

India's Number 1 Education App

BIOLOGY

BOOKS - S DINESH & CO BIOLOGY (HINGLISH)

EXCRETORY PRODUCTS AND THEIR ELIMINATION

Mcq Multiple Choice Question

- 1. The number of uriniferous tubles in each kidney of mass is
 - A. About 10,000
 - B. About 5,000
 - C. Numberous
 - D. About $1.0 imes 10^6$

Answer: D

2.	The waste	matters	(urea)	are	trans	ported	bv
	THE WASE	macccis	(al ca)	uic	ci aiis	porcea	\sim y

- A. Blood
- B. Lymph
- C. RBC
- D. None of the above

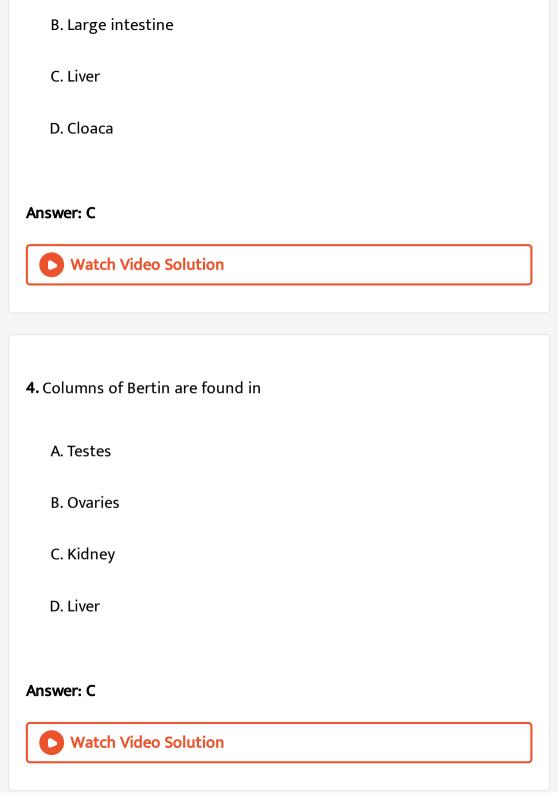
Answer: A



Watch Video Solution

3. The conversion of NH_3 into urea occurs in or Transamination process takes place in

A. Lungs



5. Man is
A. Ammonotelic
B. Ureotelic
C. Uricotelic
D. None of the above
Answer: B
Watch Video Solution
6. The yellow colour of urine is due to the presence of
A. Uric acid
B. Urea
C. Urochrome
D. Melanin

Answer: C Watch Video Solution 7. Malpighian body is present in A. skin B. kidney C. Testes D. Ovaries **Answer: B Watch Video Solution** 8. Certain carbonates and phosphates are removed by A. skin

C. Kidney D. None of the above Answer: A **Watch Video Solution** 9. The retroperitoneal kidney is A. Kidney of fish B. Kidney covered by peritoneum on ventral side C. Kidney covered by peritoneum on dorsal side D. Kidney uncovered by peritoneum on either side Answer: B **Watch Video Solution**

B. Liver

10. In man kidney is

- A. Pronephros
- B. Mesonephros
- C. Metanephors
- D. None of the above

Answer: C



Watch Video Solution

11. Micturition is

- A. Removal of urea from blood
- B. Removal of uric acid
- C. Passing out urine
- D. Removal of faeces

Answer: C Watch Video Solution 12. The excretory organs of Palaeomon are A. Malpighian tubules B. Nephridia C. Green glands D. Kidney **Answer: C Watch Video Solution** 13. Excretion is a continuous process but urine is not passed out continuously because of

A. Urinary bladder B. Cloaca C. Rectum D. Ureter Answer: A **Watch Video Solution** 14. The main excretory organs in man are A. Kidneys B. Nephridia C. Trachea D. Lungs Answer: A



15. The smallest functional unit of kidney is

A. Nephron

B. collecting tubule

C. Glomerulus

D. Bowman's capsule

Answer: A



16. Kidneys are not the only organs of excretion their work is supplemented by

A. Liver

B. Skin

C. Heart	
D. Large intestine	
Answer: B	
Watch Video Solution	
17. The kidneys are located	
A. With the coelom	
B. Near the buccal cavity	
C. Near the heart	
D. Outside the coelom	
Answer: D	
Watch Video Solution	

18. The position of kidneys is A. Inter-peritoneal B. Retroperitioneal C. Intraperitoneal D. None of these **Answer: B Watch Video Solution** 19. The bunch of capillaries present in the Bowman's capsule is called A. Paccinian corpuscle B. Bowman's capsule C. Glomerulus D. Malpighian capsule

Answer: C Watch Video Solution 20. The cells which line the neck and the body of the nephron are A. Smooth squamous epithelial B. Tesselated epithelial C. Stratified epithelial D. Cuboidal and ciliated epithelial **Answer: D Watch Video Solution**

21. Diameter of the renal afferent vessel is

A. Same as that of efferent

- B. Smaller than that of efferent
 C. Larger than that of efferent
- D. There is no efferent vessel

Answer: C



- 22. Excretory organs of Earthworm are
 - A. Nephridia
 - B. Malpighian tubules
 - C. Green glands
 - D. kidneys

Answer: A



- **23.** The afferent and efferent vessels are
 - A. Arterial in nature
 - B. Venous in nature
 - C. One is arterial and the other is venous
 - D. None of the above

Answer: A



Watch Video Solution

- **24.** Malphighian body is constituted by
 - A. Glomerules only
 - B. Glomerulus and Bowman's capsule
 - C. Glomerulus and efferent vessel
 - D. Glomerulus, Bowman's capsule and efferent vessel

Answer: B



Watch Video Solution

25. Deamination is the first step in urea formation. It means the

- A. Reduction of ammonia
- B. Oxidation of ammonia
- C. Addition of amino group to a non-amino organic molecule
- D. Removal of amino group from an amino acid

Answer: D



Watch Video Solution

26. The kidneys not only remove the waste products from the blood but also play a very important role in maintaining

- A. Equilibrium of the body
- B. Temperature of the body
- C. Constant composition of the blood irrespective of the nature of the food or fluid intake
- D. Blood pressure constant

Answer: C



- 27. The glomerular afferent arteriole has a pressure of
 - $\mathsf{A.} + 120mmHg$
 - $\mathsf{B.}-120mmHg$
 - $\mathsf{C.} + 95mmHg$
 - $\mathsf{D.} + 75mmHg$

Answer: D Watch Video Solution 28. The pH of human urine is approximately A. 7.1 B. 6.0C. 8.4D. 9.9 **Answer: B Watch Video Solution** 29. Glycosuria is the term used for A. Loss of glucose in urine

- B. Loss of blood in the urine
- C. Loss of salts in the urine
- D. None of these

Answer: A



Watch Video Solution

- 30. Haematuria is the disorder involving
 - A. The loss of blood through the urine
 - B. Loss of haemoglobin in R.B.C.
 - C. Loss of glucose in urine
 - D. The increase in concentration blood urea

Answer: A



Watch Video Solution

- 31. Uraemia is an excretory disorder in which
 - A. The tubules of kidney reabsorb urea in large amount
 - B. Concentration of urea goes high in the blood because the tubules are not able to remove if from the blood
 - C. Urea is produced in excess in the body
 - D. None of these

Answer: B



- 32. The reabsorption of glucose from the glomerular filtrate is due to
 - A. High osmotic pressure of filtrate
 - B. passive diffusion
 - C. Active transport across the walls of proximal convoluted part

D. Filtration pressure exerted on the fluids in the loop of Henle
Answer: C
Watch Video Solution
33. The elimination of insoluble calcium phosphate takes place by
A. Liver
B. Kidney
C. Larger intestine
D. Skin
Answer: C
Watch Video Solution
34. Excretion in the form of uric and urates in birds is helpful in

A. Conserving body heat B. Conserving water C. Elimination of water D. Conserving urea Answer: B **Watch Video Solution** 35. Physioblogically urea is produced by the action of an enzyme A. Uricase B. Urease C. Arginase D. None **Answer: C**



36. Excretion of bile pigments in the urine indicates

A. Anaemia

B. Diabetes

C. Rickets

D. Jaundice

Answer: D



Watch Video Solution

37. Malpighian tubules are the excretory organs in

A. Cockroach

B. Platyhelminthes

C. Ascaries
D. Pila
Answer: A Watch Video Solution
Watch video solution
38. Which of the following enzyme is produced in the kidneys?
A. Rennin
B. Renin
C. Uricase
D. Arginase
Answer: B
Watch Video Solution

39. A notch present on the mesial side of kidney is known as
A. Ureter
B. Pelvis
C. Hilus
D. Pyramide
Answer: C
Watch Video Solution
40. The collecting ducts in the kidney converge to form
40. The collecting ducts in the kidney converge to form A. pyramid
A. pyramid
A. pyramid B. Calyx

Answer: A Watch Video Solution 41. The narrow apex of pyramid is called A. Column of Bertin B. Calyx C. Papillary duct of Bellini D. Pelvis **Answer: C Watch Video Solution** 42. In adult Frog, the kidney is A. Pronephros

B. Opisthonephros C. Mesonephros D. Metanephros **Answer: C Watch Video Solution** 43. In human beings, gout is caused by A. Deficiency of iodine B. Excessive secretion of thyroid C. Excessive liberation of uric acid D. Deposition of uric acid Answer: D **Watch Video Solution**

44. The amount of urine output per day by a normal human beings is	
A. 4-5 litres	
B. 3-4 litres	

C. 1-1.8 litres

D. 0.5-0.75 litres

Answer: C



45. Rate of glomerular filration per minute in an adult human beings is

A. 125 ml

B. 25 ml

C. 225 ml

D. 425 ml

Answer: A Watch Video Solution 46. Tubular secretion adds to the glomerular filtrate A. Urea B. Uric acid C. Ammonia D. All the above Answer: D **Watch Video Solution** 47. The process that pushes out water and other dissolved materials from blood in the glomerulus is

- A. Dialysis B. Secretion C. Filtration D. Ultrafiltration Answer: D **Watch Video Solution**
- **48.** In kidneys, urine is produced by three processes
 - A. Dialysis, ultrfiltration and tubular secretion
 - B. Ultrafiltration, dialysis and tubular secretion
 - C. Ultrafiltration, tubular reabsorption and tubular secretion
 - D. Tubular reabsorbtion and tubular secretion

Answer: C



- **49.** Collecting tubes are lined by
 - A. Squamous epithelium
 - B. Columnar epithelium
 - C. Cuboidal epithelium
 - D. Cuboidal and columnar epithelium

Answer: C



Watch Video Solution

- **50.** Bowman's capsule is lined by
 - A. Ciliated cuboidal epithelium
 - B. Squamous epithelium

- C. Non-ciliated cuboidal epithelium
- D. Non-ciliated columnar epithelium

Answer: B



Watch Video Solution

- **51.** Excretion is required for maintaning homeostasis of body fluids through regulation of their
 - A. Volume, composition, pH and osmotic potential
 - B. Volume
 - C. Composition and pH
 - D. Osmotic potential

Answer: A



Watch Video Solution

Revision Question From Competitive Exams

1.	(a)	The	conversion	of	а	protein	waste,	the	ammonia	into
ur	ea/o	rnithi	ne cycle occu	rs ir	1					

A. Kidneys

(b) Urea is synthesised in

- B. Lungs
- C. Intestine
- D. Liver

Answer: D



Watch Video Solution

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

C. Glycogen and water D. Sulphates and water	
C. Glycogen and water	
B. Plasma minus blood protenis	
A. Concentrated urine	
3. Liquid which collects in the cavity of Bowman's capsule is	
Watch Video Solution	
Answer: D	
D. Glucose	
C. Salts	
B. Uric acid	



- 4. The filtrate from glomerulus contains
 - A. Blood without cells and proteins
 - B. Plasma without sugar
 - C. Blood with proteins but without cells
 - D. Blood without urea

Answer: A



Watch Video Solution

- 5. Uric acid is excreted in
 - A. Frog
 - B. Rabbit

C. Man
D. Pigeon/Crow
Answer: D
Watch Video Solution
6. A Malpighian body si constitued by
A. Glomerules only
B. Glomerulus and Bowman's capsule
C. Glomerulus and efferent vessel
D. Glomerulus, Bowman's capsule and efferent vessel
Answer: B
Watch Video Solution

7. The reabsorption of water in the kidneys is under the control of a
hormone
A. STH
B. ACTH
C. LH
D. ADH
Answer: D
Watch Video Solution
8. Diuresis is the condition in which
A. The excretion of volume of urine increases
B. The excretion of volume of urine decreases
C. they kidneys fail to excrete urine
D. the water balance of the body is disturbed

Answer: A



Watch Video Solution

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

$$\mathsf{A.} + 75mHg$$

$$B.+80mmHg$$

$$\mathsf{C.} + 20$$
 to $25mmHg$

D. + 50mmHg

Answer: C



10. 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

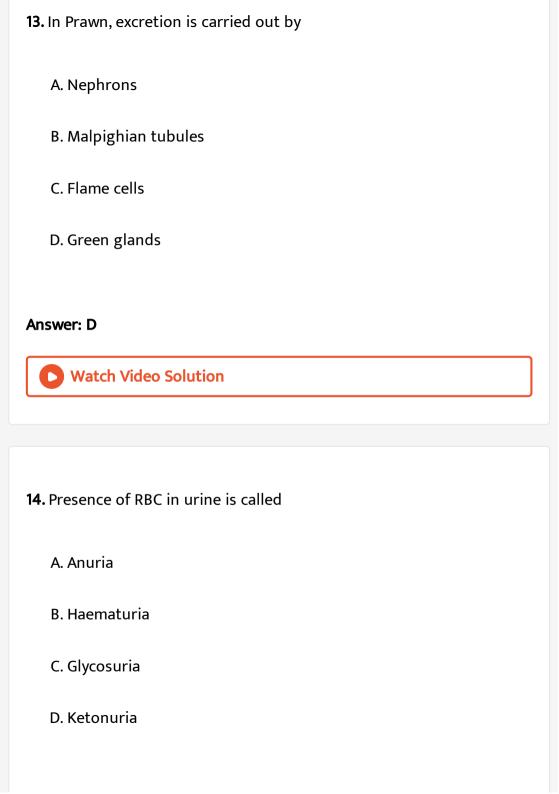
- A. Amination
- B. Lysis
- C. Digestion
- D. Deamination

Answer: D



- 11. Nitrogenous waste products are eliminated mainly as
 - A. Urea in tadpole and ammonia in adult frog
 - 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** 12. 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**



