar vertebra

B. T_{12} and L_3 vertebra

C. Last thoracic and third lumbar vertebra

D. Both b and c

Answer: D



Watch Video Solution

83. Length, width and thickness of the adult human kidney are approximately.

A. 12-16 cm, 10-12 cm and 4-6 cm respectively

B. 10-12 cm, 5-7 cm and 2-3 cm respectively

C. 10-12 cm, 2-3 cm and 5-7 cm respectively

D. 12-16 cm, 5-7 cm and 2-3 cm respectively

Answer: B



Watch Video Solution

84. Average weight of kidney is about

A. 1.2 to 1.5 kg

B. 1.2 to 1.7 kg

C. 0.12 to 0.15 kg

D. 0.12 to 0.17 kg

Answer: D



Watch Video Solution

85. Towards the centre of the inner concave surface of the kidney a notch is present which is called

- A. Hilum
- B. Renal pelvis
- C. Column of Bertini
- D. Calyx

Answer: A



Watch Video Solution

86. Each nephron has

A. Three parts-PCT, DCT and HL

B. Three parts-Glomerulus, PCT and DCT

C. Two parts-Glomerulus and Bowman's capsule

D. Two parts-Glomerulus and renal tubule

Answer: D



[Watch Video Solution](#)

87. Renal tubule begins with the

- A. Afferent arteriole
- B. Efferent arteriole
- C. Bowman's capsule
- D. PCT

Answer: C



[Watch Video Solution](#)

88. The DCTs of many nephrons open into a straight tube called

- A. Renal pelvis
- B. Duct of Bellini
- C. Columns of Bertini
- D. Collecting duct

Answer: D



Watch Video Solution

89. Many collecting ducts converge and through medullary pyramids in the calyces open into the

- A. Renal pelvis
- B. Duct of Bellini
- C. Columns of Bertini
- D. Vasa recta

Answer: A



Watch Video Solution

90. In majority of nephrons the loop of Henle is too short and extends only very little into the medulla. Such nephrons are called

- A. Cortical nephrons
- B. Medullary nephrons
- C. Juxtamedullary nephrons
- D. Juxtaglomerular nephrons

Answer: A



Watch Video Solution

91. In majority of nephrons the loop of Henle is too short and extends only very little into the medulla. Such nephrons are called

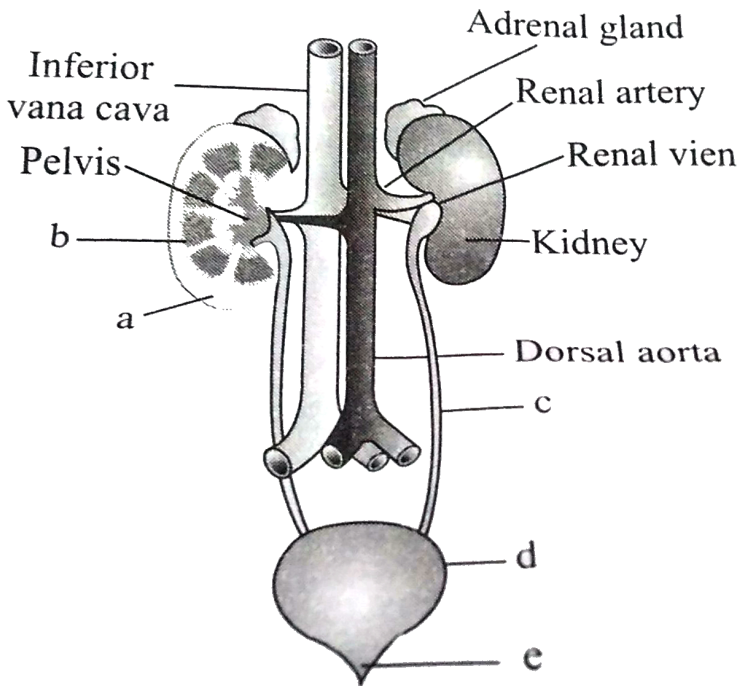
- A. Cortical nephrons
- B. Medullary nephrons
- C. Juxtamedullary nephrons
- D. Juxtaglomerular nephrons

Answer: C



Watch Video Solution

92. Recognise the figure and find out the correct matching .



A. a-cortex, b-medulla, c-ureter, d-urinary bladder, e-urethra

B. Â b-cortex, a-medulla, e-ureter, d-urinary
bladder, c-urethra

C. Â a-cortex, b-medulla, d-ureter, c-urinary
bladder, e-urethra

D. b-cortex, a-medulla, c-ureter, e-urinary
bladder, d-urethra

Answer: A



Watch Video Solution

93. The efferent arteriole emerging from the glomerulus forms a fine capillary network around the renal tubule are called

- A. Vasa recta
- B. Paratubular capillaries
- C. Counter-current mechanism
- D. Peritubular capillaries

Answer: D



Watch Video Solution

94. Vasa recta is absent or highly reduced in a

A. Cortical nephrons

B. Medullary nephrons

C. Juxtamedullary nephrons

D. Juxtaglomerular nephrons

Answer: A



Watch Video Solution

95. The shapes of Henle's loop and vasa recta are

A. C shaped and U shaped

respectively

B. C shaped and U shaped

respectively

C. Hairpin shaped and U shaped

respectively

D. U shaped and hairpin shaped
respectively

Answer: C



View Text Solution

96. Normal range of urea in 100 ml of human
blood is

A. 56-79 mg

B. 40-80 mg

C. 6-20 mg

D. 4-16 mg

Answer: C



Watch Video Solution

97. Uriniferous tubules are mainly concerned with

A. \hat{A} Concentration of urine

B. \hat{A} Passage of urine

C. Reabsorption of useful substances from glomerular filtrate

D. Removal of urea from blood

Answer: D



Watch Video Solution

98. Nitrogenous waste products are eliminated mainly as

A. Urea in tadpole and ammonia

B. Ammonia in tadpole and urea in adult frog

C. Urea in both tadpole and adult frog

D. Urea in tadpole and uric acid in adult frog

Answer: B



Watch Video Solution

99. Glomeruli are confined to

A. cortex

B. medulla

C. pelvis

D. pyramid

Answer: A



Watch Video Solution

100. Uric acid is nitrogenous waste in

A. Mammals and molluscs

B. Lizards and land snails

C. Frog and cartilaginous fishes

D. Insects and bony fishes

Answer: B



Watch Video Solution

101. Urea is formed in liver cells from

A. Ammonia and nitrogen

B. Ammonia and carbon dioxide

C. Ammonia, carbon dioxide and aspartic acid

D. Ammonia and carbon monoxide

Answer: C



Watch Video Solution

102. Which blood vessel takes blood away from kidney ?

A. Renal portal vein

B. Â Renal veinÂ

C. Afferent arteriole

D. Â Efferent arteriole

Answer: B



Watch Video Solution

103. Excretion is removal of

A. Â Carbon dioxide

B. Â Harmful and useless ingredientsÂ

C. Extra water

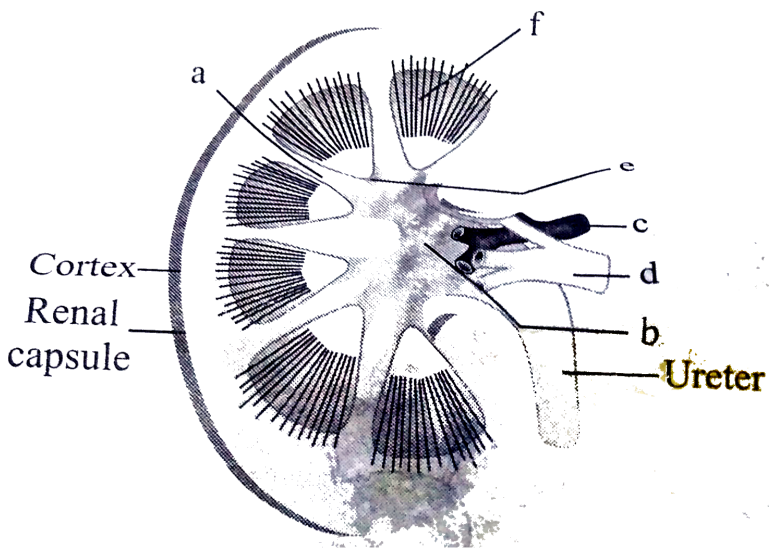
D. Metabolic waste products

Answer: B



Watch Video Solution

104. Recognise the figure and find out the correct matching.



A. d-renal artery, c-renal vein, f-calyx, e-medullary pyramid, b-renal column, a-renal pelvis

B. c-renal artery, d-renal vein, e-calyx, f-medullary pyramid, b-renal column, a-

renal pelvis

C. d-renal artery, c-renal vein, e-calyx, f-medullary pyramid, a-renal column, b-renal pelvis

D. c-renal artery, d-renal vein, e-calyx, f-medullary pyramid, a-renal column, b-renal pelvis

Answer: D



Watch Video Solution

105. Ornithine cycle removes two waste products from blood in liver

- A. urea and carbon dioxide
- B. carbon dioxide and ammonia
- C. ammonia and uric acid
- D. ammonia and urea

Answer: B



Watch Video Solution

106. Uric acid is excreted in

A. frog

B. rabbit

C. man

D. pigeon/crow

Answer: D



Watch Video Solution

107. Number of nephrons in each kidney of man is

A. 0.07 million

B. 0.9 million

C. 1.0 million

D. 1.6 million

Answer: C



Watch Video Solution

108. Urine is always fluid except in

A. Reptiles and amphibians

B. Birds and mammals

C. Birds and reptiles

D. Reptiles and mammals

Answer: C



Watch Video Solution

109. In Housefly the excretory organs are

A. Nephridia

B. Flame cells

C. Malpighian tubules

D. Kidneys

Answer: C



Watch Video Solution

110. Which one is uricotelic ?

A. Frog and toads

B. Lizards and birds/Cockroach

C. Cattle, monkey and man

D. Molluscs and teleost fishes

Answer: B



Watch Video Solution

111. As compared to efferent arteriole, the afferent arteriole of kidney is

A. Shorter and wide

B. Shorter and narrower

C. Longer and wider

D. Longer and narrower

Answer: A



Watch Video Solution

112. What is wrong about kidney

A. Peripheral cortex and central

medulla

B. Blood enters glomerulus through efferent arterioles

C. Malpighian capsules occur in cortex

D. Concave part of kidney is called hilum

Answer: B



Watch Video Solution

113. What is true of urea biosynthesis

A. Uric acid is starting point

B. Urea is synthesized in lysosomes

C. Urea cycle enzymes are located inside mitochondria

D. Urea is synthesized in kidney

Answer: C



Watch Video Solution

114. For formation of urea which one of the following is required alongwith ammonia

A. Arginase, CO_2 and O_2

B. Arginase, CO_2 and water

C. Aspartate, CO_2 and water

D. Aspartate, CO_2 and O_2

Answer: B



Watch Video Solution

115. Number of nephrons of a kidney is equal to

A. Sum of Bowman's capsules and glomeruli

B. Sum of Bowman's capsules and malpighian corpuscles of Bowman's capsules

C. Double the number of Bowman's capsules

D. Equal to number of Bowman's capsules

Answer: D



[Watch Video Solution](#)

116. In Prawn, excretion is carried out by

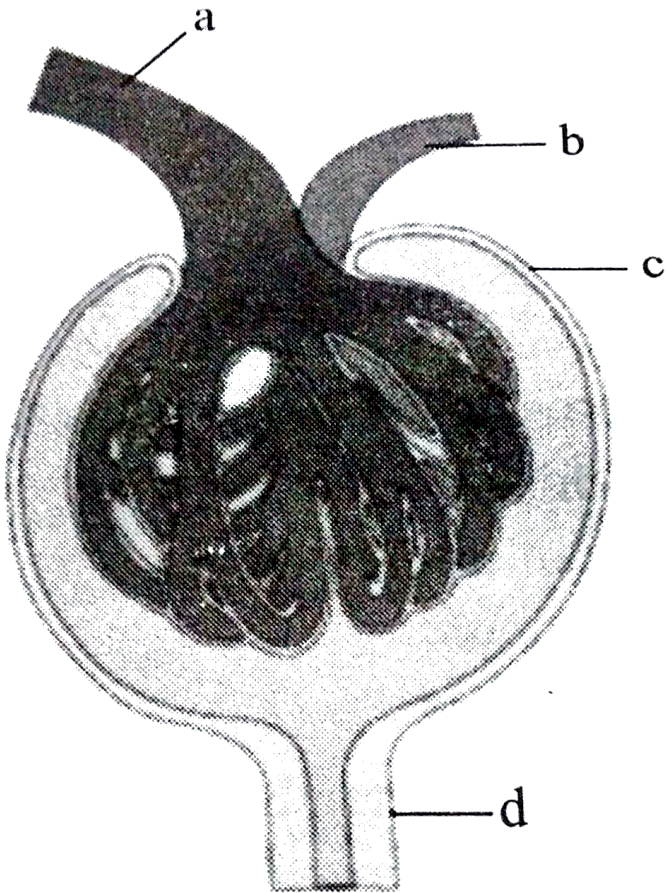
- A. nephrons
- B. malpighians tubules
- C. flame cell
- D. green glands

Answer: D



[Watch Video Solution](#)

117. Recognise the figure .



1. 'a' is the fine branch of renal Vein

2. 'b' carried blood towards the glomerulus

3. \hat{c} is the tuft of capillaries formed by the \hat{a}

4. \hat{d} is a highly coiled network of renal tubule.

Which of the following is correct?

A. 1 and 2

B. 2 and 3

C. 3 and 4

D. 4 only

Answer: D



118. Excretion of nitrogenous waster in semisolid form is found in

A. ammonotelic animals

B. uricotelic animals

C. ureotelic animals

D. aminotelic animals

Answer: B



119. A man takes large amount of protein. He is likely to excrete more amount of

A. Urea

B. uric acid

C. Sugar

D. Salts and water

Answer: A



Watch Video Solution

120. Occurrence of arginase confirms that

A. Urea cycle is operating

B. Urea cycle may be operating

C. Arginine is being converted into
citrulline

D. Arginine is being converted into
ornithine

Answer: D



Watch Video Solution

121. A terrestrial animal must be able to

- A. Excrete large amounts of urine
- B. Conserve water
- C. Actively pump out salts through skin
- D. Excrete large amount of salts in urine

Answer: B



Watch Video Solution

122. Which blood vessel contains the least amount of urea ?

- A. Hepatic vein
- B. Renal vein
- C. Hepatic portal vein
- D. Renal artery

Answer: B



Watch Video Solution

123. Malpighian body is constituted by

A. Glomerulus only

B. Glomerulus and Bowman's capsule

C. Glomerulus and efferent vessel

D. Glomerulus and afferent vessel

Answer: B



Watch Video Solution

124. If liver is removed, which component of blood will increase ?

A. ammonia

B. protein

C. uric acid

D. urea

Answer: A



Watch Video Solution

125. Antennary glands of crustaceans are meant for

- A. Gustatoreception
- B. Olfactoreception
- C. Tangreception
- D. Excretion

Answer: D



Watch Video Solution

126. Marine teleost fish excrete

A. Ammonia

B. Urea

C. Uric acid

D. Amino acids

Answer: B



Watch Video Solution

127. Glomerular hydrostatic hydrostatic pressure is present in

- A. Â Tubule of kidney
- B. Glomerulus of urinary tubule
- C. Malpighian tubule
- D. Bowmanâ€™s capsule

Answer: B



Watch Video Solution

128. Urea is produced in mammals from

A. Ammonia released by

oxidative deamination

B. Oxidative deamination of purines

C. Breakdown of ornithine

D. Breakdown of arginine

Answer: D



Watch Video Solution

129. Which is the best adapted for conservation of water ?

A. Ammonotelism

B. Ureotelism

C. Uricotelism

D. Hydrophobism

Answer: C



Watch Video Solution

130. The blood vessel taking blood/forming glomerulus into Bowman's capsule is

A. Afferent arteriole

B. Efferent arteriole

C. Renal vein

D. Renal portal vein

Answer: A



Watch Video Solution

131. Almost all aquatic animals excrete ammonia as nitrogenous waste. Which is wrong

A. Ammonia is highly toxic and requires elimination as and when formed

B. Ammonia is easily soluble in water

C. Ammonia is converted into less toxic form called urea from called urea

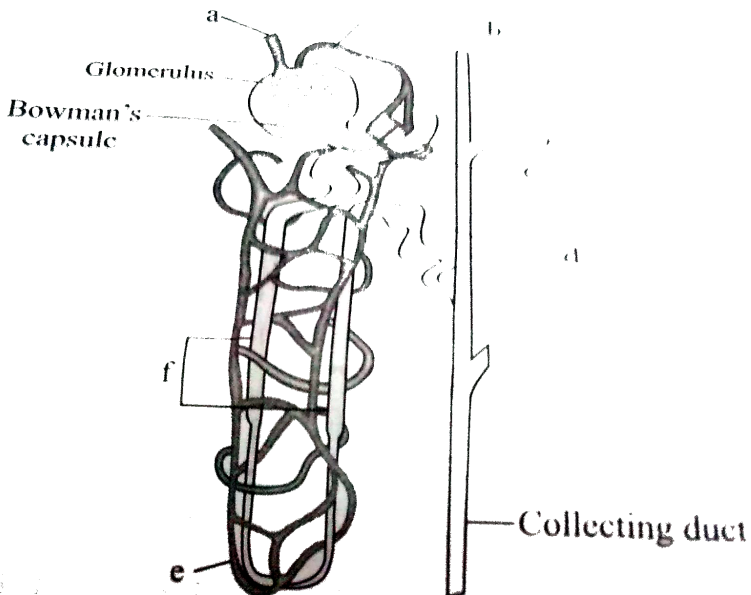
D. Ammonia is resealed from body in gaseous state

Answer: D



Watch Video Solution

132. Recognise the figure and find out the correct matching.



A. c-PCT, d-DCT, a-afferent arteriole, b-efferent arteriole f-Henle's loop, e-Vasa recta

B. d-PCT, c-DCT , b-efferent arteriole, a-afferent arteriole, e-Henle's loop, f-vasa recta

C. c-PCT , d-DCT, b-afferent arteriole, a-efferent arteriole, f-Henle's loop, e-vasa recta

D. d-PCT , c-DCT , a- afferent arteriole, b-
efferent arteriole, e-Henle's loop, f-vasa
recta

Answer: A



Watch Video Solution

133. The first formed nitrogenous waste of
vertebrates is

A. NH_2

B. Urea

C. NH_3

D. NH_4^+ ion

Answer: C



Watch Video Solution

134. which one is both osmoregulator as well as nitrogenous products

A. NH_3

B. Urea

C. uric acid

D. all of the above

Answer: B



Watch Video Solution

135. Urine flows into ureters from

A. Kidney pelvis

B. Urinary bladder

C. Urethra

D. Collecting ducts

Answer: A



Watch Video Solution

136. Which is not a part of nephron?

A. PCT

B. DCT

C. loop of henle

D. Collecting ducts

Answer: D



Watch Video Solution

137. Region of nephron found in renal medulla is

A. Malpighian corpuscle

B. Convoluted tubule

C. Distal convoluted tubule

D. Henle's loop

Answer: D



Watch Video Solution

138. Ureter develops from funnel like structure called

A. Hilum

B. Renal pelvis

C. Major calyx

D. Minor calyx

Answer: B



Watch Video Solution

Section A Topicwise Questions Topic 2 Urine Formation

1. Fill in the blanks:

1. On an average, ...a... of blood is filtered by the kidneys per minute which constitute roughly

.....b of the blood pumped out by each ventricle of the heart in a minute

2. The glomerular capillary blood pressure causes filtration of blood through three layers, i.e., the Bowman's capsule and a basement ...e... between these two layers.

A. a-1000 to 1100 ml, b-1/4th, c-mesothelium, d-endothelium, e-substance

B. a-1000 to 1100 ml, b-1/5th, c-endothelium, d-mesothelium, e-

membrane

C. a-1100 to 1200 ml, b-1/4th, c-endothelium,

d-epithelium, e-substance

D. a-1100 to 1200 ml, b-1/ 5th, c-endothelium

d-epithelium, e-membrane

Answer: D



Watch Video Solution

2. The kidneys have built in mechanisms for the regulation of GFR. One such efficient mechanism carried out by

A. JGA

B. ANF

C. PNS

D. all of the above

Answer: A



Watch Video Solution

3. JGA is special sensitive region formed by cellular modifications in the

A. DCT and the afferent arteriole at the location of their contact

B. DCT and efferent arteriole at the location of their contact

C. PCT and afferent arteriole at the location of their contact

D. PCT and efferent arteriole at the location
of their contact

Answer: A



Watch Video Solution

4. Substances like amino acids and glucose in the filtrate are reabsorbed ...a... in the tubular epithelial cells whereas the nitrogenous wastes are absorbed by ..b... transport.Â

A. a-actively, b-passive 'Â

B. Â a-passively, b-active

C. a-actively, b-active

D. a-passively, b-passiveÂ

Answer: A



Watch Video Solution

5. Liquid which collects in the cavity of Bowman's capsule is

A. Concentrated urine

B. plasma minus blood proteins

C. Glycogen and water

D. Sulphates and water

Answer: B



Watch Video Solution

6. Match the terms given in Column I with their physiological processes given in column

ii and choose the correct answer.

Column I		Column II	
a.	Proximal convoluted tubule	i.	Formation of concentrated urine
b.	Distal convoluted tubule	ii.	Filtration of blood
c.	Henle's loop	iii.	Reabsorption of 70–80% of electrolytes
d.	Counter-current mechanism	iv.	Ionic balance
e.	Renal corpuscle in medulla	v.	Maintenance of concentration gradient

A. a-iii,b-v,c-iii,d-ii,e-i

B. a-iii, b-iv, c-ii, d-v, e-ii

C. a-I, b-iii, c-ii, d-v, e-iv

D. a-iii, b-I, c-iv, d-v, e-ii

Answer: B



[Watch Video Solution](#)

7. First step in urine formation is

- A. Tubular secretion
- B. Tubular reabsorption
- C. Ultrafiltration
- D. Selective secretion

Answer: C



[Watch Video Solution](#)

8. The filtrate from glomerulus contains

- A. Blood without cells and protein
- B. Plasma without sugar
- C. Blood with proteins but without cells
- D. Blood without urea

Answer: A



Watch Video Solution

9. Podocytes are the cells , present in

A. Inner wall of Bowmans capsule

B. Outer wall of Bowmans capsule

C. large intestine

D. neck region of nephrons

Answer: A



Watch Video Solution

10. Filtration of the blood takes place at

A. PCT

B. DCT

C. Collecting ducts

D. Malpighian body

Answer: D



Watch Video Solution

11. Main functions of kidney is

A. Passive absorption

B. Ultrafiltration

C. Selective reabsorption

D. Both B and C

Answer: D



Watch Video Solution

12. Reabsorption of chloride ions from glomerular filtrate in kidney tubule occurs by

A. Active transport

B. Diffusion

C. Osmosis

D. Brownian movement

Answer: B



Watch Video Solution

13. Glucose is taken back from glomerular filtrate through

- A. Active transport
- B. Passive transport
- C. Osmosis
- D. Diffusion

Answer: A



Watch Video Solution

14. In kidney, glomerulus is involved in

- A. Reabsorption of salts
- B. Urine collection
- C. Urine formation by blood filtration
- D. All of the above

Answer: C



Watch Video Solution

15. Effective net filtration pressure in the glomerulus in kidney of man is about

A. $\hat{A} + 75$ mm Hg

B. $\hat{A} + 80$ mm Hg

C. $\hat{A} + 20$ to 25 mmHg

D. +50mmHg

Answer: C



Watch Video Solution

16. Fill in the blanks:

1. On an average, ...a... of blood is filtered by the kidneys per minute which constitute roughlyb of the blood pumped out by each ventricle of the heart in a minute

2. The glomerular capillary blood pressure causes filtration of blood through three layers, i.e., the Bowman's capsule and a basement ...e... between these two layers.

A. a-1000 to 1100ml, b-1/4th, c-mesothelium, d-endothelium, e-substance

B. a-1000 to 1100 ml, b-1/5th, c-endothelium, d-mesothelium, e-membrane

C. a-1100 to 1200 ml, b-1/4th, c-endothelium, d-epithelium, e-substance

D. a-1100 to 1200 m, b-1/5th, c-endothelium d-epithelium, e-membrane

Answer: D



Watch Video Solution

17. The kidneys have built in mechanisms for the regulation of GFR. One such efficient mechanism carried out by

A. JGA

B. ANF

C. PNS

D. all of the above

Answer: A



Watch Video Solution

18. JGA is special sensitive region formed by cellular modifications in the

A. DCT and the afferent arteriole at the location of their contact

B. DCT and efferent arteriole at the location of their contact

C. PCT and afferent arteriole at the location of their contact

D. PCT and efferent arteriole at the location
of their contact

Answer: A



Watch Video Solution

19. Substances like amino acids and glucose in the filtrate are reabsorbed __a__ in the tubular epithelial cells whereas the nitrogenous wastes are absorbed by __b__ transport.

A. a-actively, b-passive

B. \hat{A} a-passively, b-active

C. a-actively, b-active

D. a-passively, b-passive

Answer: A



Watch Video Solution

20. Liquid which collects in the cavity of Bowman's capsule is

A. Concentrated urine

B. Plasma minus blood proteins

C. Glycogen and water

D. Sulphates and water

Answer: B



Watch Video Solution

21. Match the terms given in Column I with their physiological processes given in column

ii and choose the correct answer.

Column I		Column II	
a.	Proximal convoluted tubule	i.	Formation of concentrated urine
b.	Distal convoluted tubule	ii.	Filtration of blood
c.	Henle's loop	iii.	Reabsorption of 70–80% of electrolytes
d.	Counter-current mechanism	iv.	Ionic balance
e.	Renal corpuscle in medulla	v.	Maintenance of concentration gradient

A. a-iii, b-v, c-iii, d-ii, e-i

B. a-iii, b-iv, c-ii, d-v, e-ii

C. a-i, b-iii, c-ii, d-v, e-iv

D. a-iii, b-i, c-iv, d-v, e-ii

Answer: B



Watch Video Solution

22. First step in urine formation is

- A. Tubular secretion
- B. Tubular reabsorption
- C. Ultrafiltration
- D. Selective secretion

Answer: C



Watch Video Solution

23. The filtrate from glomerulus contains

- A. Blood without cells and protein
- B. Plasma without sugar
- C. Blood with proteins but without cells
- D. Blood without urea

Answer: A



Watch Video Solution

24. Podocytes are the cells , present in

A. Inner wall of Bowman's capsule

B. Outer wall of Bowman's capsule

C. large intestine

D. neck region of nephrons

Answer: A



Watch Video Solution

25. Filtration of the blood takes place at

A. PCT

B. DCT

C. Collecting ducts

D. Malpighian body

Answer: D



Watch Video Solution

26. Main functions of kidney is

A. Passive absorption

B. Ultrafiltration

C. Selective reabsorption

D. Both B and C

Answer: D



Watch Video Solution

27. Reabsorption of chloride ions from glomerular filtrate in kidney tubule occurs by

A. Active transport

B. Diffusion

C. Osmosis

D. Brownian movement

Answer: B



Watch Video Solution

28. Glucose is taken back from glomerular filtrate through

- A. Active transport
- B. Passive transport
- C. Osmosis
- D. Diffusion

Answer: A



Watch Video Solution

29. In kidney, glomerulus is involved in

- A. Reabsorption of salts
- B. Urine collection
- C. Urine formation by blood filtration
- D. All of the above

Answer: C



Watch Video Solution

30. Effective net filtration pressure in the glomerulus in kidney of man is about

A. $\hat{A} + 75$ mm Hg

B. $\hat{A} + 80$ mm Hg

C. $\hat{A} + 20$ to 25 mmHg

D. +50mmHg

Answer: C



Watch Video Solution

Section A Topicwise Questions Topic 3 Function Of The Tubules And Mechanism Of Concentration Of

1. Which of the following step in urine formation helps in the maintenance of ionic and acid base balance of body fluids?

A. Tubular secretion

B. Ultrafiltration

C. Reabsorption

D. Both A and B

Answer: A



Watch Video Solution

2. Read the following statements and find out the incorrect statements. A. . During urine formation, the tubular cells secrete substances like H^+ , K^+ and H_2O , into the filtrate. B. As glomerular filtrate move down in descending limb of HL it gets concentrated and as concentrated filtrate pass upward in ascending limb of hl it gets diluted

A. a and b

B. b and c

C. c and d

D. a and c

Answer: D



View Text Solution

3. What is the osmolarity (in mosmol L^{-1}) in the outer cortex and inner medulla region?

A. 300 and 900 respectively

B. 600 and 300 respectively

C. 1200 and 300 respectively

D. 300 and 1200 respectively

Answer: D



Watch Video Solution

4. Which factor helps in maintaining an increasing osmolality towards the inner medullary interstitium?

Â a. Counter current pattern in vasa recta

b. Counter current pattern in Henleâ€™s loop

c. proximity between the Henleâ€™s loop and
vase recta

A. a and b

B. a, b and c

C. c only

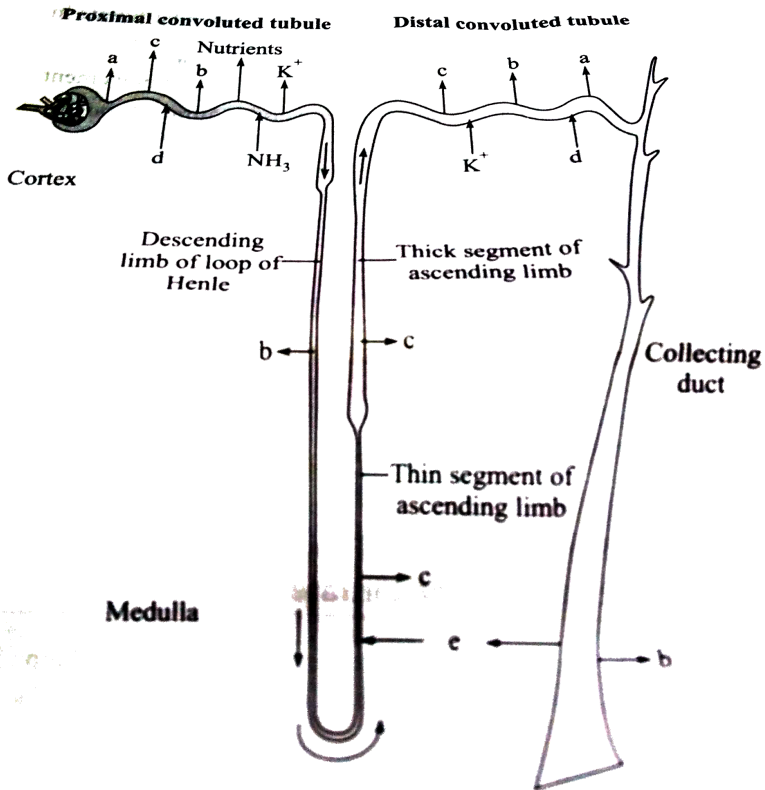
D. a and c

Answer: B



Watch Video Solution

5. Recognise the figure and find out the correct matching



A. $b - H^+$, $d - H_2O$ c- Urea , a-NaCl , e-



B. c- H^+ , $b - H_2O$, d-Urea , e- NaCl , a-



C. d- H^+ , $b - H_2O$, e- Urea , c-NaCl , a-



D. a- H^+ , $c - H_2O$, b-Urea , d-NaCl , e-



Answer: C



Watch Video Solution

6. The osmotic gradient between the cortex and medulla is created by

A. Urea

B. NH_3

C. Sodium chloride

D. Both A and C

Answer: D



Watch Video Solution

7. Fill in the blanks:

1. In counter current mechanism, NaCl is transported by the ...a... limb of Henle's loop which is exchanged with theb. limb of vasa recta.