Answer: B



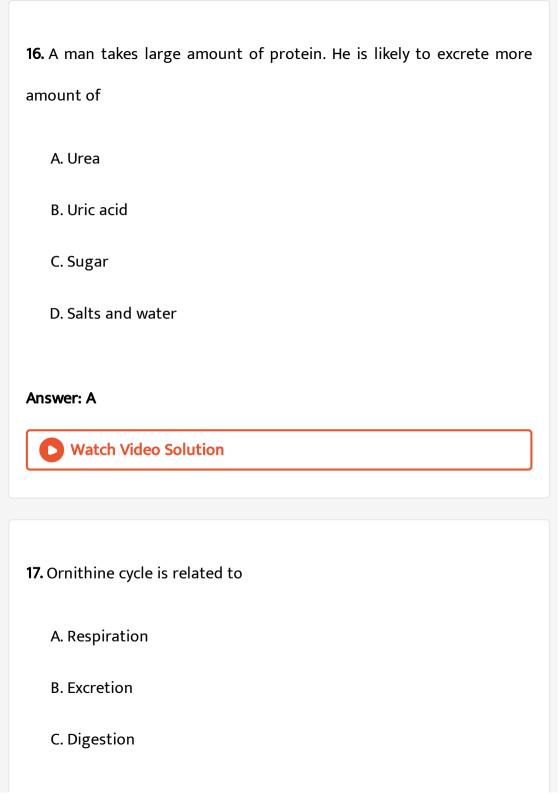
Watch Video Solution

15. 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





D. Nutrition
Answer: B
Watch Video Solution
18. Trimethylamine is the excrtory product in
A. Marine teleosts
B. Freshwater fishes
C. Molluscs
D. Amphibians
Answer: A
Watch Video Solution
19. Loop of Henle is concerned with

A. Excretory system B. Nervous system C. Reproductuve system D. Muscular system Answer: A **Watch Video Solution** 20. Kidney of adult rabbit is A. Metanephric B. Mesonephric C. Pronephric D. Holonephric **Answer: A**



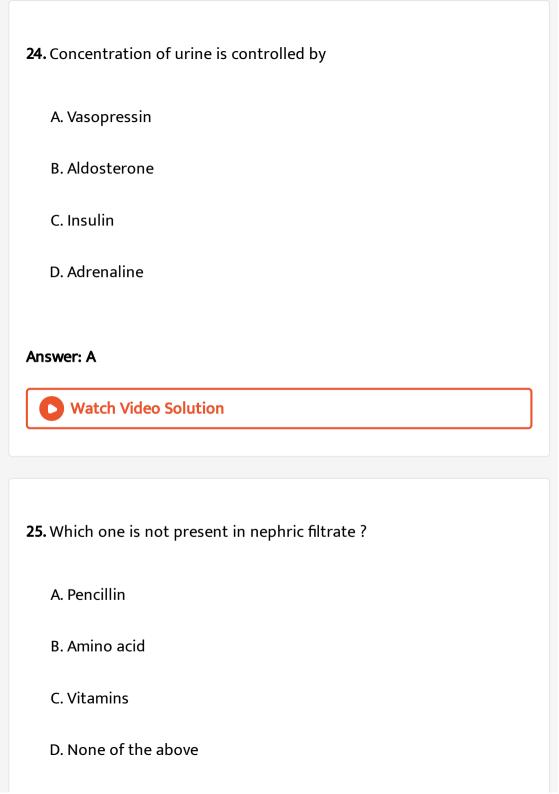
- 21. Ammonia is excretory material in
 - A. Cartilaginous fishes
 - B. Fresh water/bony fishes
 - C. Whale
 - D. Camel

Answer: B

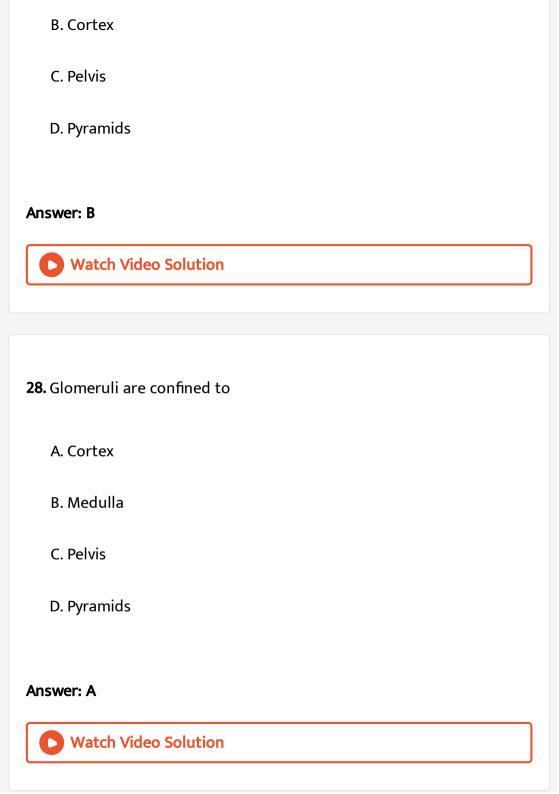


- 22. A kidney stone is
 - A. Deposition of sand particles
 - B. Precipitation of proteins

C. Crystallisation of oxalates D. Blockage of fat **Answer: C Watch Video Solution** 23. 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**



Answer: A Watch Video Solution 26. Volume of urine is regulated by A. Aldosterone B. Aldosterone and ADH C. Aldosterone, ADH and testosterone D. ADH Answer: D **Watch Video Solution** 27. Malphigian/Bowman's/renal corpuscles occur in A. Medulla



29. Filtration fraction is the ratio of

A. Glomerular filtration rate (GFR) and renal plasma flow (RPF)

B. Transport maximum (T_m) and clearance factor $ig(C_fig)$

C. Hb and HbO_2

D. O_2 and CO_2

Answer: A



Watch Video Solution

30. Proximal and distal convoluted tubules are parts of

A. Seminiferous tubules

B. Nephron

C. Oviduct

D. Vas deferens

Answer: B



Watch Video Solution

31. 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



32. 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



33. Which one is uricotelic?

A. Frog and toads

B. Lizards and birds/Corkroach

C. Cattle, monkey and man

D. Molluscs and teleost fishes
Answer: B
Allswel: b
Watch Video Solution
34. Which one is the most soluble in water ?
A. Uric acid
B. Urea
C. Fatty acids
D. Casein
Answer: B
Watch Video Solution
35. 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 **Watch Video Solution** 36. Brush border is characteristic of
- - A. Neck of nephron
 - B. collecting tubule
 - C. Proximal convoluted tubule
 - D. All the above

Answer: C



37. ADH controls water permeability of

- A. Collecting tube/duct
- B. Proximal convoluted tube
- C. Distal convoluted tubule
- D. All the above

Answer: A



Watch Video Solution

38. What will happen if one kidney of a person is removed

- A. Death due to poisoning
- B. Ureamia and death

C. Stoppage of urination
D. Nothing, the person will surive and remain normal
Answer: D
Watch Video Solution
39. Occurrence of excess urea in blood due to kidney failure is
A. Urochrome
B. Uraemia
C. Uricotelism
D. Ureotelism
Answer: B
Watch Video Solution

- **40.** Which is true abut excretion?
 - A. 90% water and $Na^{\,+}$ of glomerular filtrate are absorbed
 - B. Glucose is reabsorbed in distal convoluted tubule
 - C. Glucose is reabsorbed in proximal convoluted tubule
 - D. 99% of water and glucose in the glomerular filtrate are reabsorbed.

Answer: D



- **41.** In distal convoluted tubule of the nephrons
 - A. $Na^{\,+}$ reabsorption requires energy
 - B. $K^{\,+}$ reabsorption does not requires energy
 - C. Ammonia is excreted

D. Water reabsorption requires energy
Answer: A
Watch Video Solution
42. Total filtrate formed in 24 hours in human kidney is
A. 1.8 litres
B. 8.0 litres
C. 18 litres
D. 180 litres
Answer: D
Watch Video Solution
Watch video Soldton
43. In kidney, glomerulus is involved in

A. Reabsorption of salts B. Urine collection C. Urine formation by blood filtration D. All the above **Answer: C Watch Video Solution** 44. The mechanism of urine formation in nephron involves A. Ultrafiltration B. Secretion C. Diffusion D. Osmosis Answer: A



45. Glomerular filtrate contains glucose in comparison to plasmsa

A. More

B. Same

C. Less

D. Nil

Answer: C



Watch Video Solution

46. In diabetes mellitus the patient drink more water as there is urinary

loss of

A. Salt

B. Insulin

C. Protein
D. Glucose
Answer: D
Watch Video Solution
47. The hormone that promotes reabsorption of water from
glomerular filtrate is
A. Oxytocin
B. Vasopressin
C. Relaxin
D. Calcitonin
Answer: B
Watch Video Solution

48. Hydrostatic pressure inside glomerular afterent arteriole is
A. $+65mm$

B. + 70mm

 $\mathsf{C.} + 75mm$

D. + 80mm

Answer: C



49. Glucose is taken back from glomerular filtrate through

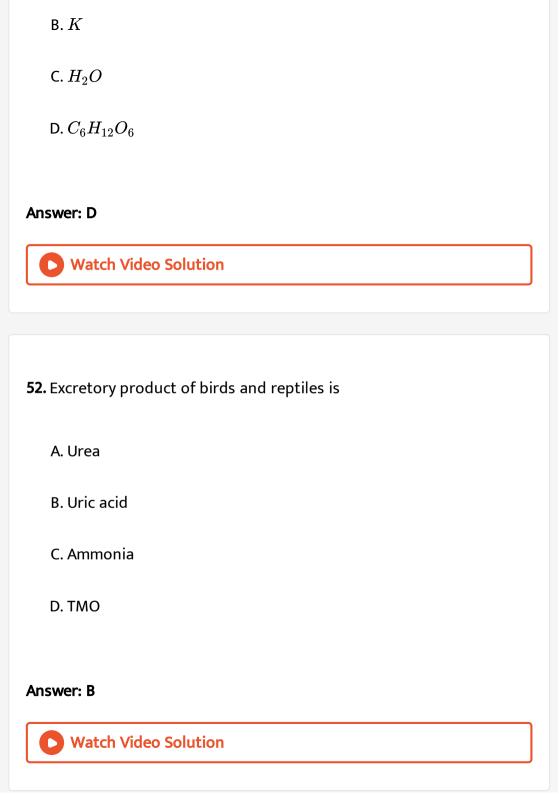
A. Active transport

B. Passive transport

C. Osmosis

D. Diffusion

Answer: A **Watch Video Solution** 50. Nephrons are connected with A. Respiratory system B. Nervous system C. Circulatory system D. Excretory system **Answer: D Watch Video Solution** 51. Which of the following is totally reabsorbed in renal tubes? A. Na



53. Which is present in the kidney?

- A. Glomerulus
- B. Ciliated nephrons
- C. Middle kidneys duct
- D. Nephridia

Answer: A



- **54.** Part not belonging to uriniferous tubule is
 - A. Glomerulus
 - B. Henle's loop
 - C. Distal convoluted tubule
 - D. Connecting tubule

Answer: A



Watch Video Solution

55. 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

56. 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** 57. Main functions of kidney is A. Passive absorption B. Ultrafiltration C. Selective reabsorption D. Both B and C **Answer: D**



58. Uric acid is nitroggenous waste in

- A. Mammals and molluscs
- B. Birds and lizards
- C. Frog and cartilaginous fishes
- D. Insects and bony fishes

Answer: B



Watch Video Solution

59. Ornithine cycle performs

- A. ATP synthesis
- B. Urea formation in spleen

C. Urea formation in liver
D. Urine formation in liver
Answer: C
Watch Video Solution
60. Henle's loop is found in
A. Lungs
B. Heart
C. Kidneys
D. Liver
Answer: C
Watch Video Solution

61. Uriniferous/nephrons tubules occurs in
A. Stomach
B. Testes
C. Ovary
D. Kidney
Answer: D
Watch Video Solution
62. Urea is formed in liver cells from
62. Urea is formed in liver cells from A. Ammonia and nitrogen
A. Ammonia and nitrogen
A. Ammonia and nitrogen B. Ammonia and carbon dioxide

Answer: B Watch Video Solution 63. The two kidneys lie A. At the level of ovaries B. At the same level C. Left kidney at a higher level than the right one D. Right kidney at a higher level than the left one **Answer: C Watch Video Solution**

64. Creatinine is not produced by

A. Children

- B. Pregnant women
- C. Fasting persons
- D. Healthy males

Answer: C



Watch Video Solution

65. 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

- **66.** Distal convoluted tubule is lined with
 - A. Cuboidal epithelium
 - B. Ciliated squamous epithelium
 - C. Pseudostratified epithelium
 - D. Columnar epithelium

Answer: D



- 67. 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 68. Length of female urethra is A. 15 cm B. 10 cm C. 4 cm D. 2 cm **Answer: C Watch Video Solution** 69. 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** 70. Excretion is removed of A. Carbon dioxide B. Harmful and useless ingredients C. Extra water D. Metabolic waste products **Answer: D**

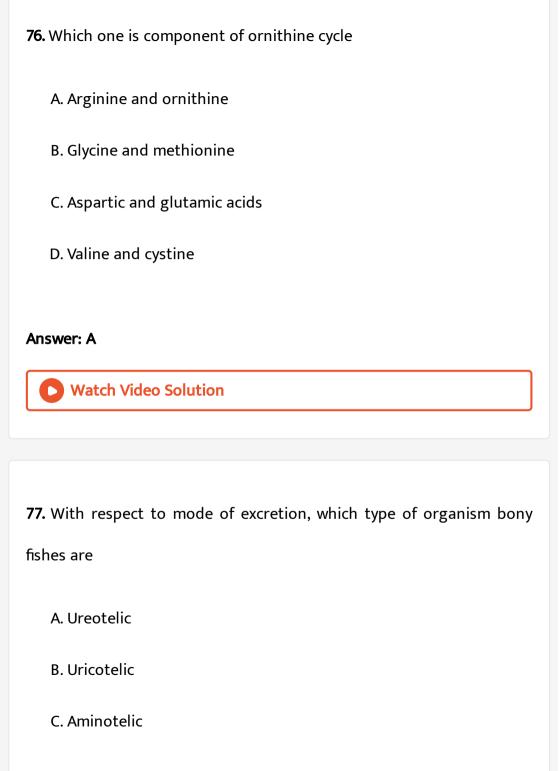
Watch Video Solution

71. Which ones influence the activity of kidneys
A. Vasopressin
B. Thyroxine
C. Vasopressin and aldosterone
D. Gonadotrophin
Answer: C
Watch Video Solution
Watch Video Solution
72. Substrate which is not readsorbed in urine is
72. Substrate which is not readsorbed in urine is
72. Substrate which is not readsorbed in urine is A. Carbohydrates

Answer: C Watch Video Solution 73. In ureotelic animals, urea is formed by A. Cori's cycle B. Krebs cycle C. Ornithine cycle D. EMP pathway **Answer: C Watch Video Solution** 74. The basic functional unit of human kidney is

A. Henle's loop

B. Nephron C. Nephridium D. Pyramide **Answer: B Watch Video Solution** 75. Ornithine cycle was discovered by A. Krebs B. Henseleit C. Krebs and Henseleit D. Ornithine **Answer: C Watch Video Solution**



D. Ammonotelic
Answer: D Watch Video Solution
78. Flame cells are excretory organ of
A. Prawn
B. Planaria
C. Silver Fish
D. Hydra
Answer: B
Watch Video Solution
79. In micturition

A. Ureters contract B. Urethra contracts C. Urethra relaxes D. Ureters relax **Answer: C Watch Video Solution** 80. Glomerulus and Bowman's capsule constitute A. Blood vessel B. Malpighian body C. Green glands D. Malpighian tubule **Answer: B**

81. Na^+ and $Cl^{\,\prime}$ are absorbed in kideny in the region of

A. Ascending limb of Henle's loop

B. Descending limb of Henle's loop

C. DCT

D. PCT

Answer: C



Watch Video Solution

82. Duct of Bellini is connected with

A. Collecting duct

B. DCT

C. Ureter
D. Papilla
Answer: A
Watch Video Solution
83. What is permeable for ascending loop of Henle?
A. Ammonia
B. Glucose
C. Na^+
D. Water
Answer: C
Watch Video Solution

84. Why do we pass more urine during winter and wet seasons? A. Increased ADH secretion B. Increased activity of kidneys C. Decreased water absorption by nephrons D. Reduced sweating **Answer: D Watch Video Solution** 85. Sea gulls excrete excess of NaCl from A. Liver B. Lungs C. Urine D. Nasal gland



Watch Video Solution

86. Match th two and pick correct combination

Column I (Cells)		Column II (Parts)
a Kupffer's cells	p	Small intestine
b β-cells	\boldsymbol{q}	PCT
c Brush border cells	r	Liver sinusoids
d Paneth cells	s	Pituitary
	t	Islets of
		Langerhans

A.
$$a = r, b = s, c = q, d = p$$

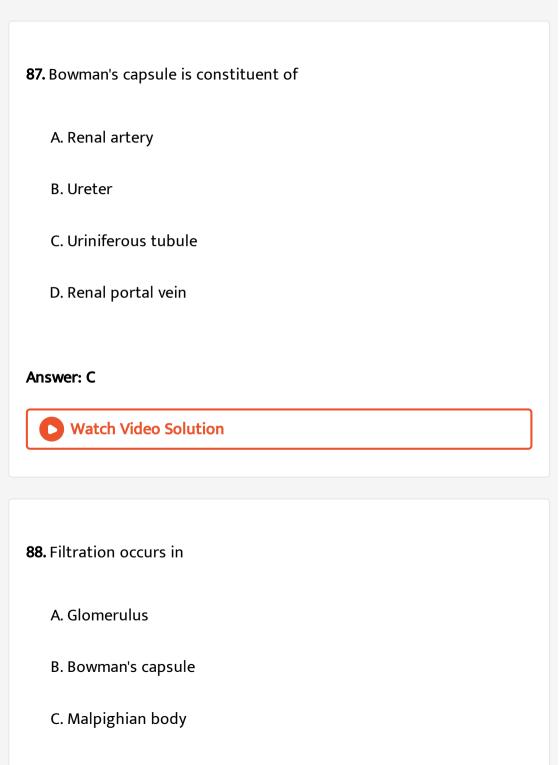
B.
$$a = r, b = t, c = q, d = p$$

C.
$$a = r, b = p, c = t, d = q$$

D.
$$a = r, b = t, c = p, d = q$$

Answer: B





D. Ureter
Answer: A
Watch Video Solution
89. Function of loop of Henle is
A. Conservating of water
B. Formation of urine
C. Filtration of blood
D. Passage of urine
Answer: A
Watch Video Solution
90. In Amoeba, NH_3 is excreted through

A. Food vacuole B. Plasma membrane C. Contractile vacuole D. All the above **Answer: B Watch Video Solution** 91. Which one is not supplied exclusively with involuntary muscles? A. Iris B. Gland ducts C. Urethra D. Coats of blood vessel **Answer: C**



- 92. Henle's loop occur in
 - A. Seminiferous tubles of Frog
 - B. Seminiferous tubules of Rabbit
 - C. Nephrons of mammals
 - D. Nephrons of Frog

Answer: C



Watch Video Solution

- 93. Malpighian tubules remove excretory products from
 - A. kidney
 - B. Haemolymph

- C. Alimentary canal

 D. None of the above

 Answer: B

 Watch Video Solution
- **94.** 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



95. Aquatic reptiles are
A. Ammonotelic
B. Uricotelic
C. Ammonotelic in water and uricotelic on land
D. Ureotelic
Answer: C
Watch Video Solution
96. Common excretory product of insects is
96. Common excretory product of insects is $ A. NH_3 $
A. NH_3
A. NH_3

Answer: C Watch Video Solution 97. In kidney, nephrostomes are functional in A. Tadpole B. Adult Frog C. Cockroach D. Rabbit Answer: A **Watch Video Solution** 98. Vital morphological and physiological units of mammalian kidney are

A. Ureters
B. Seminiferous tubules
C. Uriniferous tubule
D. Nephridia
Answer: C
Watch Video Solution
99. The end product of ornithine cycle is
A. Uric acid
B. CO_2
C. Ammonia
D. Urea
Answer: D



100. 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

101. Characteristic of metanephric kidney is

- A. Hypotonic urine
- B. Uric acid formation

C. Loop of Henle
D. Hormone production
Answer: C
Watch Video Solution
102. 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

103. Urine is always fluid except in A. Reptiles and amphibians B. Birds and reptiles C. Birds and mammals D. Reptiles and mammals **Answer: B Watch Video Solution** 104. In Housefly the excretory organs are A. Nephridia B. Flame cells C. Malpighian tubules D. Kidneys

Answer: C



Watch Video Solution

105. Ciliated funnels found on the ventral side of kidney in Frog are

- A. Ostia
- B. Nephrostomers
- C. Bidder's organs
- D. Corpora adiposa

Answer: B



Watch Video Solution

106. Assertion. In descending loop of Henele, urine is hypertonic while in ascending loop urine is hypotonic.

Reason. Descending loop is impermeable to $Na^{\,+}\,$ while ascending loop is impermeable to water

A. both are true but reason is correct explanation

B. both are true but reason is not correct explanation

C. assertion is true but reason is wrong

D. both are wrong

Answer: A



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

A. 56-70mg

B. 40-80mg

C. 17 - 30mg

D. 4-16mg

Answer: C Watch Video Solution 108. Xenopus excretes A. Uric acid B. Urea C. Ammonia D. Creatinine **Answer: C Watch Video Solution** 109. Number of nephrous in each kidney of man is A. 0.7 million

B. 0.9 million C. 1.2 million D. 1.6 million **Answer: C Watch Video Solution** 110. Which one is both hormone and enzyme A. ADH B. Angiotensinogen C. Acetylchoinesterase D. Renin **Answer: D Watch Video Solution**

111. The process used in separating large particles from smaller ones in a solution is calledA. Chromatorgraphy

B. Dialysis

C. Osmosis

D. Tyndallisation

Answer: B



112. Ureotelic animals

A. Lack urease

B. Do not excrete urea

C. cannot form uric acid

Natch Video Solution	
13. Ducts of Bellini are found in	
A. Liver	
B. Intestine	
C. Medulla oblogata oblongata	
D. Kidneys	
nswer: D	
Watch Video Solution	

D. Live in water

114. Concentration of inorganic salts in normal urine of a human beings is

A. 0.0015

B. 0.0025

C. 1.5~%

D. $2.5\,\%$

Answer: C



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

A. Ammonotelic animals

B. Uricotelic animals

C. Ureotelic animals

D. Ornithotelic animals
Answer: B
Watch Video Solution
116. Functional kidney of tadpole in Frog is
A. Pronephros
B. Mesonephros
C. Metanephors
D. Archinephros
Answer: A
Watch Video Solution
117. Kidney of Frog is

A. Pronephros B. Mesonephros C. Opisthonephros D. Metanephros **Answer: C Watch Video Solution** 118. Which one is not an excretory organ A. Skin B. Kidneys C. Intestine D. Liver **Answer: C**

119. Following are four statements. Find out the correct combination. 1.

Glucose has high threshold value. 2. Urine is concentrated in uric acid, glucose and proteins. 4. In glomerulus, urea, uric acid, water, glucose and plasma proteins are filtered out

- A. 1, 3, 4
- B. 2, 3, 4
- C. 1, 2
- D. 1, 3

Answer: C



Watch Video Solution

- A. Amphibian and reptiles
- B. Bony fishes and amphibian tadpoles
- C. Cartilaginous and bony fishes
- D. Amphibians and mammals

Answer: B



Watch Video Solution

121. ADH takes part in

- A. Water retention in urine
- B. Na^+ reabsorption
- C. Reducing urea formation
- D. Absorption of water from urine

Answer: D



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

- A. Micturition
- B. Ureotelism
- C. Reverse dialysis
- D. Haemodialysis

Answer: D

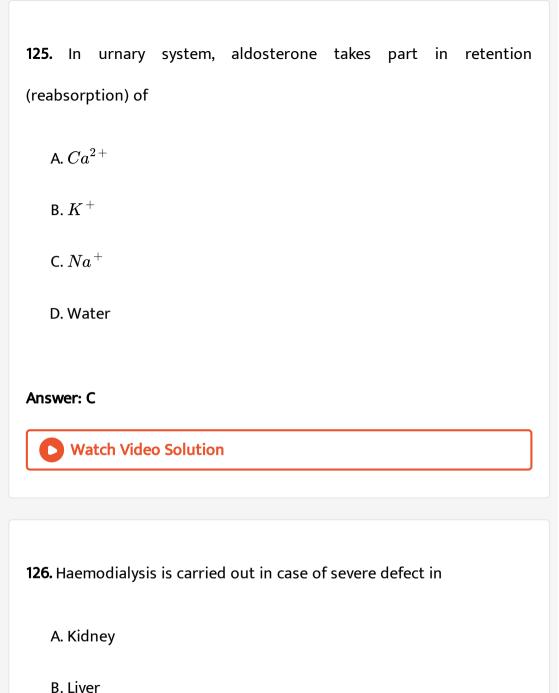


Watch Video Solution

123. 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** 124. Deposition of uric acid at the joints is: A. Rheumatoid arthritis B. Gout C. Osteoarthritis D. Bursitis **Answer: B Watch Video Solution**



C. Lung

Watch Video Solution	
127. .* Which is finally reabsorbed in distal convoluted tubule	è
A. Calcium	
B. Potassium	
C. Bicarbonate	
D. Water	
Answer: C	
Watch Video Solution	

D. Stomach

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

A. Shorter and wider

B. Shorter and narrower

C. Longer and wider

D. Longer and narrower

Answer: A



129. Ketosis is due to

A. High insulin level

B. Low insulin level

C. Low thyroxine level

D. Low level of glucagon				
Answer: B				
Watch Video Solution				
130. Excessive thirst leading to increased consumption of water is				
A. Polyurea				
B. Glycemia				
C. Polyphagia				
D. Polydipsia				
Answer: D				
Watch Video Solution				
131. Metanephros kidney occurs in				

A. Amniotes B. Fishes C. Amphibians D. Invertebrates Answer: A Watch Video Solution 132. Urea is disposed off by A. Spleen B. Liver C. Kidneys D. Both A and B **Answer: C**



133. In nephron, water absorption is maximum in

A. Proximal convoluted tubule

B. Loop of Henle

C. Glomerulus

D. Distal convoluted tubule

Answer: B



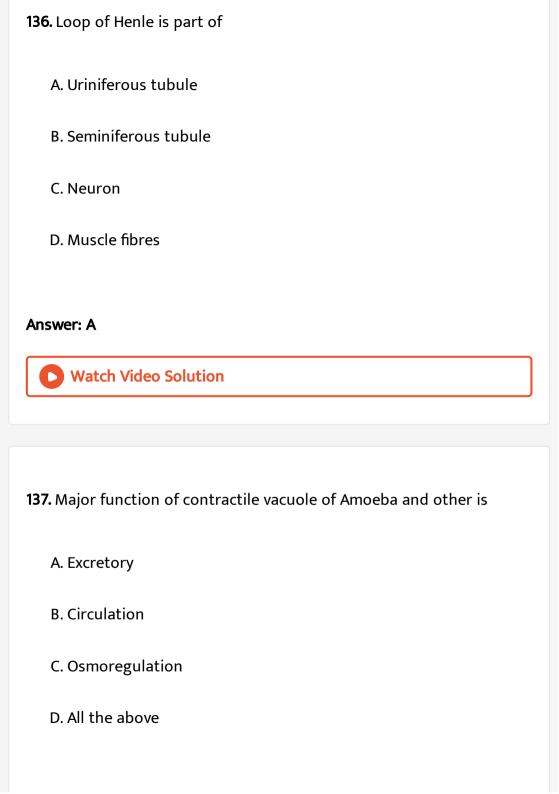
Watch Video Solution

134. Pigeon excretes

A. Urea

B. Ammonia

C. Uric acid
D. None of the above
Answer: C
Watch Video Solution
135. Contractile vacuole is analogous to
A. Sweat gland
B. Kidneys
C. Seminiferous tubule
D. Nerve fibre
Answer: B
Watch Video Solution



Answer: C



Watch Video Solution

138. 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
- C. Double the number of Bowman's capsule
- D. Equal to number of Bowman's capsule