2. NaCl is returned to the interstitium by ascending portion ofc..

3. Small amount of Urea enter thed segment of ...a... limb of Henle's loop which is transported back to the interstitium by the ...e... .

- A. a-ascending, b-descending, c-collecting tubule, d-thick, e-vasa recta
- B. a-descending, b-ascending, c- collecting tubules, d-thin, e-vasa recta
- C. a-ascending, b-descending, c-vasa recta, d-thick, e-collecting tubule
- D. a-ascending, b-descending, c-vasa recta, d- thin, e-collecting tubule

Answer: D



Watch Video Solution

8. Counter-current mechanism helps to maintain a concentration gradient in the medullary interstitium. Presence of such interstitial gradient helps in an easy passage of water from the

A. Vasa recta

B. Henle's loop

C. Collecting tubule

D. DCT

Answer: C



Watch Video Solution

9. Human kidneys can produce urine nearly concentrated than the initial filtrate formed

A. $1/5$ times

B. 10 times

C. 5 times

D. 4 times

Answer: D



Watch Video Solution

10. Reabsorption of useful substances from glomerular filtrate occurs in

- A. Collecting tube
- B. Loop of Henle
- C. Proximal convoluted tubule
- D. Distal convoluted tubule

Answer: C



Watch Video Solution

11. Under normal conditions which one is completely reabsorbed in the renal tubule ?

A. Urea

B. Uric acid

C. Salts

D. Glucose

Answer: D



Watch Video Solution

12. Which of the following is totally reabsorbed in renal tubes ?

A. Na^+ ion

B. K^+ ion

C. H_2O

D. $\text{C}_6\text{H}_{12}\text{O}_6$

Answer: D



Watch Video Solution

13. Reabsorption of water in PCT part of nephron is

A. Passive ,80%

B. active,40%

C. active, 80%

D. passive, 40%

Answer: A



Watch Video Solution

14. Distal convoluted tubule is lined with

A. Cuboidal epithelium

B. Ciliated squamous epithelium

C. Pseudostratified epithelium

D. Columnar epithelium

Answer: A



Watch Video Solution

15. In nephron, water absorption is maximum in

- A. Proximal convoluted tubule
- B. Loop of Henle
- C. Glomerulus
- D. Distal convoluted tubule

Answer: A



16. What is permeable for ascending loop of Henle?

A. Ammonia

B. Glucose

C. Na^+ ion

D. Water

Answer: C



17. Part of nephron involved in active reabsorption of sodium is

A. PCT

B. Ascending limb of Henle's loop

C. Bowman's capsule

D. DCT

Answer: A



Watch Video Solution

18. Main function of loop of Henle is

A. Absorption of water

B. Absorption of sugar

C. Absorption of sodium

D. Secretion of ions

Answer: A



Watch Video Solution

19. If Henle's loop were absent from mammalian nephron which of the following is to be expected

- A. there will be no urine formation
- B. the urine will be more concentrated
- C. the urine will be more dilute
- D. no change

Answer: C



Watch Video Solution

20. Absorption of major part of Na^+ and K^+ ions occurs in

- A. Proximal convoluted tubule
- B. Bowman's capsule
- C. Distal convoluted tubule
- D. Loop of Henle

Answer: A



Watch Video Solution

21. Loop of Henle is connected with

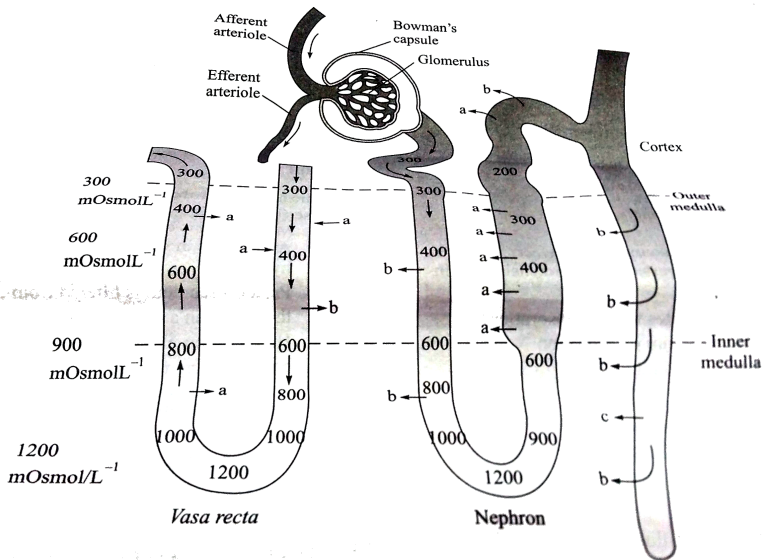
- A. Dilution of urine
- B. Removal of water
- C. Counter current system
- D. Remove salt

Answer: C



Watch Video Solution

22. Â Recognise the figure and find out the correct matching



A. $a - H_2O$, b-Urea , c- NaCl

B. $c - H_2O$, a - Urea , b-NaCl

C. $b-H_2O$, c-Urea , a - NaCl

D. $a - H_2O$, c- Urea , b - NaCl

Answer: C



Watch Video Solution

23. Excretion of dilute urine is due to

A. more secretion of aldosterone

B. less secretion of vasopressin

C. less secretion of glucagons

D. more secretion of insulin

Answer: B



Watch Video Solution

24. We can produce concentrated? Dilute urine. This is facilitated by a special mechanism. Identify the mechanism.

- A. reabsorption from PCT
- B. reabsorption from collecting duct
- C. reabsorption/ secretion in DCT

D. counter current mechanism in henle,s
loop/vasa recta

Answer: D



Watch Video Solution

25. Formation of hypertonic urine is mediated
through

A. having small loop of henle

B. eating salt free diet

C. counter-current system

D. increased waste intake

Answer: C



Watch Video Solution

26. Glucose is mainly absorbed in

A. henle's loop

B. DCT

C. PCT

D. nephron

Answer: C



Watch Video Solution

27. Ethylene is mainly responsible for

A. obligatory reabsorption of water

through Bowman's capsule

B. facultative reabsorption of water from

DCT

C. facultative reabsorption of water from
Henle's loop

D. obligatory reabsorption of water from
PCT

Answer: B



Watch Video Solution

28. Proximal convoluted tubule (PCT) is lined
with

A. cuboidal epithelium with brush border

B. cuboidal epithelium

C. columnar epithelium

D. none of the above

Answer: A



Watch Video Solution

29. Loop of Henle takes part in absorption of

A. potassium

B. glucose

C. water

D. urea

Answer: D



Watch Video Solution

30. Which of the following step in urine formation helps in the maintenance of ionic and acid base balance of body fluids?

A. Tubular secretion

B. Ultrafiltration

C. Reabsorption

D. Both A and B

Answer: A



Watch Video Solution

31. Read the following statements and find out the incorrect statements. A. . During urine formation, the tubular cells secrete

substances like H^+ , K^+ and H_2O , into the filtrate. B. As glomerular filtrate moves down in descending limb of HL it gets concentrated and as concentrated filtrate passes upward in ascending limb of HL it gets diluted

A. a and b

B. b and c

C. c and d

D. a and c

Answer: D



32. What is the osmolarity (in mosmol L^{-1}) in the outer cortex and inner medulla region?

- A. 300 and 900 respectively
- B. 600 and 300 respectively
- C. 1200 and 300 respectively
- D. 300 and 1200 respectively

Answer: D



[Watch Video Solution](#)

33. Which factor helps in maintaining an increasing osmolality towards the inner medullary interstitium?

a. Counter current pattern in vasa recta

b. Counter current pattern in Henle's loop

c. proximity between the Henle's loop and vasa recta

A. a and b

B. a, b and c

C. c only

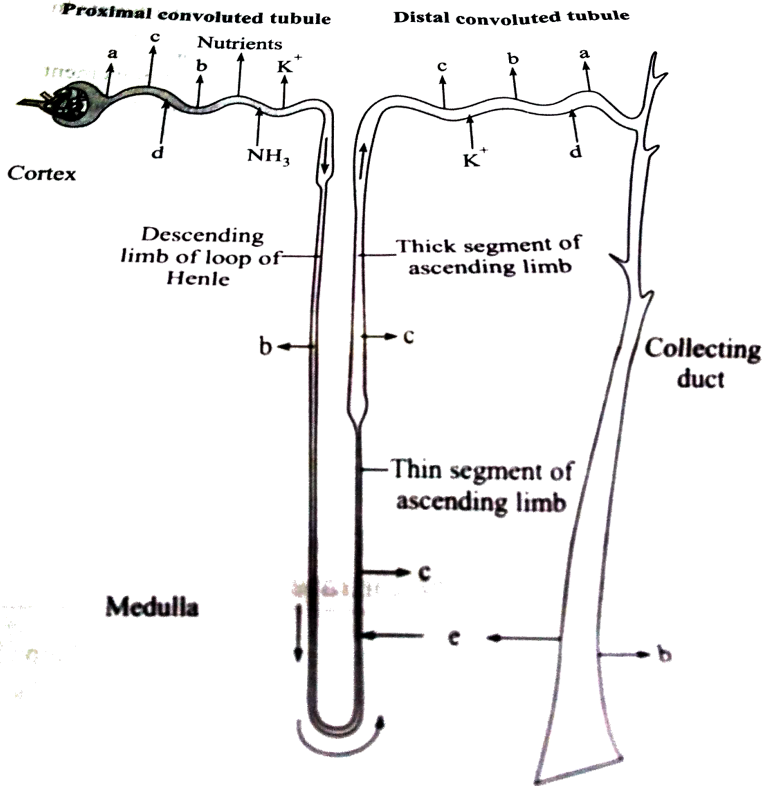
D. a and c

Answer: B



Watch Video Solution

34. Â Recognise the figure and find Out the correct matching



A. $b - H^+$, $d - H_2O$ c- Urea , a-NaCl , e-



B. $c - H^+$, $b - H_2O$, d-Urea , e- NaCl , a-



C. d- H^+ , b - H_2O , e- Urea , c-NaCl , a-



D. a- H^+ , c - H_2O , b-Urea , d-NaCl , e-



Answer: C



Watch Video Solution

35. The osmotic gradient between the cortex and medulla is created by

A. Urea

B. NH_3

C. Sodium chloride

D. Both A and C

Answer: D



Watch Video Solution

36. Fill in the blanks:

a. Ascending limb of Henle's loop ... (1) ... to

water whereas the descending limb is ...(ii)... to it.

b. Reabsorption of water from distal parts of the tubule is facilitated by hormone ...(iii)...

c. Dialysing fluid contain all the constituents as in t] plasma except ...(iv)..

d. A healthy adult human excrete (on an average) ...(v)... of urea/day.

A. Â a-ascending, b-descending, c-collecting tubule, d-thick, e-vasa recta

B. a-descending, b-ascending, c- collecting

tubules, d-thin, e-vasa recta

C. a-ascending, b-descending, c-vasa recta,

d-thick, e-collecting tubule

D. a-ascending, b-descending, c-vasa recta,

d- thin, e-collecting tubule

Answer: D



Watch Video Solution

37. Counter-current mechanism helps to maintain a concentration gradient in the medullary interstitium. Presence of such interstitial gradient helps in an easy passage of water from the

- A. Vasa recta
- B. Henle's loop
- C. Collecting tubule
- D. DCT

Answer: C



Watch Video Solution

38. Human kidneys can produce urine nearly concentrated than the initial filtrate formed

A. $1/5$ times

B. $\hat{\text{A}} 10\text{times}\hat{\text{A}}$

C. $\hat{\text{A}} 5$ times

D. $4\text{times}\hat{\text{A}}$

Answer: D



39. Reabsorption of useful substances from glomerular filtrate occurs in

- A. Collecting tube
- B. Loop of Henle
- C. Proximal convoluted tubule
- D. Distal convoluted tubule

Answer: C



40. Under normal conditions which one is completely reabsorbed in the renal tubule ?

A. Urea

B. Uric acid

C. Salts

D. Glucose

Answer: D



Watch Video Solution

41. Which of the following is totally reabsorbed in renal tubes ?

A. Na^+ ion

B. K^+ ion

C. H_2O

D. $\text{C}_6\text{H}_{12}\text{O}_6$

Answer: D



Watch Video Solution

42. Reabsorption of water in PCT part of nephron is

A. Passive ,80%

B. active,40%

C. active, 80%

D. passive, 40%

Answer: A



Watch Video Solution

43. Distal convoluted tubule is lined with

A. Cuboidal epithelium

B. Ciliated squamous epithelium

C. Pseudostratified epithelium

D. Columnar epithelium

Answer: A



Watch Video Solution

44. In nephron, water absorption is maximum in

A. Proximal convoluted tubule

B. Loop of Henle

C. Glomerulus

D. Distal convoluted tubule

Answer: A



Watch Video Solution

45. What is permeable for ascending loop of Henle ?

A. Ammonia

B. Glucose

C. Na^+ ion

D. Water

Answer: C



Watch Video Solution

46. Part of nephron involved in active reabsorption of sodium is

A. PCT

B. Ascending limb of Henle's loop

C. Bowman's capsule

D. DCT

Answer: A



Watch Video Solution

47. Main function of loop of Henle is

- A. Absorption of water
- B. Absorption of sugar
- C. Absorption of sodium
- D. Secretion of ions

Answer: A



Watch Video Solution

48. If Henle's loop were absent from mammalian nephron which of the following is to be expected

- A. there will be no urine formation
- B. the urine will be more concentrated
- C. the urine will be more dilute
- D. no change

Answer: C



Watch Video Solution

49. Absorption of major part of Na^+ and K^+ ions occurs in

- A. Proximal convoluted tubule
- B. Bowman's capsule
- C. Distal convoluted tubule
- D. Loop of Henle

Answer: A



Watch Video Solution

50. Loop of Henle is connected with

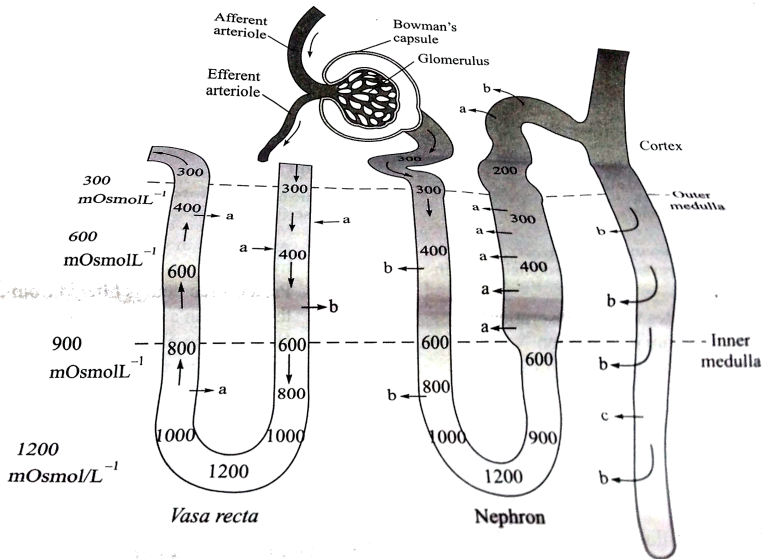
- A. Dilution of urine
- B. Removal of water
- C. Counter current system
- D. Remove salt

Answer: C



Watch Video Solution

51. ^ Recognise the figure and find out the correct matching



A. $a - H_2O$, b-Urea , c- NaCl

B. $c - H_2O$, a - Urea , b-NaCl

C. $b-H_2O$, c-Urea , a - NaCl

D. $a - H_2O$, c- Urea , b - NaCl

Answer: C



Watch Video Solution

52. Excretion of dilute urine is due to

- A. more secretion of aldosterone
- B. less secretion of vasopressin
- C. less secretion of glucagons
- D. more secretion of insulin

Answer: B



Watch Video Solution

53. We can produce concentrated? Dilute urine. This is facilitated by a special mechanism. Identify the mechanism.

- A. reabsorption from PCT
- B. reabsorption from collecting duct
- C. reabsorption/ secretion in DCT

D. counter current mechanism in henle,s
loop/vasa recta

Answer: D



Watch Video Solution

54. Formation of hypertonic urine is mediated
through

A. having small loop of henle

B. eating salt free diet

C. counter-current system

D. increased waste intake

Answer: C



Watch Video Solution

55. Glucose is mainly absorbed in

A. henle's loop

B. DCT

C. PCT

D. nephron

Answer: C



Watch Video Solution

56. Vasopressin is mainly responsible for

A. obligatory reabsorption of water

through Bowman's capsule

B. facultative reabsorption of water from

DCT

C. facultative reabsorption of water from
Henle's loop

D. obligatory reabsorption of water from
PCT

Answer: B



Watch Video Solution

57. Proximal convoluted tubule (PCT) is lined
with

A. cuboidal epithelium with brush border

B. cuboidal epithelium

C. columnar epithelium

D. none of the above

Answer: A



Watch Video Solution

58. Loop of Henle takes part in absorption of

A. potassium

B. glucose

C. water

D. urea

Answer: D



Watch Video Solution

Section A Topicwise Questions Topic 4
Regulation Of Kidney Function

1. The function of the kidneys is efficiently monitored and regulated by

A. neural feedback mechanisms

B. hormonal feedback mechanisms

C. renal feedback mechanisms

D. Both A and B

Answer: B



Watch Video Solution

2. Which of the following statements is correct?

A. ADH-prevents conversion of angiotensinogen in blood to angiotensin

B. Aldosterone-facilitates water reabsorption

C. ANF-enhances sodium reabsorption

D. Renin-causes vasodilation

Answer: B



[Watch Video Solution](#)

3. ANF mechanism, acts as a check on the

A. Renin-angiotensin mechanism

B. Counter-current mechanism

C. JGA mechanism

D. Micturition reflex

Answer: A



[Watch Video Solution](#)

4. JG cells, under low glomerular blood flow release

A. Angiotensin I

B. Angiotensin II

C. Aldosterone

D. Renin

Answer: D



Watch Video Solution

5. Voluntary response to distension of urinary bladder is

- A. Polyurea
- B. Micturition
- C. Diabetes mellitus
- D. Menstruation

Answer: B



Watch Video Solution

6. Vasopressin stimulates reabsorption of water and reduction of urine secretion. Hence vasopressin is otherwise called

A. Synovial fluid

B. Neurotransmitter

C. Antidiuretic hormone

D. Growth regulating substance

Answer: C



Watch Video Solution

7. Match the columns and choose the correct combination.

	Column I		Column II
(i)	Ultrafiltration	(a)	Henle's loop
(ii)	Concentration of urine	(b)	Ureter
(iii)	Transport of urine	(c)	Urinary bladder
(iv)	Storage of urine	(d)	Malpighian corpuscle
		(e)	Proximal convoluted tubule

- A. i-d, ii-a, iii-b, iv-c
- B. i-d, ii-c, iii-b, iv-a
- C. i-d, ii-d, iii-a, iv-b
- D. iv-e, ii-d, iii-a, iv-b

Answer: A



Watch Video Solution

8. Renin is released by

- A. Cortical nephrons
- B. collecting duct
- C. juxtaglomerular apparatus
- D. pelvies

Answer: C



Watch Video Solution

9. The function of the kidneys is efficiently monitored and regulated by

A. neural feedback mechanisms

B. hormonal feedback mechanisms

C. renal feedback mechanisms

D. Both A and B

Answer: B



10. Which of the following statements is correct?

A. ADH-prevents conversion of

angiotensinogen in blood to angiotenis

B. Aldosterone-facilitates water

reabsorption

C. ANF-enhances sodium reabsorption

D. Renin-causes vasodilation

Answer: B



Watch Video Solution

11. ANF mechanism, acts as a check on the

A. Renin-angiotensin mechanism

B. Counter-current mechanism

C. JGA mechanism

D. Micturition reflex

Answer: A



Watch Video Solution

12. JG cells, under low glomerular blood flow release

A. Angiotensin i

B. Angiotensin ii

C. Aldosterone

D. Renin

Answer: D



13. Voluntary response to distension of urinary bladder is

- A. Polyurea
- B. Micturition
- C. Diabetes mellitus
- D. Menstruation

Answer: B



14. Vasopressin stimulates reabsorption of water and reduction of urine secretion. Hence vasopressin is otherwise called

A. Synovial fluid

B. Neurotransmitter

C. Antidiuretic hormone

D. Growth regulating substance

Answer: C



Watch Video Solution

15. Match the columns and choose the correct combination.

	Column I		Column II
(i)	Ultrafiltration	(a)	Henle's loop
(ii)	Concentration of urine	(b)	Ureter
(iii)	Transport of urine	(c)	Urinary bladder
(iv)	Storage of urine	(d)	Malpighian corpuscle
		(e)	Proximal convoluted tubule

A. i-d, ii-a, iii-b, iv-c

B. i-d, ii-c, iii-b, iv-a

C. i-d, ii-d, iii-a, iv-b

D. iv-e, ii-d, iii-a, iv-b

Answer: A



Watch Video Solution

16. Renin is released by

A. Cortical nephrons

B. collecting duct

C. juxtaglomerular apparatus

D. pelvis

Answer: C



Watch Video Solution

**Section A Topicwise Questions Topic 5
Micturition And Role Of Other Organs In
Excretion**

1. Consider the following four statements (i).
(iv) and select the option that correctly identifies the true (T) and false (F) ones.
- (i). Micturition is carried out by a reflex.

(ii). ADH helps in water elimination making the urine hypotonic.

(iii). Protein-free fluid is filtered from blood plasma into the bowman's capsule.

(iv). Glucose is actively reabsorbed in the proximal convoluted tubule.

A. \hat{A} a-T, b-F, c-T, d-T, e-T

B. \hat{A} a-T, b-F, c-T, d-F, e-T

C. a-F, b-T, c-F, d-T, e-F

D. a-T, b-F, c-F, -T, e-T

Answer: A



[Watch Video Solution](#)

2. The pH of human urine is approximately

A. 6.5

B. 7

C. 6

D. 7.5

Answer: C



[Watch Video Solution](#)

3. Match the columns I and II and choose the correct combination from the option given

Column I		Column II	
a.	Ammonotelism	1.	Birds
b.	Bowman's capsule	2.	Water reabsorption
c.	Micturition	3.	Bony fish
d.	Uricotelism	4.	Urinary bladder
e.	ADH	5.	Renal tubule

A. a-2, b-4, c-5, d-3, e-1

B. a-3, b-5, c-4, d-1, e-2

C. a-1, b-5, c-4, d-3, e-2

D. a-3, b-4, c-5, d-1, e-2

Answer: B



Watch Video Solution

4. Fill in the blanks:

a. Ascending limb of Henle's loop ...(1)... to water whereas the descending limb is ...(ii)... to it.

b. Reabsorption of water from distal parts of the tubule is facilitated by hormone ...(iii)...

c. Dialysing fluid contain all the constituents

as in t] plasma except ...(iv)..

d. A healthy adult human excrete (on an average) ...(v)... of urea/day.

A. (i)-permeable, (ii) impermeable, (iii)

aldosterone, (iv) proteins, (v) 12 to 16 mg

B. (i)-impenneable, (ii) penneable, (iii)ADH

(iv)proteins, (v) 25 to 30 mg

C. (i)permeable (ii) impermeable, (iii) ADH

(iv)nitrogenus wastes, (v) 25 to 30

gm

D. (i) impermeable, (ii) , permeable™

(iii), ADH (iv) , nitrogenous wastes, (v)-5 to

30 gm

Answer: D



Watch Video Solution

5. Urine formed by the nephrons is ultimately carried to the urinary bladder where it is stored till a voluntary signal is given by the

A. CNS

B. PNS

C. ANSÂ

D. Endocrine system

Answer: A



Watch Video Solution

6. The stretch receptors are present on the

A. CNS

B. Â Medulla

C. Wall of urinary bladder

D. Wall of the atria of heartÂ

Answer: C



Watch Video Solution

7. The CNS passes on motor message to initiate the ...a... of smooth muscles of the urinary bladder and simultaneousb of the

urethral sphincter causing the release of the urine

A. a-contraction, b- relaxation

B. a-relaxation, b-contraction

C. a-relaxation, b-relaxation

D. a-contraction, b-contraction

Answer: A



Watch Video Solution

8. Our lungs remove large amounts of CO_2 .

The amount is

- A. 18 litres/day
- B. 180 litres/day
- C. 200 ml/minute
- D. 200 ml/day

Answer: C



Watch Video Solution

9. Liver secretes bile containing substances like bilirubin, biliverdin, cholesterol, degraded steroid hormones, vitamins and drugs. Most of these substances ultimately pass out along with

- A. Urine
- B. Digestive wastes
- C. Sweating
- D. Secretion of sebum

Answer: B





Watch Video Solution

10. The primary function of sweat is

- A. To facilitate a cooling effect on body surface
- B. Removal of waste products
- C. Both A and B
- D. None of the above

Answer: A



Watch Video Solution

11. Volume of urine is regulated by

- A. aldosterone
- B. aldosterone and ADH
- C. aldosterone, ADH and testosterone
- D. ADH

Answer: B



Watch Video Solution

12. ADH takes part in

A. water retention in urine

B. Na^+ reabsorption

C. reducing urea formation

D. absorption of water from urine

Answer: D



Watch Video Solution

13. Accessory excretory human organ is

A. skin

B. skin and liver

C. skin and lung

D. skin ,lung, liver and intestine

Answer: D



Watch Video Solution

14. Match the columns

	Column I		Column II
(a)	Uremia	1.	Excess of protein level in urine
(b)	Haematuria	2.	Presence of high ketone bodies in urine
(c)	Ketonuria	3.	Presence of blood cells of urine
(d)	Glycosuria	4.	Presence of glucose in urine
(e)	Proteinuria	5.	Presence of excess urea in blood

A. a-2,b-1, c-3,d-4,e-5

B. a-3,b-5, c-2,d-1,e-4

C. a-5,b-3, c-4,d-2,e-1

D. a-5,b-3, c-2,d-4,e-1

Answer: D



Watch Video Solution

15. Urine is excreted out of the body through

A. pelvis

B. a-3,b-5, c-2,d-1,e-4

C. urinary bladder

D. urethra

Answer: D



Watch Video Solution

16. Glycosuria is the term used for

A. low amount of sugar in urine

B. low amount of fat in urine

C. average amount of carbohydrate in
urine

D. high amount of sugar in urine

Answer: D



Watch Video Solution

17. Condition of concentration of ketone body in urine is

A. turner's syndrome

B. sickle cell anaemia

C. acromegly

D. diabetes mwillitus

Answer: D



Watch Video Solution

18. The average quantity of urea excreted in urine by man per day is

A. 10-15 g

B. 25-30 g

C. 40-50 g

D. 100-500 g

Answer: B



Watch Video Solution

19. Consider the following four statements (i).

(iv) and select the option that correctly identifies the true (T) and false (F) ones.

(i). Micturition is carried out by a reflex.

(ii). ADH helps in water elimination making the urine hypotonic.

(iii). Protein-free fluid is filtered from blood plasma into the bowman's capsule.

(iv). Glucose is actively reabsorbed in the proximal convoluted tubule.

A. a-T, b-F, c-T, d-T, e-T

B. \hat{A} a-T, b-F, c-T, d-F, e-T

C. a-F, b-T, c-F, d-T, e-F

D. a-T, b-F, c-F, -T, e-T

Answer: A



Watch Video Solution

20. The pH of human urine is approximately

A. 6.5

B. 7

C. 6

D. 7.5

Answer: C



Watch Video Solution

21. Match the columns I and II and choose the correct combination from the option given

	Column I		Column II
a.	Ammonotelism	1.	Birds
b.	Bowman's capsule	2.	Water reabsorption
c.	Micturition	3.	Bony fish
d.	Uricotelism	4.	Urinary bladder
e.	ADH	5.	Renal tubule

A. a-2, b-4 ,c-5, d-3, e-1

B. a-3, b-5 ,c-4, d-1, e-2

C. a-1, b-5 ,c-4, d-3, e-2

D. a-3, b-4 ,c-5, d-1, e-2

Answer: B



Watch Video Solution

22. Fill in the blanks:

- a. Ascending limb of Henle's loop ...(1)... to water whereas the descending limb is ...(ii)... to it.
- b. Reabsorption of water from distal parts of the tubule is facilitated by hormone ...(iii)...
- c. Dialysing fluid contain all the constituents as in plasma except ...(iv)..
- d. A healthy adult human excrete (on an average) ...(v)... of urea/day.