Answer: D

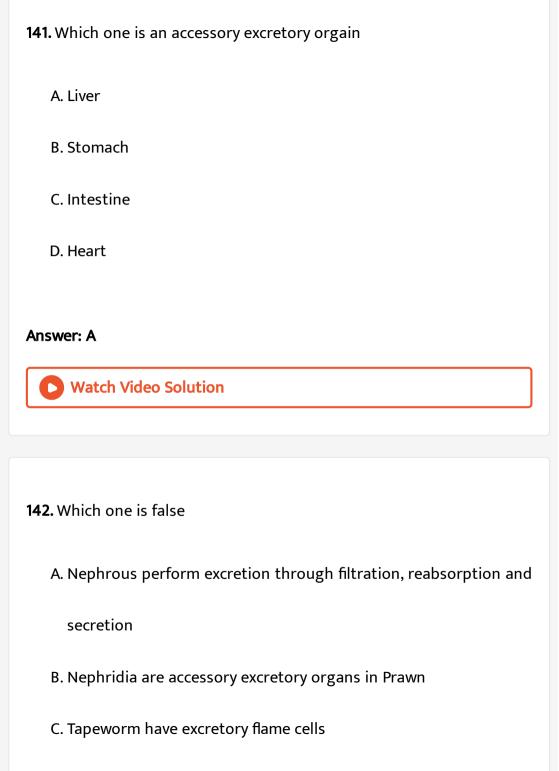


Watch Video Solution

139. Hippuric acid, creatinine and ketones are added to urine through

A. Reabsorption

B. Glomerular filtration C. Tubular secretion D. Both B and C **Answer: D Watch Video Solution** 140. Haemodialysis is also called artifical A. Liver B. Lungs C. Heart D. Kidneys **Answer: D Watch Video Solution**



D. Nephrons begin with Bowman's capsule having glomerulus

Answer: B



Watch Video Solution

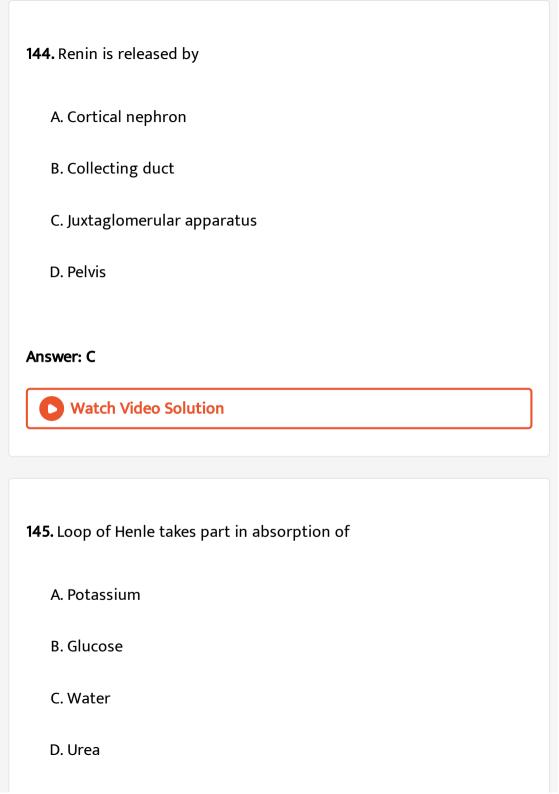
143. For formation of urea which one of the following is required alongwith ammonia

- A. Arginase, CO_2 and O_2
- B. Arginase, CO_2 and water
- C. Asparate, CO_2 and water
- D. Asparate, CO_2 and O_2

Answer: B



Watch Video Solution



Answer: D



Watch Video Solution

146. 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

147. Urinary bladder is absent in

A. Aves B. Reptiles C. Amphibians D. Mammal Answer: A **Watch Video Solution** 148. Mesonephric kidney is found in A. Aves B. Reptila C. Amphibia D. Mammalia **Answer: C**



149. Absorption of water in DCT is controlled by

A. ACTH

B. ADH

C. LH

D. Oxytocin

Answer: B



Watch Video Solution

150. Uric acid is formed from

A. Protein

B. Pyrimidines

D. Glucose
Answer: C
Watch Video Solution
151. 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

C. Purines

- **152.** What is true of urea biosynthesis
 - A. Uric acid is starting point
 - B. Urea is synthesised in lysosomes
 - C. Urea cycle enzymes are located inside mitochondira
 - D. Urea is synthesised in kidney

Answer: C



Watch Video Solution

- 153. 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 hilus

Answer: B Watch Video Solution

154. Excretory organs of flatworms/Taenia are

- A. Flame cells
- B. Nephridia
- C. Malpighian tubules
- D. Renette glands

Answer: A



Watch Video Solution

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

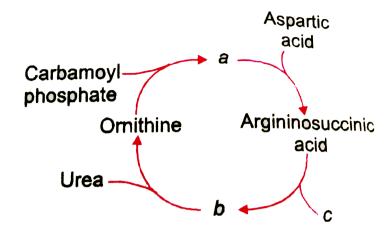
A. Descending limb of Henle's loop

B. Ascending limb of Henle's loop C. Bowman's capsule D. DCT Answer: D **Watch Video Solution** 156. Diabetes insipidus is due to A. Hyposecretion of vasopressin (ADH) B. Hypersecretion of insulin C. Hyposecretion of insulin D. Hypersecretion of vasopressin (ADH)

Answer: A



157. Indentify alphabet and choose coorect combination



- A. a- arginine, b-succinic acid, c-fumaric acid
- B. a-citrulline, b-arginine, c-succinic acid
- C. a-citrulline, b-fumaric acid, c-arginine
- D. a-citrulline, b-arginine, c-fumaric acid

Answer: D



158. Assertion. RBC production is regulated by kidney.

Reason. Erythropoiethin reaches red bone marrow, induces steam cell mitosis and speeds up development of RBC

- A. both are ture and reason being correct correct explanation
- B. both are ture and reason being correct not correct explanation
- C. assertion is true but reason is wrong
- D. both are wrong

Answer: A



Watch Video Solution

159. 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. There will be hardly any change in the quality and quantity of

urine formed

C. the urine will be more concentrated

D. the urine will be more dilute

Answer: D



Watch Video Solution

160. An X-ray of lower abdomen shown a shadow in the region of the ureter suspected to be a uretelic calculus. A possible clinical symptom would be

A. Active renal failure

B. Anuria and haematuria

C. Motor aphasia

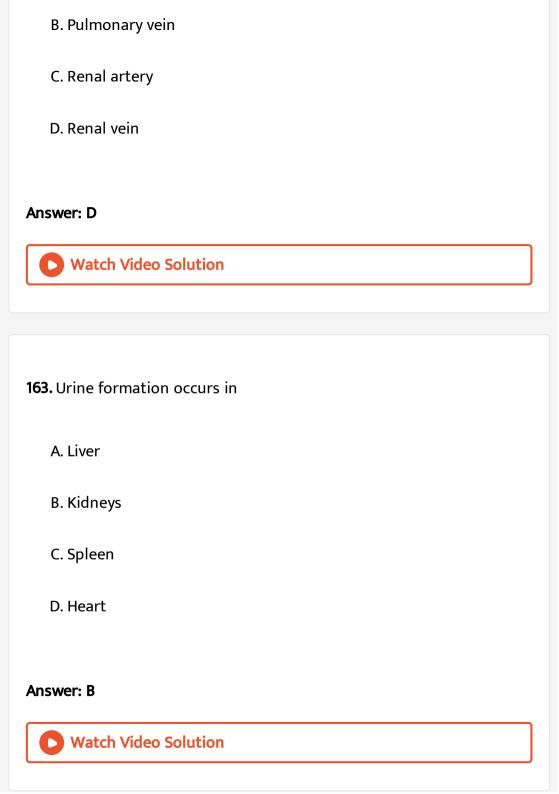
D. Chronic renal failure (CRF)

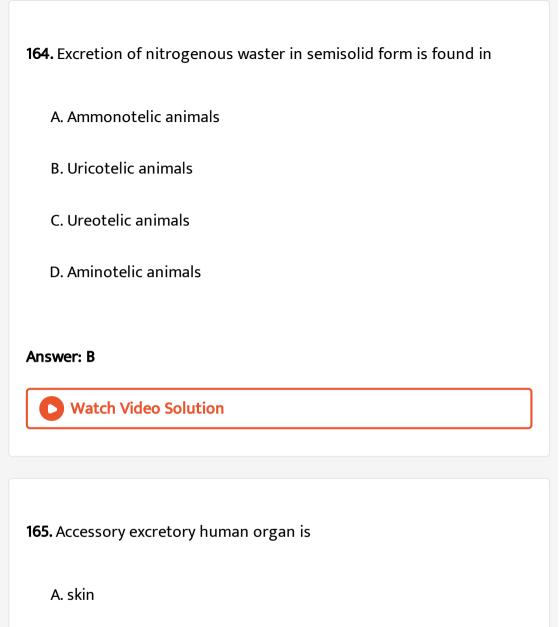
Answer: B Watch Video Solution 161. Uraemia is the occurrence of A. Blood in urine B. Excess of urea in blood C. Excess of sugar in blood D. Deficiency of sugar **Answer: B**



162. Blood vessel that carries minimum nitrogenous wastes is

A. Hepatic vein





B. Skin and liver

C. Skin and lungs

D. Skin, lungs, liver and intestine

Answer: D Watch Video Solution 166. Which one does not enter nephron A. Water B. Glucose C. Plasma proteins D. Urea **Answer: C Watch Video Solution** 167. Urine is concentrated in loop of Henle in A. Descending limb

- B. Thick ascending limb
- C. Hairpin bend between descending and ascending limbs
- D. Area between ascending limb and distal convoluted tubule

Answer: C



- 168. A terrestrial animal must be able to
 - A. Excrete large amount of urine
 - B. Conserve water
 - C. Actively pump out salts through skin
 - D. Excrete large amount of salts in urine

Answer: B



169. Match the columns and find out the correct combination

\boldsymbol{a}	Nephridia	p	Hydra
\boldsymbol{b}	Malpighian	$oldsymbol{q}$	Leech
	tubules		
C	Protonephridia	r	Shark
d	Kidneys	8	Roundworm
		1	Cockroach

A.
$$a-t, b-q, c-s, d-r$$

$$\mathtt{B.}\,a-q,b-s,c-t,d-p$$

C.
$$a - q, b - t, c - s, d - r$$

D.
$$a - s, b - q, c - p, d - t$$

Answer: C



Watch Video Solution

170. Kidney and ureter develop from

A. Endodern

B. Mesoderm

C. Ectoderm and mesoderm

D. Mesoderm and endoderm

Answer: B



Watch Video Solution

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

A. Uric acid

 $C.CO_2$

B. H_2O

D. None of the above

Answer: C



watch video Solution

172. 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

173. Which of these is not a ketone body

A. Succinic acid

B. Acetone

C. Acetoacetic acid

D. eta $-$	hydroxybutyric acid

Answer: A



Watch Video Solution

174. 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

175. Main function of glomerulus is

A. Reabsorption of water B. Filtration of Blood C. Reabsorption of Na^+ D. concentration of urine. **Answer: B View Text Solution** 176. As compared to blood, human urine is A. Isotonic B. Hypotonic C. Hypertonic D. None of the above **Answer: C**



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

A. Bile salts

B. Barium chloride

C. Zinc sulphate

D. Calcium oxalate

Answer: D



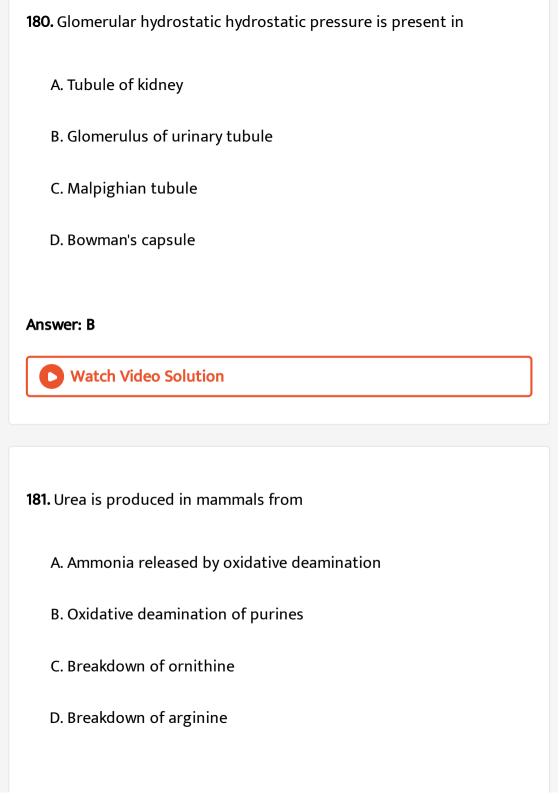
Watch Video Solution

178. Excretory product of mammals is generally

A. Uric acid

B. Urea

C. Ammonia				
D. All the above				
Answer: B				
Watch Video Solution				
179. Haemodialysis helps in the patient having				
A. Goitre				
B. Anaemia				
C. Uremia				
D. Diabetes				
Answer: C				
Watch Video Solution				



Answer: D Watch Video Solution 182. Humans are A. Ammonotelic B. Ureotelic C. Uricotelic D. Both B and C **Answer: B Watch Video Solution** 183. Kidneys are excretory organs in A. All chordates

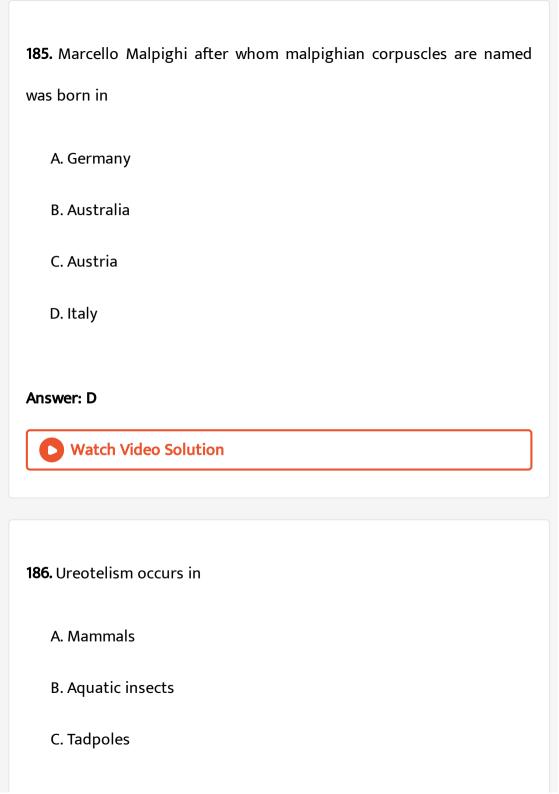
C. Mammals and amphibians only D. Mammals reptiles and amphibians only Answer: A **Watch Video Solution** 184. Loop of Henle is connected with A. Dilution of urine B. Removal of water C. Counter current multiplier system

Answer: C

D. Remove salt

B. Mammals only





D. Birds					
Answer: A Watch Video Solution					
187. Excessive formation of uric acid may result in					
A. Rheumatoid arthritis					
B. Osteoarthritis					
C. Osteoporosis					
D. Gout					
Answer: D					
Watch Video Solution					
188. Voluntary response to distension of urinary bladder is					

- A. Polyurea

 B. Micturition

 C. Diabetes mellitus

 D. Menstruation

 Answer: B

 Watch Video Solution
- **189.** Part of nephron impermeable to salt is
 - A. Proximal convoluted tubule
 - B. Distal convoluted tuble
 - C. Descending limb of loop of Henle
 - D. Ascending limb of loop of Henle

Answer: C



190. Antennary glands of crustaceans are meant for

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

Answer: D



Watch Video Solution

191. Marine teleost fish excrete

- A. Ammonia
- B. Urea

C. Uric acid
D. Amino acids
Answer: B
Watch Video Solution

192. 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



193. Match the colums 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
- (e) Proximal convoluted tubule

A.
$$I-d, ii-a, iii-b, iv-c$$

$$\mathtt{B}.\,i-d,ii-c,iii-b,iv-a$$

$$\mathsf{C}.\,i-e,ii-d,iii-a,iv-c$$

$$\mathtt{D}.\,i-e,ii-d,iii-a,iv-b$$

Answer: A



- **194.** Which of the following statements is/are true
- (1) Urine is hypertonic in distal convoluted tubule

- (2) When the urine passes into collecting tubule, it becomes hypotonic
- (3) Urine is isotonic in proximal convoluted tubule
- (4) Urine becomes more and more hypotonic as it passes through

Henle's loop

- A. 1 and 4
- B. 1, 2, 3
- C. 2, 3
- D. 3

Answer: D

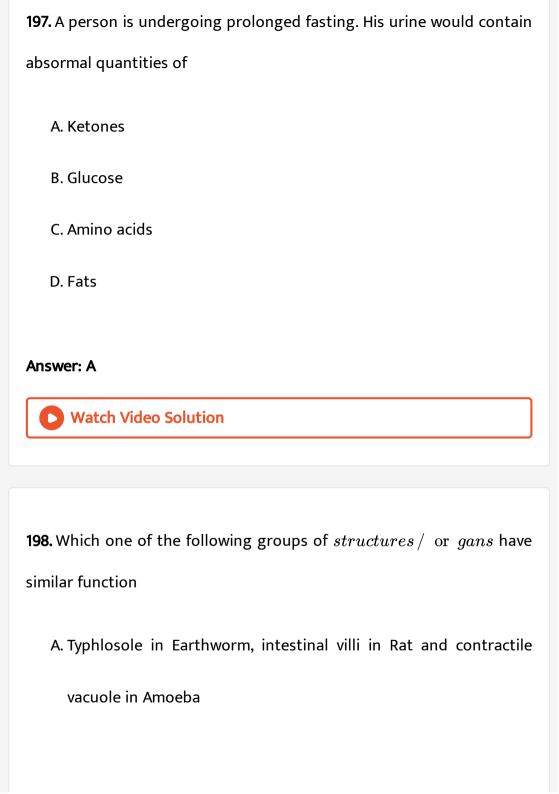


Watch Video Solution

195. Unxtaglomerular cells of renal cortex synthesises an enzyme called

- A. ADH
- B. Oxytocin

C. Renin
D. Urochrome
Answer: C
Watch Video Solution
196. Ornithine cycle removes two waste products from blood in liver
A. CO_2 and Urea
B. Ammonia and urea
C. Urea and urine
D. CO_2 and ammonia
Answer: D
▶ Watch Video Solution



- B. Nephridia in Earthworm, malpighian tubules in Cockroach and urinary tubules in Rat
- C. Antennae in Cockroach, tympanum of Frog and clitellum of
- D. Incisors of Rat, gizzard (proventriculus) of Cockroach and tube feet of Starfish

Answer: B



199. Which one of the following statements is correct with respect to salt water balance inside the body of living organisms

A. When water is not available, camels do not produce urine but store urea in tissues

B. Salmon fish excreters lot of stored salt through gill membrane

when in fresh water

C. Oparamoecium discharges concentrated salt by contractile vacuole

D. Body fluids of fressh water animals are generally hypotonic to surrounding water.

Answer: A



200. Glucose is mainly absorbed in

A. Henle's loop

B. DCT

C. PCT

D. Nephron

Answer: C Watch Video Solution 201. 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





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

A. Ammonia

B. Protein C. Uric acid

D. Urea

Answer: A



Watch Video Solution

- 203. A portion of uric acid is changed into urea and ammonia by intestinal
 - A. Urogenolysis
 - B. Ureolysis
 - C. Uricolysis
 - D. Ureotolysis

Answer: C





- **204.** Wolffian body is also known as
 - A. Pronephros
 - B. Mesonephros
 - C. Abnormal heart
 - D. Metanephros

Answer: B



- **205.** A health person will not excrete urine having
 - A. Creatinine
 - B. Uric acid
 - C. Alanine

D. Vitamin B-complex					
Answer: A					
Watch Video Solution					
206. Which one acts are artifical kidney in haemodialysis ?					
A. Dialysing liquid					
B. Bubble trap					
C. Blood pump					
D. Dialyser					
Answer: D					
Watch Video Solution					
207. The first formed nitrogenous waste of vertebrates is					

A. NH_2
B. Urea
C. NH_3
D. NH_4
Answer: C
Watch Video Solution
208. Which of the following is located on the base of urinary bladder?
A. Seminal vesicle
B. Protate glands
C. Bulbourethral gland
D. Ovary
Answer: A



209. Almost all aquatic animals excrete ammonia as nitrogenous waste.

Which is wrong

- A. Ammonia is highly toxic and requires elimination when formed
- B. Ammonia is easily soluble in water
- C. Ammonia is converted into less toxic form called urea
- D. Ammonia is released from body in gaseous state

Answer: C



- 210. Which is the best adapted for conservation of water?
 - A. Ammonotelism
 - B. Ureotelism

- C. Uricotelism
- D. Hydrophobism

Answer: C



Watch Video Solution

211. Read the given statements and select the correct option.

Statement 1: Inflammation of a skeletal joint may immobilise the movements of the joint.

Statement 2: This may be caused due to uric acid crystals in the joint cavity and ossification of articular cartilage.

- A. both are true being reason is correct explanation
- B. both true but reason is not correct explanation
- C. assertion is true but reason is wrong
- D. both are wrong



Watch Video Solution

212. Match the colums

	I		II
(u Uraemia	1.	Excess of protein
Ь	naematuria	2.	level in urine Presence of high ketone bodies in urine
\boldsymbol{c}	Ketonuria	3.	Presence of blood cells in 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.
$$a - 5$$
, $b - 3$, $c - 2$, $d - 4$, $e - 1$

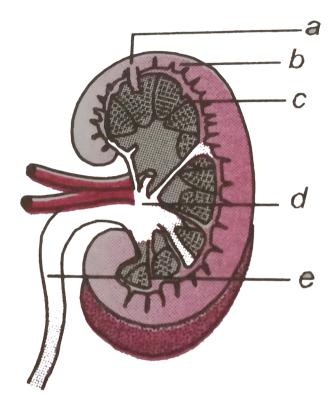
Answer: D Watch Video Solution 213. Green glands present in some arthropods help in A. Respiration B. Excretion C. Digestion D. Reproduction **Answer: B Watch Video Solution** 214. Urine is excreted out of the body through A. Pelvis

- B. Ureter
- C. Urinary bladder
- D. Urethra

Answer: D



215. Find out the correct labelling



A. a- nephron, b-cortex, c-medulla, d-pelvis, e-ureter

B. a- cortex, b-nephron, c-pelvis, d- medulla, e- ureter

C. a - cortex, b- medulla, c- nephron, d- pelvis, e- ureter

D. a - nephron, b- cortex, c- medulla, d - ureter, e- pelvis

Answer: A





- A. Kidney
- B. Lungs
- C. Skin
- D. All the above

Answer: A



Watch Video Solution

217. Which is correctly matched

- A. Glomerulare filtrate serum with protein
- B. Glomerular filtration rate 125 ml/min

- C. Reabsorption collecting tubule
- D. Reabsorption of $Cl^{\,\prime}$ Active absorption

Answer: B



Watch Video Solution

218. Formation of hypertonic urine is mediated through

- A. Having small loop of Henle
- B. Eating salt free diet
- C. Counter-current system
- D. Increased water intake

Answer: C



- 219. Which is wrong
 - A. Presence of albumin in urine is albuminaria
 - B. Presence of glucose in urine is glycsuria
 - C. Presence of ketose sugar in urine is ketonuria
 - D. Presence of excess urea in blood is uremia

Answer: C



- 220. Region of nephron found in renal medulla is
 - A. Malpighian corpuscle
 - B. Promixmal convoluted tubule
 - C. Distal convoluted tubule
 - D. Henle's loop

Answer: D



Watch Video Solution

221. Consider the following statements

- A. Flame cells are excretory structures in flatworms
- B. Green glands are excretory organs in annelids
- C. Columns of Bertini are the conical projections of renal pelvis into medulla between the renal pyramids
 - A. II and III incorrect
 - B. I and II correct
 - C. I and III correct
 - D. I, II and III correct

Answer: A



222. Excretion of dilute urine is due to

- A. More secretion of aldosterone
- B. Less secretion of vasopressin
- C. Less secretion of glucoagon
- D. More secretion of insulin

Answer: B



Watch Video Solution

223. First step in urine formation is

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

Answer: C Watch Video Solution 224. Which is not part of nephron? A. PCT B. DCT C. Loop of Henle D. Collecting duct **Answer: D Watch Video Solution** 225. Nitrogenous waste products are eliminated mainly as A. Urea in tadpole and adult

- B. Urea in tadpole and ammonia in adult

 C. Urea in tadpole and uric acid in adult

 D. Urea in adult and ammonia in tadpole

 Answer: D

 Watch Video Solution
- **226.** Urine flows into ureters from
 - A. Kidney pelvis
 - B. Urinary bladder
 - C. Urethra
 - D. Collecting ducts

Answer: A



227. The longest loop of Henle is found in

- A. Kangaroo Rat
- **B.** Rhesus Monkey
- C. Opposum
- D. Rabbit

Answer: A



Watch Video Solution

228. Bidder's canal occurs in

- A. Testis of Frog
- B. Kidney of Frog
- C. Kidney of Rabbit
- D. Both B and C

Answer: B Watch Video Solution 229. Excretory product of spider is A. Ammonia B. Uric acid C. Guanine D. All the above **Answer: C Watch Video Solution** 230. which one is both osmoregulator as well as nitrogenous products A. NH_3

B. Urea C. Uric acid D. All the above **Answer: B Watch Video Solution** 231. 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**

232. 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



233. In the absence of loop of Henle

- A. Urine will be hypotonic
- B. Urine will be hypertonic
- C. Urine will be isotonic

D. No change in urine concentration

Answer: A



Watch Video Solution

234. Urge for urination starts as bladder comes to have urine

A. 200-300ml

 ${\tt B.\,300-400} ml$

 $\mathsf{C.}\ 400-450ml$

 $\mathsf{D.}\,450-550ml$

Answer: C



Watch Video Solution

235. Haemodialysis is also called artifical

A. Liver
B. Spleen
C. Stomach
D. Kidney
Answer: D
Watch Video Solution
236. In wich of these animals, antennal gland or green glands functions
as excretory organ
A. Planaria
B. Prawn
C. Earthworm
D. Cockroach

Answer: B **Watch Video Solution** 237. JG cells, under low glomerular blood flow release A. Angiotensin I B. Angiotensin II C. Aldosterone D. Renin Answer: D **Watch Video Solution** 238. Proximal convoluted tubule (PCT) is lined with

A. Cubodial epithelium with brush border

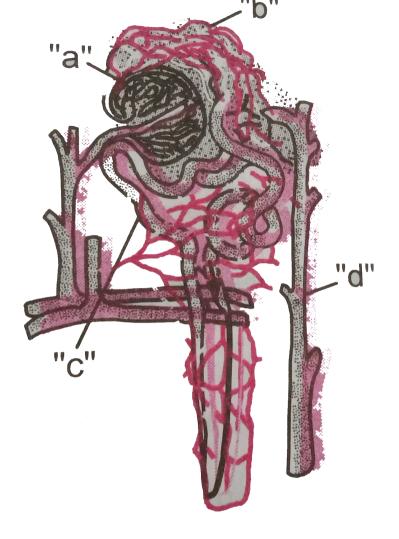
- B. Cuboidal epithelium
- C. Columnar epithelium
- D. Ciliated epithelium

Answer: A



Watch Video Solution

239. In the accompanying diagram of urine formation, identify a, b, c and d



A. a- pressure filtration, b-reabsorption, c-secretion, d-collection of urine

B. a-pressure filtration, b-secretion, c- reabsorption, d-collection of

urine

C. a-collection of urine, b-secretion, c-reabsorption, d-pressure filtration

D. a-reabsorption, b-secretion, c-pressure filtration, d-collection of

Answer: A



arteriole

240. Which of the following processes cretates high osmotic pressure in uriniferous tubule ?

A. Active secretion of ${\it Na}^+$ into efferent arteriole follwed by ${\it Cl}^{\,\prime}$ secretion

B. Active $Na^{\,+}$ absorption followed by $Cl^{\,\prime}$ absorption

C. Active secretion of Cl^- and absorption of Na^+ into efferent

D. Active $Cl^{\,\prime}$ absorption follwed by absorption of $Na^{\,+}$

Answer: B



View Text Solution

241. It is produced due to irregularity in metabolism of nitrogenous waste

A. Osteoarthritis

B. Rheumatoid arthritis

C. Osteoporosis

D. Gouty arthritis

Answer: D



- 242. Vasporessin in mainly responsible for
 - A. Obligatory reabsorption of water through Bowman's capsule
 - B. Facultative reabsorption of water from DCT
 - C. Faculative reabsorption of water from Henle's loop
 - D. Obligatory reabsorption of water from PCT

Answer: B



- 243. Curved portion of Henle's loop is lined by
 - A. Columnar epithelium
 - B. Cuboidal epithelium
 - C. Squamous epithelium
 - D. Ciliated epithelium