A. (i)-permeable, (ii) impermeable, (iii)

aldosterone, (iv) proteins, (v) 12 to 16 mg

B. (i)-impermeable, (ii) permeable, (iii) ADH

(iv) proteins, (v) 25 to 30 mg

C. (i) permeable (ii) impermeable, (iii) ADH

(iv) nitrogenous wastes, (v) 25 to 30

gm

D. (i) impermeable, (ii) , permeable (iii)

(iii), ADH (iv) , nitrogenous wastes, (v) 5 to

30 gm

Answer: D



Watch Video Solution

23. Urine formed by the nephrons is ultimately carried to the urinary bladder where it is stored till a voluntary signal is given by the

A. CNS

B. PNS

C. ANS

D. Endocrine system

Answer: A



Watch Video Solution

24. The stretch receptors are present on the

A. CNS

B. Medulla

C. Wall of urinary bladder

D. Wall of the atria of heart

Answer: C



Watch Video Solution

25. The CNS passes on motor message to initiate the ...a... of smooth muscles of the urinary bladder and simultaneousb of the urethral sphincter causing the release of the urine

A. a-contraction, b- relaxation

B. a-relaxation, b-contraction

C. a-relaxation, b-relaxation

D. a-contraction, b-contraction

Answer: A



Watch Video Solution

26. Our lungs remove large amounts of CO_2 .

The amount is

A. 18 litres/day

B. 180 litres/day

C. 200 ml/minute

D. 200 ml/day

Answer: C



Watch Video Solution

27. Liver secretes bile containing substances like bilirubin, biliverdin, cholesterol, degraded steroid hormones, vitamins and drugs. Most of these substances ultimately pass out along with

A. Urine

B. Digestive wastes

C. Sweating

D. Secretion of sebum

Answer: B



Watch Video Solution

28. The primary function of sweat is

A. To facilitate a cooling effect on body surface

B. Removal of waste products

C. Both A and B

D. None of the above

Answer: A



Watch Video Solution

29. Volume of urine is regulated by

A. aldosterone

B. aldosterone and ADH

C. aldosterone, ADH and testosterone

D. ADH

Answer: B



Watch Video Solution

30. ADH takes part in

A. water retention in urine

B. Na^+ reabsorption

C. reducing urea formation

D. absorption of water from urine

Answer: D



Watch Video Solution

31. Accessory excretory human organ is

A. skin

B. skin and liver

C. skin and lung

D. skin ,lung, liver and intestine

Answer: D



Watch Video Solution

32. Match the columns

	Column I		Column II
(a)	Uremia	1.	Excess of protein level in urine
(b)	Haematuria	2.	Presence of high ketone bodies in urine
(c)	Ketonuria	3.	Presence of blood cells of urine
(d)	Glycosuria	4.	Presence of glucose in urine
(e)	Proteinuria	5.	Presence of excess urea in blood

A. a-2,b-1, c-3,d-4,e-5

B. a-3,b-5, c-2,d-1,e-4

C. a-5,b-3, c-4,d-2,e-1

D. a-5,b-3, c-2,d-4,e-1

Answer: D



Watch Video Solution

33. Urine is excreted out of the body through

A. pelvis

B. a-3,b-5, c-2,d-1,e-4

C. urinary bladder

D. urethra

Answer: D



Watch Video Solution

34. What is glycosuria

A. low amount of sugar in urine

B. low amount of fat in urine

C. average amount of carbohydrate in
urine

D. high amount of sugar in urine

Answer: D



Watch Video Solution

35. Condition of concentration of ketone body in urine is

A. turner's syndrome

B. sickle cell anaemia

C. acromegly

D. diabetes mellitus

Answer: D



Watch Video Solution

36. The average quantity of urea excreted in urine by man per day is

A. 10-15 g

B. 25-30 g

C. 40-50 g

D. 100-500 g

Answer: B



Watch Video Solution

Section A Topicwise Questions Topic 6 Disorder Of The Excretory System

1. What is ultimate method in the correction of acute renal failure

A. haemodialysis

B. kidney transplantation

C. both a and b

D. none of the above

Answer: a



Watch Video Solution

2. A large quantity of one of the following is removed from our body by lung

A. CO_2 only

B. H_2O only

C. CO_2 and H_2O ammonia

D. Ammonia

Answer: A



Watch Video Solution

3. The condition of accumulation of urea in the blood is termed as

A. renal calculi

B. glomerulonephritis

C. uremia

D. ketonuria

Answer: C



Watch Video Solution

4. Match the abnormal condition given in column A with their explanations given in column

B and choose the correct option

Column A		Column B	
a. Glycosuria	i.	Accumulation of uric acid in joints	
b. Renal calculi	ii.	Inflammation in glomeruli	
c. Glomerulo-nephritis	iii.	Mass of crystallised salts within the kidney	
d. Gout	iv.	Presence of glucose in urine	

A. a-i, b-iii, c-ii, d-iv

B. a-iii, b-ii, c-iv, d-i

C. a-iv, b-iii, c-ii, d-i

D. a-iv, b-ii, c-iii, d-i

Answer: C



View Text Solution

5. Dialysing unit (artificial kidney) contains a fluid which is almost same as plasma except that it has

A. high glucose

B. high urea

C. no urea

D. high uric acid

Answer: C



Watch Video Solution

6. Lub sound produced by heart is caused by

A. ventricular systole

B. ventricular diastole

C. atrial diastole

D. atrial systole

Answer: A



Watch Video Solution

7. Increase in frequency of urination is

A. uremia

B. protenuria

C. polyurea

D. glycouria

Answer: C



Watch Video Solution

8. Which one acts as artificial kidney in haemodialysis ?

A. dialysis liquid

B. bubble trap

C. blood pump

D. dialyser

Answer: D



Watch Video Solution

9. Chemical composition of renal calculi, besides uric acid is

- A. bile salts
- B. barium chloride
- C. zinc sulphate
- D. calcium oxalate

Answer: D



Watch Video Solution

10. Haemodialysis helps in the patient having

A. goiter

B. anaemia

C. uremia

D. diabetes

Answer: C



Watch Video Solution

11. A kidney stone is

A. depositions of sand particles

B. precipitation of proteins

C. crystallisation of oxalates

D. blockage of fat

Answer: C



Watch Video Solution

12. In uraemia, artificial kidney is used for removing accumulated waste products like urea by the process called

- A. mituration
- B. Ureotelism
- C. reverse dialysis
- D. haemodialysis

Answer: D



Watch Video Solution

13. Occurrence of excess urea in blood due to kidney failure is

A. urochrome

B. uremia

C. uricotelism

D. ureotelism

Answer: B



Watch Video Solution

14. In diabetes mellitus the patient drink more water as there is urinary loss of

A. salt

B. insulin

C. protien

D. Glucose

Answer: D



Watch Video Solution

15. What will happen if one kidney is removed from the body of a human poisoning

A. death due to poisoning

B. uremia and death

C. stoppage of urination

D. nothing , the person will survive and remain normal

Answer: D



Watch Video Solution

16. Diuresis is the condition in which

A. the excretion of volume of urine increase

B. the excretion of volume of urine
decrease

C. the kidney fail to excrete urine

D. the water balance of the body is
disturbed

Answer: A



Watch Video Solution

17. What is ultimate method in the correction of acute renal failure

- A. haemodialysis
- B. kidney transplantation
- C. both a and b
- D. none of the above

Answer: B



Watch Video Solution

18. A large quantity of one of the following is removed from our body by lungs.

A. CO_2 only

B. H_2O only

C. CO_2 and H_2O ammonia

D. Ammonia

Answer: A



Watch Video Solution

19. The condition of accumulation of urea in the blood is termed as

- A. renal calculi
- B. glomerulonephritis
- C. uremia
- D. ketonuria

Answer: C



Watch Video Solution

20. 

Match the abnormal conditions given in column A with their explanation given in column B and choose the correct options.

A. a-i, b-iii, c-ii, d-iv

B. a-iii, b-ii, c-iv, d-i

C. a-iv, b-iii, c-ii, d-i

D. a-iv, b-ii, c-iii, d-i

Answer: C



Watch Video Solution

21. Dialysing unit (artificial kidney) contains a fluid which is almost same as plasma except that it has

A. high glucose

B. high urea

C. no urea

D. high uric acid

Answer: C



Watch Video Solution

22. Lub sound produced by heart is caused by

A. ventricular systole

B. ventricular diastole

C. atrial diastole

D. atrial systole

Answer: A



Watch Video Solution

23. Increase in frequency of urination is

A. uremia

B. protenuria

C. polyurea

D. glycouria

Answer: C



Watch Video Solution

24. Which one acts as artificial kidney in haemodialysis ?

A. dialysis liquid

B. bubble trap

C. blood pump

D. dialyser

Answer: D



Watch Video Solution

25. Chemical composition of renal calculi, besides uric acid is

- A. bile salts
- B. barium chloride
- C. zinc sulphate
- D. calcium oxalate

Answer: D



Watch Video Solution

26. Haemodialysis helps in the patient having

A. goiter

B. anaemia

C. uremia

D. diabetes

Answer: C



Watch Video Solution

27. Kidney stone is produce due to

A. depostition of sand particles

B. precipitation of proteins

C. crystallisation of oxalates

D. blockage of fat

Answer: C



Watch Video Solution

28. In uraemia, artificial kidney is used for removing accumulated waste products like urea by the process called

- A. miturition
- B. Ureotelism
- C. reverse dialysis
- D. haemodialysis

Answer: D



Watch Video Solution

29. Occurrence of excess urea in blood due to kidney failure is

A. urochrome

B. uremia

C. uricotelism

D. ureotelism

Answer: B



Watch Video Solution

30. In diabetes mellitus the patient drink more water as there is urinary loss of

A. salt

B. insulin

C. protien

D. Glucose

Answer: D



Watch Video Solution

31. What will happen if one kidney is removed from the body of a human poisoning

A. death due to poisoning

B. uremia and death

C. stoppage of urination

D. nothing , the person will survive and remain normal

Answer: D



Watch Video Solution

32. Diuresis is the condition in which

A. the excretion of volume of urine increase

B. the excretion of volume of urine
decrease

C. the kidney fail to excrete urine

D. the water balance of the body is
disturbed

Answer: A



Watch Video Solution

Section B Assertion Reasoning Questions

1. Assertion: Uric acid can be removed with a minimum loss of water.

Reason: Uric acid is least toxic among the nitrogenous wastes.

A. if both assertion and reason are true
and the reason is correct explanation of
the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. If assertion is true but reason is false

D. If both assertion and reason are false.

Answer: A



Watch Video Solution

2. Assertion: Ammonia is generally excreted by diffusion across body surfaces or through gill surfaces (in fish) as ammonium ions.

Reason: Ammonia is readily soluble in water.

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. If assertion is true but reason is false

D. If both assertion and reason are false.

Answer: A



Watch Video Solution

3. Assertion: The epithelial cells of Bowman's capsule called podocytes are arranged in an intricate manner so as to leave some minute space called filtration slits or slit pores

Reason: ultrafiltration is the first step of urine formation

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. If assertion is true but reason is false

D. If both assertion and reason are false.

Answer: B



Watch Video Solution

4. Assertion: PCT, DCT and collecting duct helps in the maintenance of pH and ionic balance of blood by the selective secretion of H^+ and K^+ ions.

Reason: PCT and DCT, both are capable of reabsorbing HCO_3^- ion

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. If assertion is true but reason is false

D. If both assertion and reason are false.

Answer: B



Watch Video Solution

5. Assertion: Nephrons are of two types: cortical and juxtamedullary according to their relative position in the cortex.

Reason, Juxtamedullary nephrons have short loop of Henle while cortical nephrons have long loop of Henle.

A. if both assertion and reason are true
and the reason is correct explanation of
the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. If assertion is true but reason is false

D. If both assertion and reason are false.

Answer: C



Watch Video Solution

6. Assertion: The functioning of the kidney is efficiently monitored by hormonal feedback mechanism involving the hypothalamus, JGA and the heart.Â

Reason: An excessive loss of fluid from the body can activate the osmoreceptors which stimulate the hypothalamus to release ADH from the adenohypophysis. .

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. If assertion is true but reason is false

D. If both assertion and reason are false.

Answer: C



Watch Video Solution

7. Assertion: Sweat glands helps in removal of sterols, hydrocarbons and waxes

Reason: Sebaceous glands eliminate certain substances like NaCl, small amount of urea and lactic through sebum.

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the

assertion

C. If assertion is true but reason is false

D. If both assertion and reason are false.

Answer: D



Watch Video Solution

8. Â Assertion: Sebum provides a protective oily covering for the skin.

Reason: Small amounts of nitrogenous wastes would be eliminated through saliva too.

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. If assertion is true but reason is false

D. If both assertion and reason are false.

Answer: B



Watch Video Solution

9. The size of filtration slits of glomerulus

A. 10 nm

B. 15 nm

C. 20 nm

D. 25 nm.

Answer: D



Watch Video Solution

10. Assertion: Uric acid can be removed with a minimum loss of water.

Reason: Uric acid is least toxic among the nitrogenous wastes.

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. If assertion is true but reason is false

D. If both assertion and reason are false.

Answer: A



Watch Video Solution

11. Assertion: Ammonia is generally excreted by diffusion across body surfaces or through gill surfaces (in fish) as ammonium ions.

Reason: Ammonia is readily soluble in water.

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. If assertion is true but reason is false

D. If both assertion and reason are false.

Answer: A



Watch Video Solution

12. Assertion: The epithelial cells of Bowman's capsule called podocytes are arranged in an intricate manner so as to leave some minutes space called filtration slits or slit pores

Reason: ultrafiltration is the first step of urine formation

A. if both assertion and reason are true
and the reason is correct explanation of
the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. If assertion is true but reason is false

D. If both assertion and reason are false.

Answer: B



Watch Video Solution

13. Assertion: PCT, DCT and collecting duct helps in the maintenance of pH and ionic balance of blood by the selective secretion of H^+ and K^+ ions.

Reason: PCT and DCT, both are capable of reabsorbing HCO_3^- ion

A. if both assertion and reason are true
and the reason is correct explanation of
the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. If assertion is true but reason is false

D. If both assertion and reason are false.

Answer: B



Watch Video Solution

14. Assertion: The two limbs of Henle's loop forms a counter current

Reason: The flow of blood in the two limbs of Henle's loop is in opposite direction.

A. if both assertion and reason are true
and the reason is correct explanation of
the assertion

B. if both assertion and reason are true but
reason is not a correct explanation of the
assertion

C. If assertion is true but reason is false

D. If both assertion and reason are false.

Answer: C



Watch Video Solution

15. Assertion: The functioning of the kidney is efficiently monitored by hormonal feedback mechanism involving the hypothalamus, JGA and the heart.

Reason: An excessive loss of fluid from the

body can activate the osmoreceptors which stimulate the hypothalamus to release ADH from the adenohypophysis. .

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. If assertion is true but reason is false

D. If both assertion and reason are false.

Answer: C



Watch Video Solution

16. Assertion: Sweat glands helps in removal of sterols, hydrocarbons and waxes

Reason: Sebaceous glands eliminate certain substances like NaCl, small amount of urea and lactic through sebum.

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. If assertion is true but reason is false

D. If both assertion and reason are false.

Answer: D



Watch Video Solution

17. Assertion: Sebum provides a protective oily covering for the skin.

Reason: Small amounts of nitrogenous wastes would be eliminated through saliva too.

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the

assertion

C. If assertion is true but reason is false

D. If both assertion and reason are false.

Answer: B



Watch Video Solution

18. The size of filtration slits of glomerulus

A. 10 nm

B. 15 nm

C. 20 nm

D. 25 nm

Answer:



Watch Video Solution

Section D Chapter End Test

1. Arcuate artery is found in

A. kidney

B. lungs

C. skin

D. all of the above

Answer: A



Watch Video Solution

2. Sea gulls excrete excess of NaCl from

A. liver

B. lungs

C. urine

D. nasal gland

Answer: D



Watch Video Solution

3. Marcello Malpighi after whom malpighian corpuscles are named was born in

A. germany

B. australia

C. austria

D. italy

Answer: D



Watch Video Solution

4. A person is undergoing prolonged fasting. His urine would contain abnormal quantities of

A. ketones

B. glucoes

C. amino acids

D. fats

Answer: A



Watch Video Solution

5. Which one of the following groups of *structures* / or *gans* have similar function

- A. typhlosole in earthworm, intestinal villi
in rat and contractile vacuole in amoeba
- B. nephridia in earthworm, malpighian
tubules in cockroach and urinary tubules
in rat
- C. antennae in cockroach , tympanum of
frog and clitellum of earthworm
- D. incisors (proventriculus) of cockroach
and tube feet of starfish

Answer: B



[Watch Video Solution](#)

6. Loop of Henle is connected with

- A. excretory system
- B. nervous system
- C. reproductive system
- D. muscular system

Answer: A



[Watch Video Solution](#)