Answer: C



Watch Video Solution

244. The correct sequence of urine movements is

A. Bladder $\;
ightarrow\;$ Kidney $\;
ightarrow\;$ Ureter $\;
ightarrow\;$ Urethra

B. Bladder $\;
ightarrow\;$ Urethra $\;
ightarrow\;$ Kidney $\;
ightarrow\;$ Ureter

C. Kidney ightarrow Bladder ightarrow Ureter ightarrow Urethra

D. Kidney $\,
ightarrow\,$ Ureter $\,
ightarrow\,$ Bladder $\,
ightarrow\,$ Urethra

Answer: D



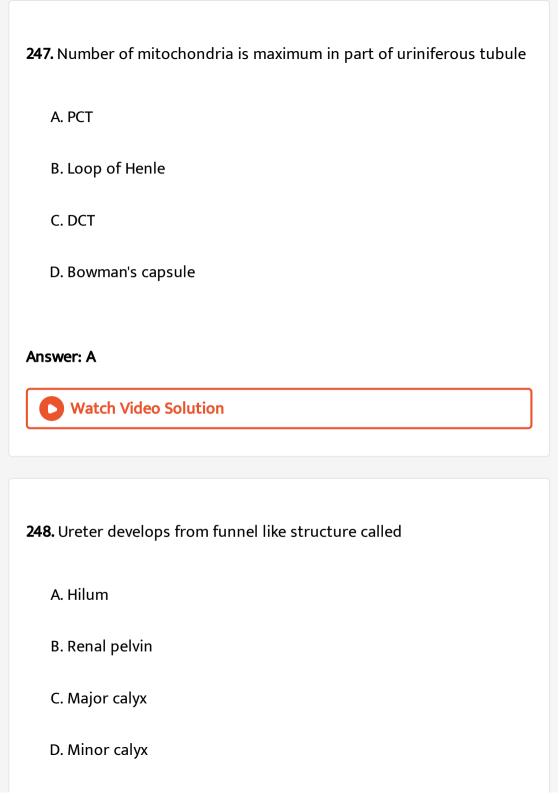
Watch Video Solution

245. Which is not a basic renal function

A. Reabsorption

C. Secretion D. Filtration Answer: B **Watch Video Solution** 246. Renal fluid isotonic to cortical fluid and blood occurs in A. Distal convulated tubule and ascending limb B. Collecting duct and asceding limb C. Proximal convuluted tubule and distal convoluted tubule D. Ascending limb and descending limb Answer: C

B. Perfusion



Answer: B Watch Video Solution 249. Maximum energy is consumed during formation of A. Ammonia B. Urea C. Uric acid D. Guanine **Answer: C**

Watch Video Solution

250. Find the correct answer about glomerular filtrate

1. Formed continuously through ultrafilration of blood

- 2. Liquid free fluid collects in the lumen of Bowman's capsule
- 3. Protein free fluid collects in the lumen of Bowman's capsule
- 4. formed by process of selective reabsorption
 - A. 1, 2, 3 correct
 - B. 1, 2 correct
 - C. 2, 4 correct
 - D. 1, 3 correct

Answer: D



Watch Video Solution

251. Which one of the following pairs of items correctly belongs to the category of organs mentioned against it

A. Nephridia of Earthrown and Malpighian tubules of Cockroach -

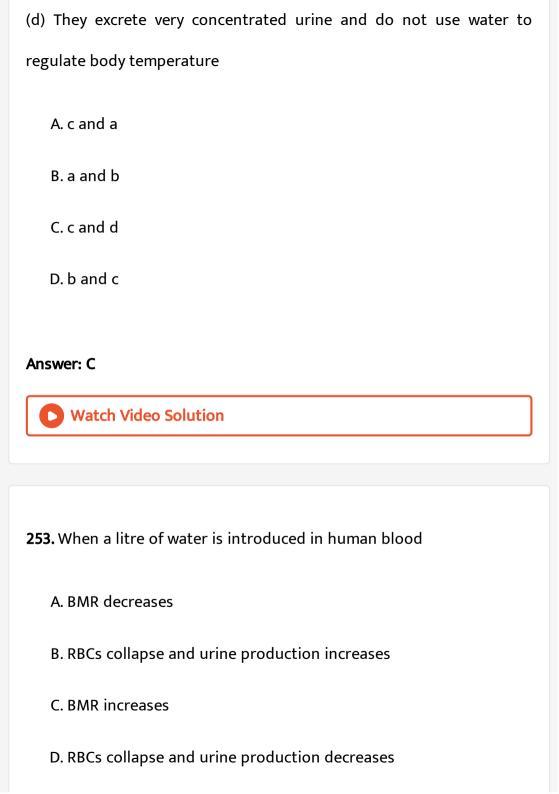
excretory organ

- B. Wings of Honey Bee and Crow Homeologus organs
- C. Nictitating membrane and blind spot in human eye-vestigial organs
- D. Thorns of Bougainvillea and tendrila of Cucurbita -Analogous organs

Answer: A



- **252.** Which are true about the following statements about kangaroo rats
- (a) They have dark colour, high rate of reproduction and excrete solide urine
- (b) They do not drink water, breathe at slow rate, and have their body covered with thick hair
- (c) The feed on dry seeds and do not require drinking water



Answer: B



Watch Video Solution

254. The substance present in higher concentration in blood than glomerular filtrate

- A. Plasma proteins
- B. Urea
- C. Water
- D. Glucose

Answer: A



255. 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



- **256.** The characteristic that is shared by urea. Uric acid and ammonia is/are
- (A) They are nitrogenous wastes
- (B) The all need very large amount of water for excretion

(C) They are all equally toxic (D) They are produced in the kidneys A. a, c B. a, d C. a, c, d D. a only Answer: D **Watch Video Solution** 257. Which of the following is the correct pathway for passage of urine in humans? A. Renal cortex $\;
ightarrow\;$ Medulla $\;
ightarrow\;$ Urinary bladder $\;
ightarrow\;$ Urethra B. Renal vein $\,
ightarrow\,$ Urethra $\,
ightarrow\,$ Bladder $\,
ightarrow\,$ Ureter C. Collecting duct ightarrow Ureter ightarrow Bladder ightarrow Urethra

D. Pelvis $ ightarrow$ Medulla $ ightarrow$ Urinary bladder $ ightarrow$ Urethra
Answer: C
Watch Video Solution
258. In nephron, water absorption is maximum in
A. Distal convoluted tubule
B. Proximal convoluted tubule
C. Glomerulus

D. Henle's loop

Answer: B



- A. Water reabsorption in descending limb and sodium reabsorption
- in ascending limb of Henle loop occur under similar conditions
- B. Sodium reabsorption in ascending limb of loop and collecting duct occur under similar conditions
- C. Water reabsorption in descending limb of loop and collecting duct occur under similar conditions
- D. Water reabsorption in descending limb of loop and collecting duct occur under different conditions

Answer: D



- **260.** The genetic defficiency of ADH receptor leads to
 - A. Diabetes mellitus
 - B. Diabetes insipidus

C. Glycosuria
D. Nephrogenic diabetes
Answer: B
Watch Video Solution
261. The size of filtration slits of glomerulus
A. 25 nm
B. 20 nm
C. 15 nm
D. 10 nm
Answer: A
Watch Video Solution

- 262. Select the incorrect statement regarding mechanism of urine formation in man.
 - A. Counter-current systems contribute in diluting urine
 - B. Tubular secretion takes place in PCT
 - C. Golmerular filtration rate is 125 ml/min
 - D. Ultra -filtration is opposed by colloidal osmotic pressure of plasma

Answer: A



263. Match the columns:

	Organism		Excreting Structure
1.	Cockroach	α	Nephridia
2.	Clarias	b	Malpighian tubules
3.	Earthworm	c	Kidneys
4.	Balanoglossus	d	Flame cells
5.	Flat worm	e^{-}	Proboscis gland

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

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

$$\mathsf{C.}\,1-b,2-a,3-c,4-e,5-d$$

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

Answer: B



Watch Video Solution

264. 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

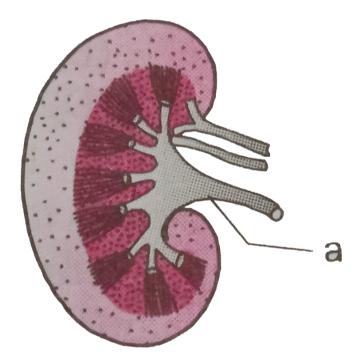
D. Urine will continue to collect normally in bladder

Answer: C



Watch Video Solution

265. In the given diagram, what does 'a' represent



A. Renal pyramid

B. Renal pelvin

- C. Renal medulla
- D. Renal cortex

Answer: B



Watch Video Solution

- **266.** Which of the following amino acids play important role in ornithine cycle ?
 - A. Citrubline, glycine
 - B. Ornithine, citrulline
 - C. Glycine, methionine
 - D. Arginine, methionine

Answer: B



267. Read the following statements and select the correct option

Statement 1: When the urine moves through the descending limb, it becomes hypertonic to blood plasma and as it passes through the ascending limb of Henl's loop it becomes hypotonic to blood plasma

Statement: The decending limb is permeable to sodium ions, while the ascending limb is impermeable to sodium ions

- A. Statement \boldsymbol{a} is correct and \boldsymbol{b} is wrong
- B. Statement a is wrong and b is correct
- C. Both statement \boldsymbol{a} and \boldsymbol{b} are wrong
- D. Both statement a and b are correct

Answer: A



- A. Blood is removed from the body and a natural filter is employed
- B. Blood is not removed from the body and a natural filter is empolyed
- C. Blood is not removed from the body and an artifical filter is used
- D. Blood is removed from the body and an artificial filter is employed

Answer: B



269. Increase in frequency of urination is

- A. Uremia
- B. Proteinuria
- C. Polyurea
- D. Glycosuria

Answer: C Watch Video Solution 270. Renal calculi are formed due to A. Calcium oxalate crystals accumulation B. Bacterial infection C. Clotting of blood D. Presence of hard particles in food **Answer: A**



271. Which is not uricotellic

A. Frog

B. Cockroach C. Birds D. Lizard **Answer: A Watch Video Solution** 272. A guanotelic animal is A. Anopheles B. Spider C. Earthworm D. Prawn **Answer: B Watch Video Solution**

273. Transitional epithelium occurs in
A. Ureter
B. Urinary bladder
C. Urethra
D. Both A and B
Answer: D
Watch Video Solution
274. Urine is hypotonic in
A. PCT
B. Loop of Henle
C. DCT

Answer: C Watch Video Solution 275. Which is correctly matched A. Man - Ureotelic B. Birds - Ammonetellic C. Fish - Uricotelic D. Frog - Uricotelic Answer: A **Watch Video Solution**

276. 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

277. Maintenance of body potassium level is primarily by tubular

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

Answer: B



278. This is not a nitrogenous waste
A. Creatinine
B. Citrulline
C. Purines
D. Allantoin
Answer: B
Watch Video Solution
279. Which is not an excretory organ of vertebrates ?
A. Liver
B. Lungs
C. Hepatopancreas
D. Skin

Answer: C Watch Video Solution 280. Glycosuria is the condition, where a man A. Low amount of sugar in urine B. Low amount of fat in urine C. Average amount of carbonhydrate in urine D. High amount of sugar in urine





281. Condition of concentration of ketone body in urine is

A. Turner's syndrome

- B. Sickle cell anaemia
- C. Acromegaly
- D. Diabetes mellitus

Answer: D



Watch Video Solution

- **282.** Many fresh water animals cannot live for long is sea water and vice versa mainly because of
 - A. change in nitrogen level
 - B. change in thermal tolerance
 - C. Variation in light intensity
 - D. Osmotic problems

Answer: D



Watch Widoo Colution

watch video Solution

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

- A. 10-15g
- $\mathsf{B.}\,25-30g$
- $\mathsf{C.}\,40-50g$
- D. 100 500mg

Answer: B



Watch Video Solution

284. ADH takes part in

A. Reabsorption of $Na^{\,+}$

B. Reabsorption of water

C. Tubular secretion of creatinine

D. Tubular secretion of urea

Answer: B



Watch Video Solution

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

- A. Cockroach Malpighian tubules and enteric caeca
- B. Earthworm -Pharyngeal, integumentary epithelium
- C. Frog Kidneys, skin and buccal epithelium
- D. Humans Kidneys, sebaceous glands and tear glands

Answer: B



286. Which one of the following statements in regard to the exretion 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 electrolystes
- D. Descending limb of loop of Henle is impermeable of water

Answer: B



- **287.** 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 immuno-suppressants for a long time
- (ii) The cell-mediated immune response is responsible for the graft

rejection				
(iii) The B-lumphocytes 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				
288. The principal nitrogenous exretory compound in humans is				
syntheised				

A. In kidneys as well as eliminated by kidneys B. In liver and also eliminated by the same through bile C. In the but eliminated mostly through kidneys D. In kidneys but eliminated mostly through liver Answer: C **Watch Video Solution** 289. How many molecules of ammonia are required to form 8 molecules of urea A. 24 B. 8 C. 16 D. 4

Answer: C



Watch Video Solution

290. The nitrogenous excrtory products are formed from the catabolism of amino acids by

- A. Calvin cycle
- B. Nitrogen cycle
- C. Ornithine cycle
- D. Krebs cycle

Answer: C

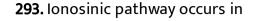


Watch Video Solution

291. The yellow colour of urine is due to the presence of

A. Urochrome B. Anthoxanthine C. Urine D. Uric acid Answer: A **Watch Video Solution** 292. Ducts of Bellini open in A. Minor calyx B. Major calyx C. Renal pyramid D. Renal sinus **Answer: C**





- A. Ammonotelism
- B. Ureotelism
- C. Uricotelism
- D. Guanotelism

Answer: C



Watch Video Solution

294. Angiotensinogen in converted into angiotensin by

- A. Renin
- B. ADH

C. ANF

D. Aldosterone

Answer: A



Watch Video Solution

295. Columns of bertin in the kidneys of mammals are formed as extensions of

A. cortex into medulla

B. Medulla into cortex

C. Renal pelvis into renal sinus

D. Renal capsule into cortex

Answer: A



296. Ketonuria is due to				
A. Intake of excess sugar				
B. Diabetes insipidus				
C. Diabetes mellitus				
D. High blood pressure				
Answer: C				
Watch Video Solution				
297. Connecting tubule acts as part of which organ				
A. Heart				
B. Kidney				
C. Liver				
D. Pancreas				

Answer: B



Watch Video Solution

298. Glucose is absorbed

- A. Passively by DCT
- B. Actively by DCT
- C. Actively by PCT
- D. Passively by PCT

Answer: C



Watch Video Solution

299. Assertion 'A'. Nitrogenous waste from arterial blood is removed when blood passes through dialyser unit

Reason 'R'. Arterial blood of patient and dialysing liquid are made to flow on two sides of permeable membrane A. Both correct by 'R' is not reason for 'A' B. Both correct and 'R' is correct reason for 'A' C. A' is correct by 'R' is wrong D. A' is wrong by 'R' is correct Answer: C **Watch Video Solution** 300. 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 301. ADH deficiency shows the following condition A. Polydipsia B. Polyuria C. Glucosuria D. Both A and B **Answer: D Watch Video Solution** 302. Juxtaglomerular cells of kidney product a peptide hormone A. Gastrin

- B. Secretin C. Estradiol
 - D. Erythropoiethin

Answer: D



Watch Video Solution

- **303.** During summer season, which hormone concentration maintained at high level
 - A. Insulin
 - B. Vasopressin
 - C. Oxytocin
 - D. Corticoid

Answer: B



wat	cn via	eo Soi	ution	

304. Dialysis fluid contains all the constituents as in plasma except

- A. Electrolytes
- **B.** Proteins
- C. Nitrogenous wastes
- D. All the above

Answer: C



Watch Video Solution

305. Effective filtration pressure in glomerulus is caused due to

- A. Secretion of adrenaline
- B. Afferent arteriole is slightly broader than efferent arteriole

C. Vacuum develops in proximal convoluted tubule and sucks the blood

D.

Answer: C



306. When a fresh water protozoan is placed in marine water

- A. The contractile vacuole disappears
- B. Contractile vacuole increases in size
- C. A number of contractile vacuoles appear
- D. The contractile vacuole remains unchanged

Answer: A



307. Select the correct statement

- A. Juxtamedullary nephrons have reduced Henle's loops
- B. Vasa recta is well developed in cortical nephrons
- C. Ascending limb of Henle's loop extends as DCT
- D. Glomerulus enclose Bowman's capsule

Answer: C



308. Which one of the following is not a part of renal pyramid?

- A. Collecting ducts
- B. Loop of Henle
- C. Convoluted tubules
- D. Peritubular capillaries

Answer: C



Watch Video Solution

309. 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 substances

Answer: C



Watch Video Solution

310. Which is correct

- A. An increase in glomerular blood flow stimulates formation of angiotensin II
- B. During summe, when body loses a lot of water by evaporation, the release of ADH is suppressed
- C. When some one drinks a lot of water, ADH release is suppressed
- D. Exposure to cold temperature stimulates ADH release

Answer: C



311. Which one of the following is associated with osmoregulation in amoeba

- A. Food vacuole
- B. Mitochondria
- C. Nucleus

D. Contractile vacuole

Answer: D



Watch Video Solution

312. Which is true of excretion

A. Large amount of water from renal filtrate is absorbed by DCT and

lesser amount in PCT

- B. Descending limb of loop of Henle is impermeable to salts
- C. Malpighian corpuscles occur in renal medulla
- D. Urine is pale yellow and slightly alkaline

Answer: B



313. 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

314. Juxtaglomerular apparatus is made up of

A. Juxtaglomerular cell, macula densa and lacis cell

B. Juxtaglomerular cell, lacis cell and myoepithelial cell

C. Juxtaglomerular cell, lacis cell and Purkinje cell

D. Juxtaglomerular cell, macula densa and argentaffin cell
Answer: A
Watch Video Solution
315. Ketone bodies consist of
A. Nicotinic acid, folic acid and ascorbic acid
B. Acetone, beta hydroxybututyryl 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
316. Which of the following glands does not help in excretion

A. Liver B. Sweat glands C. Both A and B D. Pancreas Answer: D Watch Video Solution 317. Urinary bladder opens to the outside through A. Nephron B. Glomerulus C. Ureter D. Urethra **Answer: D**

318. Which is correctly categorised

A.

Ammonotelic Ureotelic Uricotelic

Pigeon, Humans Aquatic amphibia, Lizards Cockroach, Frog

В.

Ammonotelic Ureotelic Uricotelic

Aquatic amphibia Frog, Humans Pigeon, Lizards, cockroach

C.

Ammonotelic Ureotelic Uricotelic

Aquatic amphibia Cockroach, Humans Frog, Pigcon, Lizards

D.

Ammonotelic Ureotelic Uricotelic

Frog, Lizards Aquatic amphibia, Humans Cockroach, Pigeon

Answer: B



- 319. A fall in glomerular filtration rate (GFR) activates
 - A. Juxtaglomerular cells to release renin
 - B. Adrenal cortex to release aldosterone
 - C. Posterior pituitary to release vasopstession
 - D. Adrenal medulla to release adrenaline

Answer: A



- 320. 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 321. 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**

322. The part of a nephron which opens into the collecting duct is/are

A. DCT

- B. Henle's loop
- C. Glomeruli
- D. Bowman's capsule

Answer: A



Watch Video Solution

323. 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 indicate diabetes mellitus
- D. Glycosuria is treated with hemodialysis

Answer: C



324. Pressure whch 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

325. Assertion. In PCT, glomerular filtrate becomes hypertoinc

Reason. HCO_3 is absorbed in PCT

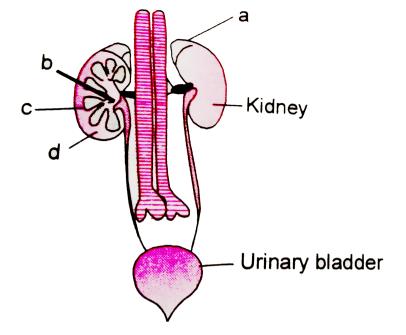
- A. both are true with reason being correct explanation
- B. both are true but reason is not correct explanation
- C. assertion is true but reason is wrong
- D. both are wrong

Answer: D



Watch Video Solution

326. Amongst labels a-d of human urinary system, select option with correct identification and characteristics/function



- A. d Cortex Outer part of kidney with no part of nephrons
- B. a- Adrenal gland Located at the anterior part of kidney. Secretes catecholamines which stimulate glycogen breakdown
- C. b-Pelvis Broad funnel shaped space inner to hilum, directly connceted to loops of Henle
- D. c- Medull Inner zone of kidney and contains complete nephrons

Answer: B



327. Select the correct match of animal, excretory organs and product

A. Salamander - kidney - urea

B. Peacock - kidney - urea

C. Housefly - renal tubules - uric acid

D. Labeo - nephridal tubes - ammonia

Answer: A



Watch Video Solution

328. Urine is formed from

A. Tubular absorption

B. Glomerular filtration

C. Tubular secretion

D. Both A and B
Answer: D
View Text Solution
329. Peritubular capillaries develop from
A. Renal vein
B. Afferent arteriole
C. Efferent arteriole
D. Arcuate artery
Answer: C
Watch Video Solution

330. Hypertonic urine formation is a characteristic of kidneys of

A. Fishes and amphibians B. Amphibians and reptiles C. Reptiles and fishes D. Birds and mammals Answer: D



331. Excretion in Hydra occurs through

- A. Flame cells
- B. Nephridia
- C. Cnidoblasts
- D. General body surface

Answer: D

332. Assertion A. The process of filtration takes place in malpighian corpuscles

Reason R. The total blood pressure is very high in glomerular capillaries

- A. A is wrong and R is correct
- B. A and R are correct. R is not explanation of A
- C. A is correct and R is wrong
- D. A and R both are correct. R is correct explanation of A

Answer: D



333. Select the proper option

I

(x) PCT

- II
- (p) Ascending limb of nephron opens in it
- (y) DCT (q) Filtrate is hypertonic to blood plasma
- (z) Descending limb (r) Fluid gets diluted due of loop of Henle to diffusion of electrolytes out of medullary fluid
- (w) Ascending limb (s) Filtrate is isotonic to of loop of Henle blood plasma.

A.
$$x - p, y - q, z - r, w - s$$

B.
$$x - s, y - p, z - r, w - q$$

C.
$$x - s, y - r, z - q, w - p$$

D.
$$x - s, y - p, z - q, w - r$$

Answer: D



334. Juxtaglomerular cells secrete -a- when there is fall in-b-ion concentration. Choose the correct option

- A. a-renin, b-chloride
- B. a-carbonic anhydrase, b-sodium
- C. a-ATPase, b-potassium
- D. a-renin, b-sodium

Answer: D



335. Which is true for excretion in humans

- A. Glucose and amino acids are reabsorbed in PCT by simple
 - diffusion
- B. DCT is impermeable to water

C. On the average, $25-30\,\mathrm{gm}$ of urea is excreted per day D. Maximum reabsorption occurs in loop of Henle's **Answer: C Watch Video Solution** 336. Mosquito is A. Ammonotelic B. Uricotelic C. Ureotelic

D. Guanotelic

Watch Video Solution

Answer: B

- 337. Read the following statement and choose the correct option
- I. Asceding limb of Henle's loop is permeable to water
- II. Tubular cells secrete substance like H^+ , K^+ and ammonia into
- filtrate
- III. There is maximum reabsorption in Henle's loop
- IV. Conditional reabsorption of Na^+ occurs in DCT
- V. PCT helps in maintaining ionic balance of body fluids
 - A. I, IV and V alone are correct
 - B. II, III and V alone are correct
 - C. III, IV and V alone are correct
 - D. II, IV and V alone are correct

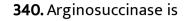
Answer: D



B. Liver cells C. Juxtaglomerular cells D. Endothelial cells Answer: B **Watch Video Solution** 339. Which ones regulate solute reabsorption during urine formation A. ADH and angiotensin B. Angiotensin II and angiotensin I C. Norepinephrine and epinephrine D. Angiotensin II and aldosterone Answer: D

A. Macula densa cell





- A. Hydrolase
- B. Ligase
- C. Lyase
- D. Oxido-reductase

Answer: C



Watch Video Solution

341. Which are catabolised by human and apes to produce uric acid

- A. Carbohydrates
- B. Lipids

C. Nucleic acids
D. Vitamins
Answer: C Watch Video Solution
342. The following is/are removed during haemodialysis
A. Urea
B. Glucose
C. Amino acids
D. All the above
Answer: A
Watch Video Solution

343. Which are not ureotelic A. Mammals B. Terrestrial amphibians C. Aquatic insects D. Bird/Snake **Answer: D View Text Solution** 344. Snake, a reptile is A. Ammonotelic B. Ureotelic C. Uricotelic D. Both A and B

Answer: C Watch Video Solution 345. Accumulation of urea in blood due to malfunctioning of kidneys is A. Edema B. Uremia C. Renal calculi D. Glomerulonephritis **Answer: B Watch Video Solution** 346. PCT is responsible for A. Filtration of blood

B. Maintenance of glomerular filtration rate

C. Reabsorption of salt only

D. Selective reabsorption of glucose, amino acids, NaCl and H_2O

Answer: D



Watch Video Solution

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

A. Renin

B. Angiotensin

C. ANF

D. None of the above

Answer: C



Match Video Colution

watch video Solution

348. Which is incorrectly matched

A. Renin - liver

B. Ptyalin - mouth

C. Pepsin - stomach

D. Trypsin - intestine

Answer: A



349. Match the lists and find the correct match

П

(part of nephron) (a) Proximal convoluted tubule (b) Distal convoluted tubule (c) Descending limb of III. Facultative

Henle's loop reabsorption of H_2O , Na^+

(d) Ascending limb of IV. Reabsorption of Henle's loop nutrients and Na

A.
$$a-III,\,b-IV,\,c-II,\,d-I$$

$$\mathtt{B.}\,a-III,b-IV,c-I,d-II$$

$$\mathsf{C.}\,a-IV,b-III,c-I,d-II$$

D.
$$a - IV$$
, $b - II$, $c - I$, $d - III$

Answer: C



350. The correct match is

- I. DCT Secretion of $H^{\,+}$ and $K^{\,+}$ ions
- II. Henle's loop -Reabsorption of glucose, water and ${\it Na}^+$ ions
- III. Podocytes Attached to parietal layer of Bowman's capsule
- IV. JGA Rise in glomerular blood pressure activates it to release renin.
 - A. III
 - B. II
 - C. I
 - D. IV

Answer: C



Watch Video Solution

351. Which one produces erythropoietin

A. Kidney

- B. Pancreas
- C. Pineal body
- D. Thyroid gland

Answer: A



Watch Video Solution

352. The wall of urinary bladder has a thick layer of smooth muscle called

- A. Dartos
- B. Detrusor
- C. Deltoid
- D. Depressor

Answer: B



watch video Solution

353. Match the columns and choose the correct option

I II ial cells of (a) Juxtamedullary

- (i) Epithelial cells of Bowman's capsule
 - nephrons
- (ii) Extension of cortex between medullary pyramids as renal
- (b) Vasa recta
- (iii) Nephrons with long loop of Henle running deep into medulla

columns

- (c) Juxtaglomerular apparatus
- (iv) A fine vessel of peritubular capillaries running parallel to Henle's loop.
- (d) Podocytes
- (v) A special sensitive region in DCT and afferent arteriole at the location of their contact.
- (e) Columns of Bertin

(f) Cortical nephron.