7. Kidney and ureter develop from

A. endoderm

B. mesoderm

C. ectoderm and mesoderm

D. mesoderm and endoderm

Answer: B



Watch Video Solution

8. Most abundant, harmful and universal waste product of metabolism is

A. Uric acid

B. H_2O

C. CO_2

D. none of the above

Answer: C



Watch Video Solution

9. Which of these is not a ketone body

A. succinic acid

B. acetone

C. acetoacetic acid

D. β -hydroxybutyric acid

Answer: A



Watch Video Solution

10. As compared to blood, human urine is

A. isotonic

B. hypotonic

C. hypertonic

D. none of the above

Answer: C



Watch Video Solution

11. Ureotelic animals are those in which the main nitrogenous waster product is

A. amino acid

B. urea

C. uric acid

D. ammonia

Answer: B



Watch Video Solution

12. Haemodialysis is also called artificial

A. liver

B. lung

C. heart

D. kidney

Answer: D



Watch Video Solution

13. Which one of the following is metabolic waste of protein metabolism

A. urea, ammonia and CO_2

B. urea , ammonia and creatinine

C. urea, ammonia and alanine

D. urea, nitrogen and O_2

Answer: B



Watch Video Solution

14. Urinary bladder is absent in

A. aves

B. reptiles

C. amphibians

D. mammal

Answer: A



Watch Video Solution

15. Mesonephric kidney is found in

A. aves

B. reptiles

C. amphibia

D. mammalia

Answer: C



Watch Video Solution

16. Uric acid is formed from

A. protiens

B. pyrimidines

C. purines

D. Glucose

Answer: C



Watch Video Solution

17. Separation of amino acid into amino and carboxyl group is

or Removal of amino group of amino acid to transform it into keto acid is

A. amination

B. lysis

C. digestion

D. deamination

Answer: D



Watch Video Solution

18. Presence of RBC in urine is called

A. anuria

B. haematuria

C. glycosuria

D. ketonuria

Answer: B



Watch Video Solution

19. Trimethylamine is the excretory product in

A. marine teleosts

B. freshwater fish

C. molluscs

D. amphibians

Answer: A



[Watch Video Solution](#)

20. Ammonia is excretory material in

- A. cartilaginous fishes
- B. fresh water/bony fishes
- C. whale
- D. camel

Answer: B



[Watch Video Solution](#)

21. The process used in separating large particles from smaller ones in a solution is called

A. chromatography

B. dialysis

C. Osmosis

D. tyndallisation

Answer: B



Watch Video Solution

22. Ureotelic animals

- A. lack urease
- B. do not excrete urea
- C. cannot form uric acid
- D. live in water

Answer: C



Watch Video Solution

23. Ducts of Bellini are found in

A. liver

B. intestine

C. medulla oblongata

D. kidney

Answer: D



Watch Video Solution

24. Ammonia is changed to uric acid in the liver of

A. ammonotelic animals

B. uricotelic animals

C. ornithotelic animals

D. ureotelic animals

Answer: B



Watch Video Solution

25. Functional kidney of tadpole in Frog is

- A. pronephros
- B. mesonephros
- C. metanephros
- D. archinephros

Answer: A



Watch Video Solution

26. Kidney of frog is

A. pronephros

B. mesonephros

C. opisthonephros

D. metanephros

Answer: B



Watch Video Solution

27. In Hydra, egestion of undigested food and excretion of nitrogenous wastes occur through

- A. mouth and mouth
- B. mouth and tentacles
- C. body wall and body wall
- D. mouth and body wall

Answer: D



Watch Video Solution

28. Haemodialysis is carried out in case of severe defect in

A. kidney

B. liver

C. lung

D. stomach

Answer: A



Watch Video Solution

29. Excessive thirst leading to increased consumption of water is

A. Polyurea

B. glycaemia

C. polyphagia

D. polydipsia

Answer: D



Watch Video Solution

30. Metanephros kidney occurs in

A. amniotes

B. fishes

C. amphibians

D. invertebrates

Answer: A



Watch Video Solution

31. Urea is disposed off by

A. spleen

B. liver

C. kidney

D. both a and b

Answer: C



Watch Video Solution

32. Characteristic of metanephric kidney is

A. hypotonic urine

B. uric acid formation

C. loop of henle

D. hormone production

Answer: C



Watch Video Solution

33. Concentration of urine in organisms depends upon

A. length of loop of henle

B. PCT

C. DCT

D. intake of water

Answer: A



Watch Video Solution

34. Orinithine cycle is releted to

A. respiration

B. excretion

C. digestion

D. nutrition

Answer: B



Watch Video Solution

35. Aquatic reptiles are

A. ammonotelic animals

B. uricotelic animals

C. ammonotelic in water and uricotelic on
land

D. ureotelic

Answer: C



Watch Video Solution

36. The end product of ornithine cycle is

A. uric acid

B. CO_2

C. ammonia

D. urea

Answer: D



Watch Video Solution

37. Blood which leaves liver and passes towards heart has higher concentration of

A. bile

B. oxygen

C. RBCs

D. urea

Answer: D



38. Concentration of urine is controlled by

A. vasopressin

B. aldosterone

C. insulin

D. adrenaline

Answer: A



39. Which one is not supplied exclusively with involuntary muscles ?

A. iris

B. gland ducts

C. urethra

D. coats of blood vessels

Answer: C



Watch Video Solution

40. Malpighian tubules remove excretory products from

A. kidney

B. haemolymph

C. alimentary canal

D. none of the above

Answer: B



Watch Video Solution

41. Ornithine cycle was discovered by

A. krebs

B. henselits

C. krebs and henselit

D. ornithine

Answer: C



Watch Video Solution

42. Why do we pass more urine during winter and wet seasons ?

- A. increased ADH secretion
- B. increased activity of kidneys
- C. decrease water absorption by nephorns
- D. reduced sweating

Answer: D



Watch Video Solution

43. Length of female urethra is

A. 15cm

B. 10cm

C. 4cm

D. 2cm

Answer: C



Watch Video Solution

44. The two kidneys lie

A. at the level of ovaries

B. at the same level

C. left kidney at a higher level than right

one

D. right kidney is at a higher level than left

one

Answer: C



Watch Video Solution

45. If kidneys fails to reabsorb water, the effect on tissue would

- A. remain unaffected
- B. shrink and shrivel
- C. absorb water from blood plasma
- D. take more O_2 from blood

Answer: B



Watch Video Solution

46. Glomerular filtrate contains glucose in comparison to plasma

A. more secretion of aldosterone

B. same

C. less

D. nil

Answer: C



Watch Video Solution

47. Hydrostatic pressure inside glomerular afferent arteriole is

A. + 65mm

B. + 70mm

C. + 75mm

D. + 80mm

Answer: C



Watch Video Solution

48. In rabbit and humans, the kidney is

A. metanephric

B. mesonephric

C. pronephric

D. holonephric

Answer: A



Watch Video Solution

49. Proximal and distal convoluted tubules are parts of

A. seminiferous

B. nephrons

C. oviduct

D. vas deferens

Answer: B



Watch Video Solution

50. Blood fraction remaining unchanged after circulation through kidney is

A. urea and uric acid

B. urea and proteins

C. urea and glucose

D. glucose and proteins

Answer: D



Watch Video Solution

51. Arcuate artery is found in

A. kidney

B. lungs

C. skin

D. all of the above

Answer: A



Watch Video Solution

52. Sea gulls excrete excess of NaCl from

A. liver

B. lungs

C. urine

D. nasal gland

Answer: D



Watch Video Solution

53. Marcello Malpighi after whom malpighian corpuscles are named was born in

A. germany

B. australia

C. austria

D. italy

Answer: D



Watch Video Solution

54. A person is undergoing prolonged fasting. His urine would contain abnormal quantities of

A. ketones

B. glucoes

C. amino acids

D. fats

Answer: A



Watch Video Solution

55. Which one of the following groups of *structures* / or *gans* have similar function

A. typhlosole in earthworm, intestinal villi in rat and contractile vacuole in amoeba

B. nephridia in earthworm, malpighian tubules in cockroach and urinary tubules in rat

C. antennae in cockroach , tympanum of frog and clitellum of earthworm

D. incisors (proventriculus) of cockroach
and tube feet of starfish

Answer: B



Watch Video Solution

56. Loop of Henle is connected with

A. excretory system

B. nervous system

C. reproductive system

D. muscular system

Answer: A



Watch Video Solution

57. Kidney and ureter develop from

A. endoderm

B. mesoderm

C. ectoderm and mesoderm

D. mesoderm and endoderm

Answer: B



Watch Video Solution

58. Most abundant, harmful and universal waste product of metabolism is

A. Uric acid

B. H_2O

C. CO_2

D. none of the above

Answer: C



Watch Video Solution

59. Which of these is not a ketone body

- A. succinic acid
- B. acetone
- C. acetoacetic acid
- D. β -hydroxybutyric acid

Answer: A



[Watch Video Solution](#)

60. As compared to blood, human urine is

A. isotonic

B. hypotonic

C. hypertonic

D. none of the above

Answer: C



[Watch Video Solution](#)

61. Ureotelic animals are those in which the main nitrogenous waste product is

A. amino acid

B. urea

C. uric acid

D. ammonia

Answer: B



Watch Video Solution

62. Haemodialysis is also called artificial

A. liver

B. lung

C. heart

D. kidney

Answer: D



Watch Video Solution

63. Which one of the following is metabolic waste of protein metabolism

A. urea, ammonia and CO_2

B. urea, ammonia and creatinine

C. urea, ammonia and alanine

D. urea, nitrogen and O_2

Answer: B



Watch Video Solution

64. Urinary bladder is absent in

A. aves

B. reptiles

C. amphibians

D. mammal

Answer: A



Watch Video Solution

65. Mesonephric kidney is found in

A. aves

B. reptiles

C. amphibia

D. mammalia

Answer: C



Watch Video Solution

66. Uric acid is formed from

A. protiens

B. pyrimidines

C. purines

D. Glucose

Answer: C



Watch Video Solution

67. Separation of amino acid into amino and carboxyl group is

or Removal of amino group of amino acid to transform it into keto acid is

A. amination

B. lysis

C. digestion

D. deamination

Answer: D



Watch Video Solution

68. Presence of RBC in urine is called

A. anuria

B. haematuria

C. glycosuria

D. ketonuria

Answer: B



Watch Video Solution

69. Trimethylamine is the excretory product in

A. marine teleosts

B. freshwater fish

C. molluscs

D. amphibians

Answer: A



Watch Video Solution

70. Ammonia is excretory material in

A. cartilaginous fishes

B. fresh water/bony fishes

C. whale

D. camel

Answer: B



Watch Video Solution

71. The process used in separating large particles from smaller ones in a solution is called

A. chromatography

B. dialysis

C. Osmosis

D. tyndallisation

Answer: B



Watch Video Solution

72. Ureotelic animals

A. lack urease

B. do not excrete urea

C. cannot form uric acid

D. liver in water

Answer: C



Watch Video Solution

73. Ducts of Bellini are found in

A. liver

B. intestine

C. medulla oblongata

D. kidney

Answer: D



Watch Video Solution

74. Ammonia is changed to uric acid in the liver of

- A. ammonotelic animals
- B. uricotelic animals
- C. ornithotelic animals
- D. ureotelic animals

Answer: B



Watch Video Solution

75. Functional kidney of tadpole in Frog is

- A. pronephros
- B. mesonephros
- C. metanephros
- D. archinephros

Answer: A



[Watch Video Solution](#)

76. Kidney of frog is

- A. pronephros
- B. mesonephros
- C. opisthonephros
- D. metanephros

Answer: B



[Watch Video Solution](#)

77. In Hydra, egestion of undigested food and excretion of nitrogenous wastes occur through

- A. mouth and mouth
- B. mouth and tentacles
- C. body wall and body wall
- D. mouth and body wall

Answer: D



Watch Video Solution

78. Haemodialysis is carried out in case of severe defect in

A. kidney

B. liver

C. lung

D. stomach

Answer: A



Watch Video Solution

79. Excessive thirst leading to increased consumption of water is

A. Polyurea

B. glycaemia

C. polyphagia

D. polydipsia

Answer: D



Watch Video Solution

80. Metanephros kidney occurs in

A. amniotes

B. fishes

C. amphibians

D. invertebrates

Answer: A



Watch Video Solution

81. Urea is disposed off by

A. spleen

B. liver

C. kidney

D. both a and b

Answer: C



Watch Video Solution

82. Characteristic of metanephric kidney is

A. hypotonic urine

B. uric acid formation

C. loop of henle

D. hormone production

Answer: C



Watch Video Solution

83. Concentration of urine in organisms depends upon

A. length of loop of henle

B. PCT

C. DCT

D. intake of water

Answer: A



Watch Video Solution

84. Orinithine cycle is related to

A. respiration

B. excretion

C. digestion

D. nutrition

Answer: B



Watch Video Solution

85. Aquatic reptiles are

A. ammonotelic animals

B. uricotelic animals

C. ammonotelic in water and uricotelic on
land

D. ureotelic

Answer: C



Watch Video Solution

86. The end product of ornithine cycle is

A. uric acid

B. CO_2

C. ammonia

D. urea

Answer: D



Watch Video Solution

87. Blood which leaves liver and passes towards heart has higher concentration of

A. bile

B. oxygen

C. RBCs

D. urea

Answer: D



Watch Video Solution

88. Concentration of urine is controlled by

A. vasopressin

B. aldosterone

C. insulin

D. adrenaline

Answer: A



Watch Video Solution

89. Which one is not supplied exclusively with involuntary muscles ?

A. iris

B. gland ducts

C. urethra

D. coats of blood vessels

Answer: C



Watch Video Solution

90. Malpighian tubules remove excretory products from

A. kidney

B. haemolymph

C. alimentary canal

D. none of the above

Answer: B



Watch Video Solution

91. Ornithine cycle was discovered by

A. krebs

B. henselits

C. krebs and henselit

D. ornithine

Answer: C



Watch Video Solution

92. Why do we pass more urine during winter and wet seasons ?

- A. increased ADH secretion
- B. increased activity of kidneys
- C. decrease water absorption by nephorns
- D. reduced sweating

Answer: D



Watch Video Solution

93. Length of female urethra is

A. 15cm

B. 10cm

C. 4cm

D. 2cm

Answer: C



Watch Video Solution

94. The two kidneys lie

A. at the level of ovaries

B. at the same level

C. left kidney at a higher level than right
one

D. right kidney is at a higher level than left
one

Answer: C



Watch Video Solution

95. If kidneys fails to reabsorb water, the effect on tissue would

- A. remain unaffected
- B. shrink and shrivel
- C. absorb water from blood plasma
- D. take more O_2 from blood

Answer: B



Watch Video Solution

96. Glomerular filtrate contains glucose in comparison to plasma

- A. more secretion of aldosterone
- B. same
- C. less
- D. nil

Answer: C



Watch Video Solution

97. Hydrostatic pressure inside glomerular afferent arteriole is

A. + 65mm

B. + 70mm

C. + 75mm

D. + 80mm

Answer: C



Watch Video Solution

98. In rabbit and humans, the kidney is

A. metanephric

B. mesonephric

C. pronephric

D. holonephric

Answer: A



Watch Video Solution

99. Proximal and distal convoluted tubules are parts of

A. seminiferous

B. nephrons

C. oviduct

D. vas deferens

Answer: B



100. Blood fraction remaining unchanged after circulation through kidney is

- A. urea and uric acid
- B. urea and proteins
- C. urea and glucose
- D. glucose and proteins