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

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

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

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

Answer: D



Watch Video Solution

354. Identify the correct statement regarding urine formation

- A. Counter-current mechanism works around glomerules and PCT
- B. To prevent diuresis, ADH facilitates water reabsorption from the later parts of the tubule
- C. Maximum absorption of electrolytes occurs in Henle's loop
- D. A decrease in blood pressure can increase glomerular filtration rate

Answer: B



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

A. Increase in antidiuretic hormone levels

B. Decrease in aldosterone levels

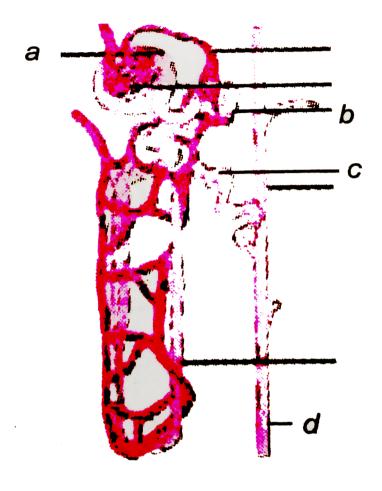
C. Decrease in antidiuretic hormone levels

D. Increase in aldosterone level

Answer: D



356. Identify $a,\,b,\,c$ and d of nephron and select the correct option



A. a- glomerulus - a tuft of capillaries formed by afferent arteriole

B. b-PCT - reabsorption of HCO_3^- and selective secretion of $H^{\,+}$

and $K^{\,+}$ occurs here

C. $c-DCT-\,$ almost all glucose, amino acids, water, $K^{\,+}\,$ and uric

acid are absorbed here

 $\ensuremath{\mathsf{D}}.\,d$ - collecting duct - extends from cortex to inner part of medulla,

large amount of water is secreted in this region

Answer: A



357. 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



358. 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

359. The increase in blood flow to heart stimulates secretion of

- A. Renin
- B. Oxytocin

C. Antidiuretic hormone
D. Atrial natriuretic factor
Answer: D
Watch Video Solution
360. Deposition of uric acid at the joints is:
A. Urea
B. Uric acid
C. Guanine
D. Ammonia
Answer: B
Watch Video Solution

- **361.** Choose the wrong statement regarding urine formation
 - A. Filtration is non-selective process perfomed by glomerulus
 - B. Glomerular capillary blood pressure causes filtration of blood through three layers
 - C. GFR in a healty individual is approximately 125 ml/min
 - D. Ascending limb of Henle's loop is permeable to water but allows transport of electrolytes actively or passively

Answer: D



- 362. Vasa recta refers to
 - A. Rectum region of insects
 - B. Blood capillaries in invertebrates

- C. A fine blood capillary network of afferent artriole
- D. A fine capillary network which runs parallel to Henle's loop

Answer: D



Watch Video Solution

363. Find the wrongly matched pair of animal and its excretory structure

- A. Balanoglossus Proboscis gland
- B. Earthworm Nephridia
- C. Grasshopper Malpighian tubules
- D. Prawn Flame cells

Answer: D



364. The conditions in which kidneys fail to conserve water leading to water loss and dehydration due to impaired ADH synthesis or release is

- A. Graves' disease
- B. Addison's disease
- C. Diabetes insipidus
- D. Cretinism

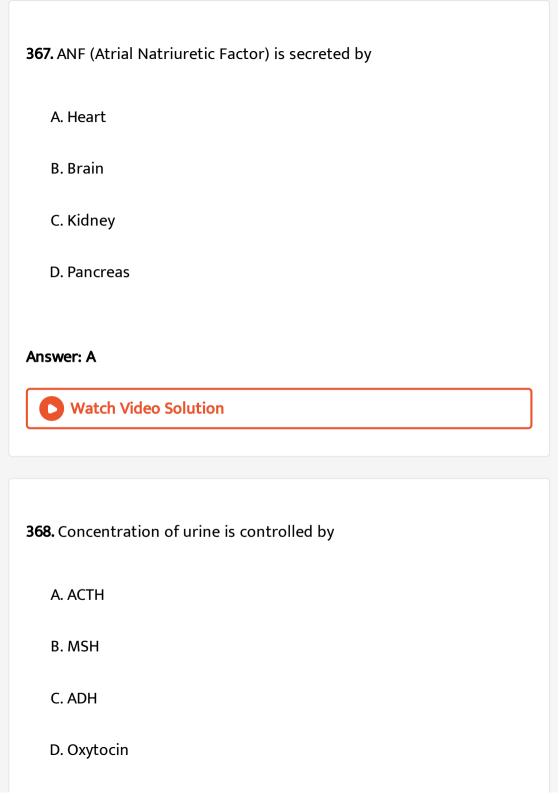
Answer: C



365. Which one of the following component of urine in a healthy human does not differ much in concentration from that of blood plasma

A. NH_4^+

B. K^+ C. Na^+ D. $SO_4^{2\,-}$ **Answer: D Watch Video Solution** 366. Birds excrete nitrogenous waste as A. Uric acid B. Urea $\mathsf{C}.\,NH_3$ D. Guanine Answer: A **Watch Video Solution**



Answer: C



Watch Video Solution

369. Which of the following statements is false

- A. Urea is more toxic than ammonia
- B. Ammonia is converted to urea in liver
- C. Ammonia is produced in the body cells by the metabolism of proteins
- D. Fluid collected in Bowman's capsule is called glomerular fluid

Answer: A



Watch Video Solution

370. Which determines the abiltiy of a mammal to concentrate its urine

- A. Number of nephrons
- B. Length of proximal convoluted tubules
- C. Length of collecting ducts
- D. Size of gomerulus

Answer: C



- **371.** The principal nitrogenous exretory compound in humans is syntheised
 - A. Kidneys as well as eliminated by kidneys
 - B. Liver but eliminated mostly through kidneys
 - C. Kidneys but mostly eliminated through liver
 - D. Liver and also eliminated by the same through bile

Answer: B



Watch Video Solution

372. Human urine is usually acidic because

- A. Sodium transporter exchanges one hydrogen ion for each sodium ion, in peritubular capillaries
- B. Excreted plasma proteins are acidic
- C. Potassium and sodium exchange generates acidity
- D. Hydrogen ions are actively secreted into the filtrate

Answer: D



Watch Video Solution

373. Choose the correct one regarding urinary excretion

A. Urinary excretion: Glomerular filtration - Tubular reabsorption

+ Tubular secretion

B. Urinary excretion : Tubular reabsorption $\,+\,$ Glomerular filtration

Tubular secretion

C. Urinary excretion: Tubular secretion + Tubular reabsorption

D. Urinary excretion : Tubular secretion $\,-\,$ Glomerular filtration

Answer: A



374. Which of the following function is performed by collecting tubule of kidney

A. In the maintenance of pH and ionic balanced of blood by the secretion of $H^{\,+}$ and $K^{\,+}$ ions

B. Maintenance of pH of blood and removal of $Na^{\,+}$ and $K^{\,+}$ ions

C. Absorption of glucose and ammonia from the blood

D. None of the above

Answer: A

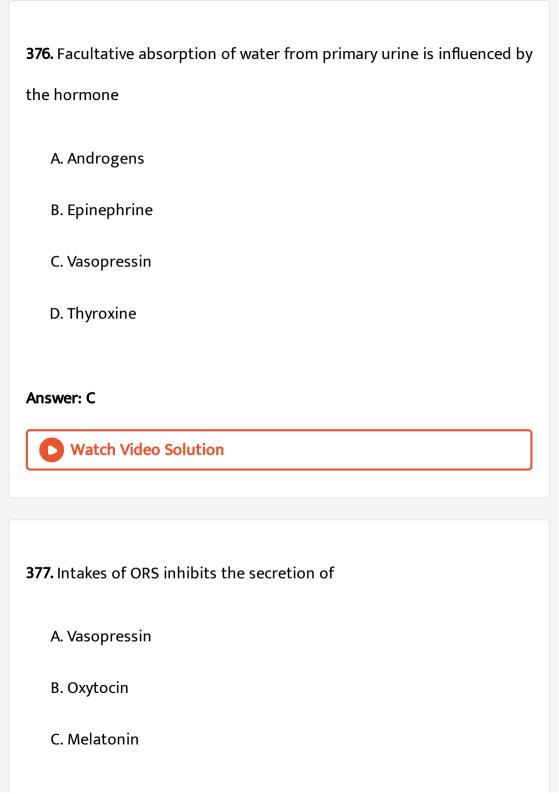
Watch Video Solution

375. Which of the following disease shows the blockage of kidney tubules and causes severe back pain

- A. Renal calculi
- B. Uremia
- C. Kidney failure
- D. Nephritis

Answer: A





D. Thyroxine

Answer: A



Watch Video Solution

378. Select the group of animals adapted to ammontelism, guanotelism and ureotelism respectively

- A. Tadpole larva of Frog, Spider Pigeon
- B. Scorpion, Turtle, Labeo
- C. Catla, Penguin, Cat
- D. Cobra, Cockroach, Bomay Duck

Answer: C



379. Hydrostatic pressure of blood while flowing in glomerulus of nephron is

- A. 10 mm Hg
- B. 18 mm Hg
- C. 32 mm Hg
- D. 60 mm Hg

Answer: D



380. Assertion A: In dializer the plasma proteins of the blood, cannot be filtered but molecules like urea, uric acid, creatinine and ions can be filtered

Reason R: The cellophane membrane used in dializer is permeable to macromolecules but impermeable to micromolecules

- A. Both A and R are true, R is correct explanation of A
- B. Both A and R is true, R is not the correct explanation of A
- C. A is true but R is false
- D. A is false but R is true

Answer: C



Watch Video Solution

381. Assertion A: The renal fluid becomes increasingly concentrated when it flows down in the descending limb of loop of Henle towards the inner medulla but its concentration decreases in the ascending limb when it flows towards the cortex

Reason R: The descending limb of the loop of Henle reabsorbs water, the ascending limb is impermeable to water but salts are reabsorbed

- A. Both A and R are true, R is correct explanation of A
- B. Both A and R is true, R is not the correct explanation of A

C. A is true but R is false

D. A is false but R is true

Answer: A



Watch Video Solution

382. In renal tubules, aldosterone increases

A. Absorption of $K^{\,+}\,,H^{\,+}$ and elimination of $Na^{\,+}\,,H_2O$

B. Absorption of Na^+, H_2O and elimination of $K^+, PO_4^{3\,-}$

C. Absorption of $Na^+, H_2O, K^+, PO_4^{3-}$

D. Elimination of $Na^+, H_2O, K^+, PO_4^{3\,-}$

Answer: B



- **383.** Excretory structures of rotifers are

 A. Green glands
 - B. Malpighian tubules
 - C. Flame cells
 - D. Gills

Answer: C



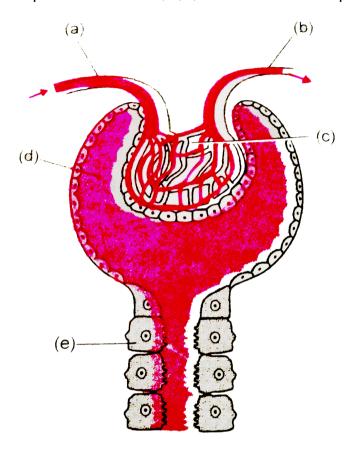
- **384.** Read the following statements and choose the correct option
- (i) Glomerular filtration rate in a healthy individual is about 180 ml/day
- (ii) All constituents of plasma pass into lumen of Bowman's capsule
- (iii) $70-80\,\%$ of electrolystes and water are absorbed in PCT
- (iv) Angiotensin II increases the glomerular blood pressure and $\ensuremath{\mathsf{GFR}}$
- (v) Counter current system contribute in concentrating the filtrate

- A. i and ii only are correct
- B. v along is correct
- C. ii, iii and iv are correct
- D. iii, iv and v are correct

Answer: D



385. The parts labelled as a, b, c, d and e of renal corpuscle represent



A. a- afferent arteriole, b- efferent arteriole, c- glomerulus,

d- Bowman's capsule, e- proximal convoluted tubule

B. a- efferent arteriole, b- afferent arteriole, c- glomerulus,

d- Bowman's capsule, e- proximal convoluted tubule

 $\operatorname{C.}a-\operatorname{afferent}$ arteriole, $b-\operatorname{efferent}$ arteriolde, $c-\operatorname{glomerulus}$

 $d-{\sf Bowman's}$ capsule, $e-{\sf distal}$ convoluted tubule

D. a- afferent arteriole, b- efferent arteriole, c- Bowman's

capsule, $d-\mathsf{glomerulus}$, $e-\mathsf{proximal}$ convoluted tubule

Answer: A



Watch Video Solution

386. What is the correct option for the maintenance of concentration of urine

A. Counter-current produced in two limbs of Henle's loop

B. Counter-current produced in two limbs of vasa rects

C. Acending limb of Henle's loop

D. Counter-current producted by Henle's loop and vasa rects

Answer: D



Watch Video Solution

387. What conditions are responsible for stimulation of juxtaglomerular apparatus

- A. An increase in blood pressure or blood volume in heart
- B. An increase in the solute concentration of the blood plasma
- C. A decrease in the solute concentration of the blood plasma
- D. Decrease in blood pressure or blood volume in afferent arteriole

Answer: D



Watch Video Solution

388. Which of the following statements on human kidney is false

A. Renal plasma flow is normally 660 ml/min B. Blood flow in the cortex is greater than that in the medulla C. Reabsorption of ions and water occurs mainly in the distal convoluted tubules D. Renal blood flow is decreased in dehyration **Answer: C Watch Video Solution** 389. Ketone bodies are bypoducts in metabolism of

A. Carbohydrates

D. All the above

B. Protein

C. Fat

Answer: c



Watch Video Solution

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

- A. Hepatic portal vein
- B. Renal vein
- C. Dorsal aorta
- D. Hepatic vein

Answer: D



Watch Video Solution

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

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

Answer: C



Watch Video Solution

392. Which of the following statements is correct

- A. Ascending limb of loop of Henle is impermeable to water
- B. Descending limb of loop of Henle is impermeable to water
- C. Ascending limb of loop of Henle is permeable of water
- D. Descending limb of loop of Henle is permeable to electrolytes.

Answer: A



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

A. Renin

B. Atrial natriuretic factor

C. Aldosterone

D. ADH

Answer: B



Watch Video Solution

Check Your Graps

1. Archinephros occurs in

A. Adult Hagfish

B. Larva of Hegfish

C. Molluscs

D. Anamniotes

Answer: b



- 2. Aminotelic animals are
 - A. Cockroach
 - B. Nereis
 - C. Pila and Starfish
 - D. Elasmobranch fishes

Answer: c



- 3. Excretory product of spider is
 - A. Ammonia
 - B. Urea
 - C. Uric acid
 - D. Guanine

Answer: A



- 4. The cell lining the Bowman's capsule are
 - A. cubical
 - B. Columnar

C. Podocytes
D. Glomerular cells
Answer: c Watch Video Solution
5. Which one is the diluting segments of uriniferous tubule?
A. Ascending loop of Henle
B. Descending loop of Henle
C. PCT
D. DCT
Answer: A
Watch Video Solution

6. Which one increases glomerular pressure ?
A. Renin
B. Angiotensin
C. Aldosterone
D. ADH
Answer: A
Watch Video Solution
7. Urine calculi are
7. Urine calculi are A. Bile pigments
A. Bile pigments
A. Bile pigments B. Protein particles

Answer: 4 Watch Video Solution

- **8.** In which part of uriniferous tubule, $Na^{\,+}$ passes out
 - A. Descending loop of Henle
 - B. collecting tubule
 - C. Ascending loop of Henle
 - D. None of the above

Answer: c



- 9. Vasa rectae are peritubular capillaries around
 - A. Posterior part of alimentary canal

B. PCT C. Loop of Henle D. DCT Answer: c **Watch Video Solution** 10. Green glands are excretory organs of A. Crustaceans **B.** Centipedes C. Annelids D. Molluscs Answer: A **Watch Video Solution**