Answer: D



Others

1. The longest loop of Henle is found in

- A. Kangaroo Rat
- B. Rhesus Monkey
- C. Opossum
- D. Rabbit

Answer: A



Watch Video Solution

2. Excretory product of spider is

A. Ammonia

B. Uric acid

C. Guanine

D. All of the above

Answer: C



Watch Video Solution

3. A person on long hunger strike and surviving only on water will have

A. Less amino acids in urine

B. More glucose in blood

C. Less urea in urine

D. More sodium in urine

Answer: C



Watch Video Solution

4. Which one is component of ornithine cycle

A. Ornithine, citrulline and alanine

B. Ornithine, citrulline and arginine

C. Amino acids are not used

D. Ornithine, citrulline and fumaric acid

Answer: B



Watch Video Solution

5. When a litre of water is introduced in human blood

A. BMR decreases

B. RBCs collapse and urine production increase

C. BMR increase

D. RBCs collapse and urine production decrease

Answer: B



Watch Video Solution

6. The size of filtration slits of glomerulus

A. $\hat{\text{A}}$ 25 nm

B. 20 nm

C. 15 nm

D. 10 nm $\hat{\text{A}}$

Answer: A



Watch Video Solution

7. What will happen if the stretch receptors of the urinary bladder wall are totally removed

A. There will be no micturition

B. Urine will not collect in bladder

C. micturition will continue

D. urine will continue to collect normally in bladder

Answer: A



Watch Video Solution

8. Which is wrongly matched ?

A. DCT-Absorption of glucose

B. Bowman's capsule Glomerular filtration

C. Henle's loop-concentration of urine

D. PCT-Absorption of Na^+ and K^+ ions

Answer: A



Watch Video Solution

9. Maintenance of body potassium level is primarily by tubular

A. Absorption in PCT

B. Secretion in DCT

C. Absorption in DCT

D. Secretion in PCT

Answer: B



Watch Video Solution

10. Which one of the following organisms is correctly matched with its excretory organs?

A. Cockroach-Malpighian tubules and enteric caeca

B. Earthworm-Pharyngeal, integumentary and septa! nephridia

C. Frog-Kidneys, skin and buccal epithelium

D. Humans-Kidneys, sebaceous glands and tear glands.

Answer: B



Watch Video Solution

11. Which one of the following statements in regard to the excretion by the human kidneys is correct?

A. Distal convoluted tubule is incapable of reabsorbing HCO_3

B. Nearly 99% of glomerular filtrate is reabsorbed by renal tubules

C. Ascending limb of loop of Henle is impermeable to electrolytes

D. Descending limb of loop of Henle is impermeable to water

Answer: B



Watch Video Solution

12. Consider the following four statements (i-iv) regarding kidney transplant and select the two correct ones out of these

(i) Even if a kidney transplant is proper the recipient may need to take immunosuppressants for a long time

(ii) The cell-mediated immune response is responsible for the graft rejection

(iii) The B-lymphocytes are responsible for rejection of the graft

(iv) The acceptance or rejection of a kidney transplant depends on specific interferons

The correct statements are

A. c and d

B. a and c

C. a and b

D. b and c

Answer: C



Watch Video Solution

13. The principal nitrogenous excretory compound in humans is synthesised

A. in kidney as well as eliminated by kidney

B. in liver and also eliminated by the same
through bile

C. in the liver but eliminated mostly
through kidneys

D. In kidneys but eliminated mostly
through liver

Answer: C



Watch Video Solution

14. A large quantity of fluid is filtered everyday by nephrons in the kidneys but only about 1% of it excreted as urine. The remaining 99% of the filtrate

A. gets collected in renal pelvis

B. is lost as sweat

C. is absorbed into blood

D. is stored in urinary bladder

Answer: C



Watch Video Solution

15. Haematuria is the disorder involving

- A. RBCs in urine
- B. WBCs in urine
- C. Both A and B
- D. none of the above

Answer: C



Watch Video Solution

16. Ducts of Bellini open in

A. minor calyx

B. major calyx

C. renal pyramiad

D. renal sinus

Answer: C



Watch Video Solution

17. Angiotensinogen is converted into angiotensin by

A. renin

B. ADH

C. ANF

D. aldosterone

Answer: a



Watch Video Solution

18. "Columns of Bertini" in the kidney of mammals are formed as the extension of

- A. cortex into medulla
- B. medulla into cortex
- C. renal pelvis into renal sinus
- D. renal capsule into cortex

Answer: A



Watch Video Solution

19. Glucose and amino acids are reabsorbed in

A. proximal tubule

B. distal tubule

C. collecting duct

D. loop of henle

Answer: A



Watch Video Solution

20. ADH deficiency shows the following condition

A. polydipsia

B. polyuria

C. glucosuria

D. both a and b

Answer: D



Watch Video Solution

21. During summer season, which hormone concentration is maintained at high level

- A. insulin
- B. vasopressin
- C. oxytocin
- D. corticoid

Answer: B



Watch Video Solution

22. Which is correct

A. distal convoluted tubule -reabsorption
of K^+ ions

B. afferent arteriole -carries blood away
from glomerulus

C. podocytes - create minute spaces (slit
pores) for filtration

D. Henle's loop - most reabsorption of
major substance

Answer: C



Watch Video Solution

23. Which is correct?

A. an increase in glomerular blood flow stimulates formation of angiotensin II .

B. during summer, when body loses a lot of water by evaporation , the release of ADH is suppressed.

C. when someone drinks a lot of water, ADH release is suppressed

D. exposure to cold temperature ADH release.

Answer: C



Watch Video Solution

24. The maximum amount of electrolytes and water (70-80 per cent) from the glomerular

filtrate is reabsorbed in which part of the nephron?

A. PCT

B. descending limb of henle's loop

C. ascending limb of henle's loop

D. DCT

Answer: A



Watch Video Solution

25. Ketone bodies consist of

A. nicotinic acid, folic acid and ascorbic acid

B. acetone, beta hydroxybutyryl CoA and
acetoacetic acid

C. acetoacetic acid, acetone and beta
hydroxybutyric acid

D. acetic acid, acetone and beta
hydroxybutyric acid

Answer: C



Watch Video Solution

26. Which of the following glands does not help in excretion

A. liver

B. sweat gland

C. Both A and B

D. pancreas

Answer: D



Watch Video Solution

27. A fall in glomerular filtration rate (GFR) activates

A. juxtaglomerular cells to release rennin

B. adrenal cortex to release aldosterone

C. posterior pituitary to release vasopressin

D. adrenal medulla to release adrenaline

Answer: C



Watch Video Solution

28. What is common between humans and adult Frog

- A. internal fertilization
- B. nucleated RBCs
- C. four chambered heart
- D. ureotelic excretion

Answer: D



Watch Video Solution

29. Kidneys perform all the functions except

A. filtration of blood

B. regulation of B.P.

C. secretion of antibodies

D. regulation of pH of body fluids

Answer: C



Watch Video Solution

30. Which is correct in normal humans

A. pH of urine is around 8

B. 20-30 mg of urea is excreted per day

C. ketone bodies in urine indicated
diabetes mellitus

D. glycosuria is treated with hemodialysis

Answer: C



Watch Video Solution

31. Pressure which favours filtration and one which opposes filtration of blood are and respectively

A. capsular hydrostatic pressure and glomerular osmotic pressure

B. glomerular hydrostatic pressure and glomerular osmotic pressure

C. glomerular osmotic pressure and glomerular hydrostatic pressure

D. glomerular osmotic pressure and
arterial pressure

Answer: B



Watch Video Solution

32. Which of the following causes an increase in sodium reabsorption in the distal convoluted tubule

A. decrease in antidiuretic hormone levels

B. increase in aldosterone levels

C. increase in antidiuretic hormone levels

D. decrease in aldosterone levels

Answer: B



Watch Video Solution

33. Diabetes insipidus is due to

A. insulin

B. glucagon

C. renin

D. ADH

Answer: D



Watch Video Solution

34. Recation of ornithine cycle occur in

A. liver to produce area

B. kidney to produce urine

C. liver to produce ammonia

D. kidney to from urea

Answer: A



Watch Video Solution

35. Angiotensin-II stimulates

A. vasoconstriction

B. vasodilation

C. the secretion of ADH

D. adrenal cortex of release glucocorticoids

Answer: A



Watch Video Solution

36. Human urine is usually acidic because

A. excreted plasma proteins are acidic

B. potassium and sodium exchange
generates acidity

C. hydrogen ions are actively secreted into
the filtrate

D. the sodium transporter exchanges one hydrogen ion for each sodium ion, in peritubular capillaries

Answer: C



Watch Video Solution

37. Which is not a zymogen

A. trypsinogen

B. pepsinogen

C. angiotensin-II

D. procollagenase

Answer: C



Watch Video Solution

38. Which one of the following blood vessels in mammals would normally carry the largest amount of urea

A. hepatic vein

B. hepatic portal vein

C. renal vein

D. dorsal aorta

Answer: A



Watch Video Solution

39. Part of nephron involved in active reabsorption of sodium is

A. Bowman's capsule

B. descending limb of henle's loop

C. Distal convoluted tubule

D. proximal convoluted tubule

Answer: D



Watch Video Solution

40. The posterior pituitary gland is not a 'true' endocrine gland because

A. it is under the regulation of hypothalamus

B. it secretes enzymes

C. it is provided with a duct

D. it only stores and release hormones

Answer: D



Watch Video Solution

41. A decrease in blood pressure / volume will not cause the release of

A. atrial natriuretic factor

B. aldosterone

C. ADH

D. Renin

Answer: A



Watch Video Solution

42. Which of the following statements is correct?

A. the descending limb of loop of henle is impermeable to water

B. the ascending limb of loop of henle is permeable to water

C. the descending limb of loop is permeable to electrolytes

D. the ascending limb of loop henle is impermeable to water

Answer: D



Watch Video Solution

43. Match the items given in column I with those in column ii and select the correct option given below

Column I

- a. *Glycosuria*
- b. Gout
- c. Renal calculi
- d. Glomerular nephritis

Column II

- i. Accumulation of uric acid in joints
- ii. Mass of crystallised salts within the kidney
- iii. Inflammation in glomeruli
- iv. Presence of glucose in urine

- A. a b c d
(A) ii iii iv i

- B. (B)
- | | | | |
|---|----|-----|----|
| a | b | c | d |
| i | ii | iii | iv |
- C. (C)
- | | | | |
|----|-----|---|----|
| a | b | c | d |
| ii | iii | i | iv |
- D. (D)
- | | | | |
|-----|---|----|----|
| a | b | c | d |
| iii | i | ii | iv |

Answer: D



Watch Video Solution

44. Match the items given in column I with those in column ii and select the correct

option given below

Column I (Function)	Column II (Part of Excretory System)
a. Ultrafiltration	i. Henle's loop
b. Concentration of urine	ii. Ureter
c. Transport of urine	iii. Urinary bladder
d. Storage of urine	iv. Malpighian corpuscle
	v. Proximal convoluted tubule

A. (A) a b c d
iv v ii iii

B. (B) a b c d
iv i ii iii

C. (C) a b c d
v iv i ii

D. (D) a b c d
v iv i ii

Answer: B



Watch Video Solution

45. A person passes much urine and drinks much water but his blood glucose level is normal. This condition may be the result of

A. a reduction in insulin secretion from pancreas

B. a reduction in vasopressin secretion from posterior pituitary

C. a fall in the glucose concentration in urine

C. (C) Total blood volume 5-6 litres

D. ESR in Wintrobe method " " 9-15 mm in
males and 20-34 mm in females

Answer: C



Watch Video Solution

47. In which of the following minimum content of urea is present?

A. hepatic portal vein

B. portal vein

C. renal vein

D. vena cava

Answer: C



Watch Video Solution

48. Duct of Bellini is connected with

A. filtration of urine

B. purification of urine

C. conduction of urine

D. all the above

Answer: C



Watch Video Solution

49. Which one of the following statements in regard to the excretion by the human kidneys is correct?

A. ascending limb of loop of henle is impermeable to electrolytes

B. descending limb of loop of henle is impermeable to water

C. distal convoluted tubule is incapable of reabsorbing HCO_3^-

D. nearly 99 percent of the glomerular filtrate is reabsorbed by the tubules

Answer: D



Watch Video Solution

50. Part of nephron impermeable to salt is

- A. Proximal convoluted tubule
- B. distal convoluted tubule
- C. Ascending limb of loop of Henle
- D. descending limb of loop of henle

Answer: C



Watch Video Solution

51. Which of the following waste products is not excreted in Grasshopper but is used in other metabolic activities

A. carbon dioxide

B. water

C. uric acid

D. faeces

Answer: B



Watch Video Solution

52. In Ornithine cycle which one pair of the following wastes is removed from the blood?

- A. urea and urine
- B. ammonia and urine
- C. CO_2 and ammonia
- D. CO_2 and urea

Answer: C



Watch Video Solution

53. Assertion : Diabetes insipidus is marked by excessive urination and too much thirst for water .

Reason : Anti-diuretic hormone (ADH) is secreted by the posterior lobe of pituitary gland .

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the

assertion

C. if the assertion is true but reason is false

D. if both the assertion and reason are

false

Answer: B



Watch Video Solution

54. Assertion : Secreting hypotonic urine is effective in reducing urinary loss of water .

Reason : Hypotonic urine is more

concentrated and higher in osmotic pressure than the blood .

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. if the assertion is true but reason is false

D. if both the assertion and reason are false

Answer: D



Watch Video Solution

55. Assertion: Aldosterone is a steroid hormone and is important in the control of sodium and potassium ion concentration in mammals.

Reason: It upgrades sodium ion concentration

in the ECF by promoting reabsorption of sodium ions from renal tubules and excretion of potassium ions in urine

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. if the assertion is true but reason is false

D. if both the assertion and reason are false

Answer: A



Watch Video Solution

56. Assertion: Ultrafiltration takes place in presence of effective filtration pressure.

Reason: In ultrafiltration process, blood is filtered in Bowman's capsule, filtered fluid contain protein and blood corpuscles also

A. if both assertion and reason are true
and the reason is correct explanation of
the assertion

B. if both assertion and reason are true but
reason is not a correct explanation of the
assertion

C. if the assertion is true but reason is false

D. if both the assertion and reason are
false

Answer: C



Watch Video Solution

57. Assertion: The person with diabetes insipidus feels thirsty.

Reason: A person with diabetes insipidus suffers from excess secretion of vasopressin.

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. if the assertion is true but reason is false

D. if both the assertion and reason are false

Answer: C



Watch Video Solution

58. Assertion: Failure of secretion of hormone vasopressin causes diabetes mellitus in the patient. Reason: Vasopressin increases the volume of urine by increasing the reabsorption of water from the urine.

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the

assertion

C. if the assertion is true but reason is false

D. if both the assertion and reason are

false

Answer: D



Watch Video Solution

59. Assertion: in vertebrates, the liver is also referred as an accessory excretory organ

Reason: liver helps kidneys in the secretion of urine

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. if the assertion is true but reason is false

D. if both the assertion and reason are false

Answer: C



Watch Video Solution

60. Assertion: arthritis or inflammation of a joint makes the joint painful

Reason: some toxic substances are deposited at the joint

A. if both assertion and reason are true
and the reason is correct explanation of
the assertion

B. if both assertion and reason are true but
reason is not a correct explanation of the
assertion

C. if the assertion is true but reason is false

D. if both the assertion and reason are
false

Answer: C



Watch Video Solution

61. Assertion: main constituent of human urine is ammonia

Reason: if human urine is allowed to stand for some time, it smells strongly of ammonia .

A. if both assertion and reason are true and the reason is correct explanation of the assertion

- B. if both assertion and reason are true but reason is not a correct explanation of the assertion
- C. if the assertion is true but reason is false
- D. If the assertion is false but reason are false .

Answer: D



Watch Video Solution

62. Assertion:hemodialysis can save and prolong the life of uremic patients

Reason: waste products like urea can be removed from the blood by the process of hemodialysis.

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the

assertion

C. if the assertion is true but reason is false

D. if both the assertion and reason are

false

Answer: A



Watch Video Solution

63. Assertion : ADH and RAAS work in response to low blood volume and blood pressure

Reason : ANF works in response to high blood volume and blood pressure.

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. if the assertion is true but reason is false

D. if both the assertion and reason are
false

Answer: B



Watch Video Solution

64. The longest loop of Henle is found in

- A. Kangaroo Rat
- B. Rhesus Monkey
- C. Opossum

D. Rabbit

Answer: A



Watch Video Solution

65. Excretory product of spider is

A. Ammonia

B. Uric acid

C. Guanine

D. All of the above

Answer: C



Watch Video Solution

66. A person on long hunger strike and surviving only on water will have

- A. $\hat{\text{A}}$ Less amino acids in urine $\hat{\text{A}}$
- B. More glucose in blood
- C. Less urea in urine $\hat{\text{A}}$
- D. More sodium in urine $\hat{\text{A}}$

Answer: C



Watch Video Solution

67. Which one is component of ornithine cycle

- A. Ornithine, citrulline and alanine
- B. Ornithine, citrulline and arginine
- C. Amino acids are not used
- D. Ornithine, citrulline and fumaric acid

Answer: B



Watch Video Solution

68. When a litre of water is introduced in human blood

A. BMR decreases

B. RBCs collapse and urine production increase

C. BMR increase

D. RBCs collapse and urine production decrease

Answer: B



Watch Video Solution

69. The size of filtration slits of glomerulus

A. $\hat{\text{A}}$ 25 nm

B. 20 nm

C. 15 nm

D. 10 nm $\hat{\text{A}}$

Answer: A



Watch Video Solution

70. What will happen if the stretch receptors of the urinary bladder wall are totally removed

- A. There will be no micturition
- B. Urine will not collect in in bladder
- C. micturition will continue
- D. urine will continue to collect normally in bladder

Answer: A



Watch Video Solution

71. Which is wrongly matched ?

A. DCT-Absorption of glucose

B. Bowman's capsul Glomerular filtration

C. Henle's loop-concentration of urine

D. PCT-Absorption of Na^+ and K^+ ions

Answer: A



Watch Video Solution

72. Maintenance of body potassium level is primarily by tubular

- A. Absorption in PCT
- B. Secretion in DCT
- C. Absorption in DCT
- D. Secretion in PCT

Answer: B



Watch Video Solution

73. Which one of the following organisms is correctly matched with its excretory organs?

A. Cockroach-Malpighian tubules and

enteric caeca

B. Earthworm-Pharyngeal, integumentary

and septa! nephridia

C. Frog-Kidneys, skin and buccal epithelium

D. Humans-Kidneys, sebaceous glands and tear glands.

Answer: B



Watch Video Solution

74. Which one of the following statements in regard to the excretion by the human kidneys is correct?

- A. Distal convoluted tubule is incapable of reabsorbing HCO_3
- B. Nearly 99% of glomerular filtrate is reabsorbed by renal tubules
- C. Ascending limb of loop of Henle is impermeable to electrolytes
- D. Descending limb of loop of Henle is impermeable to water

Answer: B



Watch Video Solution

75. Consider the following four statements (i-iv) regarding kidney transplant and select the two correct ones out of these

(i) Even if a kidney transplant is proper the recipient may need to take immunosuppressants for a long time

(ii) The cell-mediated immune response is responsible for the graft rejection

(iii) The B-lymphocytes are responsible for rejection of the graft

(iv) The acceptance or rejection of a kidney

transplant depends on specific interferons

The correct statements are

A. c and d

B. a and c

C. a and b

D. b and c

Answer: C



Watch Video Solution

76. The principal nitrogenous excretory compound in humans is synthesized

A. in kidney as well as eliminated by kidney

B. in liver and also eliminated by the same
through bile

C. in the liver but eliminated mostly
through kidneys

D. In kidneys but eliminated mostly
through liver

Answer: C



Watch Video Solution

77. A large quantity of fluid is filtered everyday by nephrons in the kidneys but only about 1% of it excreted as urine. The remaining 99% of the filtrate

A. gets collected in renal pelvis

B. is lost as sweat

C. is absorbed into blood

D. is stored in urinary bladder

Answer: C



Watch Video Solution

78. Haematuria is the disorder involving

A. RBCs in urine

B. WBCs in urine

C. Both A and B

D. none of the above

Answer: C



Watch Video Solution

79. Ducts of Bellini open in

- A. minor calyx
- B. major calyx
- C. renal pyramiad
- D. renal sinus

Answer: C



Watch Video Solution

80. Angiotensinogen is converted into angiotensin by

A. renin

B. ADH

C. ANF

D. aldosterone

Answer: C



81. "Columns of Bertini" in the kidney of mammals are formed as the extension of

- A. cortex into medulla
- B. medulla into cortex
- C. renal pelvis into renal sinus
- D. renal capsule into cortex

Answer: A



82. Glucose and amino acids are reabsorbed in

A. proximal tubule

B. distal tubule

C. collecting duct

D. loop of henle

Answer: A



Watch Video Solution

83. ADH deficiency shows the following condition

A. polydipsia

B. polyuria

C. glucosuria

D. both a and b

Answer: D



Watch Video Solution

84. During summer season, which hormone concentration is maintained at high level

- A. insulin
- B. vasopressin
- C. oxytocin
- D. corticoid

Answer: B



Watch Video Solution

85. Which is correct?

A. distal convoluted tubule -reabsorption
of K^+ ions

B. afferent arteriole -carries blood away
from glomeruls

C. podocytes - create mintue spaces (slit
pores) for filtration

D. henel's loop - most reabsorption of
major substance

Answer: C



View Text Solution

86. Which is correct?

A. an increase in glomerular blood flow stimulates formation of angiotensin II .

B. during summer, when body loses a lot of water by evaporation , the release of ADH is suppressed.

C. when someone drinks a lot of water, ADH release is suppressed

D. exposure to cold temperature ADH release.

Answer: C



Watch Video Solution

87. The maximum amount of electrolytes and water (70-80 per cent) from the glomerular

filtrate is reabsorbed in which part of the nephron?

A. PCT

B. descending limb of henle's loop

C. ascending lomb of henle's loop

D. DCT

Answer: A



Watch Video Solution

88. Ketone bodies consist of

A. nicotinic acid, folic acid and ascorbic acid

B. acetone, beta hydroxybutyryl CoA and
acetoacetic acid

C. acetoacetic acid, acetone and beta
hydroxybutyric acid

D. acetic acid, acetone and beta
hydroxybutyric acid

Answer: C



[Watch Video Solution](#)

89. Which does help in excretion?

A. liver

B. sweat gland

C. Both A and B

D. pancreas

Answer: D



[Watch Video Solution](#)

90. A fall in glomerular filtration rate (GFR) activates

A. juxtaglomerular cells to release rennin

B. adrenal cortex to release aldosterone

C. posterior pituitary to release vasopressin

D. adrenal medulla to release adrenaline

Answer: C



Watch Video Solution

91. What is common between humans and adult Frog

- A. internal fertilization
- B. nucleated RBCs
- C. four chambered heart
- D. ureotelic excretion

Answer: D



Watch Video Solution

92. Kidneys perform all the functions except

A. filtration of blood

B. regulation of B.P.

C. secretion of antibodies

D. regulation of pH of body fluids

Answer: C



Watch Video Solution

93. Which is correct in normal humans

A. pH of urine is around 8

B. 20-30 mg of urea is excreted per day

C. ketone bodies in urine indicated
diabetes mellitus

D. glycosuria is treated with hemodialysis

Answer: C



Watch Video Solution

94. Pressure which favours filtration and one which opposes filtration of blood are and respectively

A. capsular hydrostatic pressure and glomerular osmotic pressure

B. glomerular hydrostatic pressure and glomerular osmotic pressure

C. glomerular osmotic pressure and glomerular hydrostatic pressure

D. glomerular osmotic pressure and
arterial pressure

Answer: B



Watch Video Solution

95. Which of the following causes an increase in sodium reabsorption in the distal convoluted tubule

A. decrease in antidiuretic hormone levels

B. increase in aldosterone levels

C. increase in antidiuretic hormone levels

D. decrease in aldosterone levels

Answer: B



Watch Video Solution

96. Diabetes insipidus is due to

A. insulin

B. glucagon

C. renin

D. ADH

Answer: D



Watch Video Solution

97. Recation of ornithine cycle occur in

A. liver to produce area

B. kidney to produce urine

C. liver to produce ammonia

D. kidney to from urea

Answer: A



Watch Video Solution

98. Angiotensin-II stimulates

A. vasoconstriction

B. vasodilation

C. the secretion of ADH

D. adrenal cortex of release glucocorticoids

Answer: A



Watch Video Solution

99. Human urine is usually acidic because

A. excreted plasma proteins are acidic

B. potassium and sodium exchange
generates acidity

C. hydrogen ions are actively secreted into
the filtrate

D. the sodium transporter exchanges one hydrogen ion for each sodium ion, in peritubular capillaries

Answer: C



Watch Video Solution

100. Which is not a zymogen

A. trypsinogen

B. pepsinogen

C. angiotensin-II

D. procollagenase

Answer: C



Watch Video Solution

101. Which one of the following blood vessels in mammals would normally carry the largest amount of urea

A. hepatic vein

B. hepatic portal vein

C. renal vein

D. dorsal aorta

Answer: A



Watch Video Solution

102. Part of nephron involved in active reabsorption of sodium is

A. Bowman's capsule

B. descending limb of henle's loop

C. Distal convoluted tubule

D. proximal convoluted tubule

Answer: D



Watch Video Solution

103. The posterior pituitary gland is not a 'true' endocrine gland because

A. it is under the regulation of hypothalamus

B. it secretes enzymes

C. it is provided with a duct

D. it only stores and release hormones

Answer: D



Watch Video Solution

104. A decrease in blood pressure / volume will not cause the release of

A. atrial natriuretic factor

B. aldosterone

C. ADH

D. Renin

Answer: A



Watch Video Solution

105. Which of the following statements is correct?

A. the descending limb of loop of henle is impermeable to water

B. the ascending limb of loop of henle is permeable to water

C. the descending limb of loop is permeable to electrolytes

D. the ascending limb of loop henle is impermeable to water

Answer: D



Watch Video Solution

106. Match the items given in column I with those in column ii and select the correct option given below

Column I

- a. *Glycosuria*
- b. Gout
- c. Renal calculi
- d. Glomerular nephritis

Column II

- i. Accumulation of uric acid in joints
- ii. Mass of crystallised salts within the kidney
- iii. Inflammation in glomeruli
- iv. Presence of glucose in urine

- A. a b c d
(A) ii iii iv i

- B. a b c d
(B) i ii iii iv
- C. a b c d
(C) ii iii i iv
- D. a b c d
(D) iii i ii iv

Answer: D



Watch Video Solution

107. Match the items given in column I with those in column ii and select the correct

option given below

Column I (Function)	Column II (Part of Excretory System)
a. Ultrafiltration	i. Henle's loop
b. Concentration of urine	ii. Ureter
c. Transport of urine	iii. Urinary bladder
d. Storage of urine	iv. Malpighian corpuscle
	v. Proximal convoluted tubule

A. (A) a b c d
iv v ii iii

B. (B) a b c d
iv i ii iii

C. (C) a b c d
v iv i ii

D. (D) a b c d
v iv i ii

Answer: B



Watch Video Solution

108. A person passes much urine and drinks much water but his blood glucose level is normal. This condition may be the result of

A. a reduction in insulin secretion from pancreas

B. a reduction in vasopressin secretion from posterior pituitary

C. a fall in the glucose concentration in urine

C. (C) Total blood volume 5-6 litres

D. ESR in Wintrobe method " " 9-15 mm in
males and 20-34 mm in females

Answer: C



Watch Video Solution

110. In which of the following minimum content of urea is present?

A. hepatic portal vein

B. pulmonary vein

C. renal vein

D. vena cava

Answer: C



Watch Video Solution

111. Duct of Bellini is connected with

A. filtration of urine

B. purification of urine

C. conduction of urine

D. all the above

Answer: C



Watch Video Solution

112. Which one of the following statements in regard to the excretion by the human kidneys is correct?

A. ascending limb of loop of henle is impermeable to electrolytes

B. descending limb of loop of henle is impermeable to water

C. distal convoluted tubule is incapable of reabsorbing HCO_3^-

D. nearly 99 percent of the glomerular filtrate is reabsorbed by the tubules

Answer: D



Watch Video Solution

113. Which part of nephron is impermeable to water

- A. Proximal convoluted tubule
- B. distal convoluted tubule
- C. Ascending limb of loop of Henle
- D. descending limb of loop of henle

Answer: C



Watch Video Solution

114. Which of the following waste products is not excreted in Grasshopper but is used in other metabolic activities

A. carbon dioxide

B. water

C. uric acid

D. faeces

Answer: B



Watch Video Solution

115. Which one of the following pair of waste substances is removed from blood in ornithine cycle

- A. urea and urine
- B. ammonia and urine
- C. CO_2 and ammonia
- D. CO_2 and urea

Answer: C



Watch Video Solution

116. Assertion : Diabetes insipidus is marked by excessive urination and too much thirst for water .

Reason : Anti-diuretic hormone (ADH) is secreted by the posterior lobe of pituitary gland .

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. if the assertion is true but reason is false

D. if both the assertion and reason are false

Answer: B



Watch Video Solution

117. Assertion : Secreting hypotonic urine is effective in reducing urinary loss of water .

Reason : Hypotonic urine is more concentrated and higher in osmotic pressure than the blood .

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the

assertion

C. if the assertion is true but reason is false

D. if both the assertion and reason are

false

Answer: D



Watch Video Solution

118. Assertion: Aldosterone is a steroid hormone and is important in the control of sodium and potassium ion concentration in

mammals.Â

Reason: It upgrades sodium ion concentration in the ECF by promoting reabsorption of sodium ions from renal tubules and excretion of potassium ions in urine

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. if the assertion is true but reason is false

D. if both the assertion and reason are
false

Answer: A



Watch Video Solution

119. Assertion: Ultrafiltration takes place in presence of effective filtration pressure

Reason: In ultrafiltration process, blood is

filtered in Bowman's capsule, filtered fluid contain protein and blood corpuscles also

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. if the assertion is true but reason is false

D. if both the assertion and reason are false

Answer: C



Watch Video Solution

120. Assertion: The person with diabetes insipidus feels thirsty.

Reason: A person with diabetes insipidus suffers from excess secretion of vasopressin.

A. if both assertion and reason are true
and the reason is correct explanation of
the assertion

B. if both assertion and reason are true but
reason is not a correct explanation of the
assertion

C. if the assertion is true but reason is false

D. if both the assertion and reason are
false

Answer: C



Watch Video Solution

121. Assertion: Failure of secretion of hormone vasopressin causes diabetes mellitus in the patient. Reason: Vasopressin increases the volume of urine by increasing the reabsorption of water from the urine.

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. if the assertion is true but reason is false

D. if both the assertion and reason are false

Answer: D



Watch Video Solution

122. Assertion: Liver is referred to as the primary excretory organ in vertebrates.

Reason: Liver helps kidneys in the secretion of urine.

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. if the assertion is true but reason is false

D. if both the assertion and reason are
false

Answer: C



Watch Video Solution

123. Assertion: arthritis or inflammation of a joint makes the joint painful

Reason: some toxic substances are deposited at the joint

A. if both assertion and reason are true
and the reason is correct explanation of
the assertion

B. if both assertion and reason are true but
reason is not a correct explanation of the
assertion

C. if the assertion is true but reason is false

D. if both the assertion and reason are
false

Answer: C



Watch Video Solution

124. Assertion: main constituent of human urine is ammonia

Reason: if human urine is allowed to stand for some time, it smells strongly of ammonia .

A. if both assertion and reason are true and the reason is correct explanation of the assertion

- B. if both assertion and reason are true but reason is not a correct explanation of the assertion
- C. if the assertion is true but reason is false
- D. If the assertion is false but reason are false .

Answer: D



Watch Video Solution

125. Assertion:hemodialysis can save and prolong the life of uremic patients

Reason: waste products like urea can be removed from the blood by the process of hemodialysis.

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the

assertion

C. if the assertion is true but reason is false

D. if both the assertion and reason are

false

Answer: A



Watch Video Solution

126. Assertion : ADH and RAAS work in response to low blood volume and blood pressure

Reason : ANF works in response to high blood volume and blood pressure.

A. if both assertion and reason are true and the reason is correct explanation of the assertion

B. if both assertion and reason are true but reason is not a correct explanation of the assertion

C. if the assertion is true but reason is false

D. if both the assertion and reason are
false

Answer: B



Watch Video Solution