

Homeostasis

Q. 1) The mechanism which eliminates nitrogenous waste is referred as —

- a) Homeostasis
- b) Osmoregulation
- c) Excretion
- d) Thermoregulation

Ans. : — c) Excretion.

Q. 2) What factor disturbs the homeostasis?

- a) Social environment.
- b) Internal environment.
- c) External environment.
- d) All of the above

Ans. : — d) All of the above.

Q. 3) What is controlled condition

- a) It receives the input
- b) Disruptions caused in homeostasis.
- c) Variable which is monitored
- d) receives output

Ans. : — Variable which is monitored

Q. 4) the condition of Equilibrium in the body is known as ?

- a) hemostasis.
- b) homeostasis
- c) translation
- d) transcription.

Ans : — b) homeostasis.

Q. 5) What factors comes under social environment which disturb homeostasis

- a) Temp.
- b) lack of O₂
- c) blood glucose level
- d) none of the above

Ans : — none of the above

Q. 6) The more concentrated extranodal environment is termed as —

- a) isotonic
- b) Hypotonic
- c) Hypertonic
- d) No of the above

Ans . — c) Hypertonic

Q. 7) Which adaptations for reduced rate of transpiration?

- a) Hydrophytes.
- b) mesophytes.
- c) Xerophytes
- d) osmoregulation.

Ans : - c) xerophytes.

Q. 8) — have moderate water availability.

- a) Hydrophytes.
- b) Homeostasis.
- c) Xerophytes.
- d) Mesophytes.

Ans : - d) mesophytes

Q. 9) Which type of adaptation the surface area of leaves is very large to transpire water excessively.

Ans : -

- a) Xerophytes.
- b) mesophytes
- c) Hydrophytes.
- d) No of above

Ans : - Hydrophytes.

Q. 10) In Paramecium, osmoregulation is a function of —

- a) cytoosome
- b) contractile vacuole
- c) cytophyge
- d) trichocysts.

Ans. :- b) contractile vacuole.

Q. 11) Osmoregulators carry out excretion of salt through

- Ans: a) gills.
b) fins
c) scales
d) bladder.

Ans : - gills.

Q. 12) Without restoration, if excess water passes out from the tissues of kidney, the cells would

- a) shrivel & die
- b) burst open & die
- c) not get affected at all
- d) take water from plasma

Ans : - c) not get affected at all.

Q. 13) This is used as an osmolyte in humans to increase medullary interstitial osmolality during concentration of urine.

- a) Urea
- b) TMAO
- c) a & b both
- d) uric acid

Ans :— Urea.

Q. 14) A person on a long hunger strike, surviving only on water will have

- a) less amino acids in his urine.
- b) more sodium in his urine
- c) less urea in his urine
- d) more glucose in his blood.

Ans :— c) less urea in his urine.

Q. 15) Mechanism of regulation, typically between entities & its environment of solutes & the loss & gain of water is known as

- a) Homeostasis b) thermoregulation
- c) Homeostasis d) osmoregulation.

Ans :— d) osmoregulation.

- Q. 16) Most of the marine invertebrates are
a) osmoregulator's b) osmoconformers
c) both depends on d) None of above
Sea Water concentration

Ans : - b) osmoconformers.

- Q. 17) kidney matrix retains some quantity of urea to maintain.
a) metabolism b) micturition
c) desired osmolarity d) balance of the body

Ans : - c) desired osmolarity.

- Q. 18) This is not a primary function of protonephridia
a) excretion b) osmoregulation.
c) fluid volume regulation d) ionic volume regulation

Ans : - a) Excretion.

- Q. 19) This is both osmoregulator & a nitrogenous product.
a) uric acid b) urea.
c) NH₃ d) All of the above

Ans : - b) urea.

Q.20) Homeostasis is best described by which of the following statements?

- a) maintaining a stable environment & unaltered state of the body.
- b) stable equilibrium.
- c) keeping the internal environment to meet the body's near constant.
- d) changing the external environment to meet the body requirements.

Ans: a) maintaining a stable & unaltered state of the body.

Q.21) What are the two types of osmoregulation
are —

- a) Osmoconformers
- b) Osmoregulators.
- c) both a) & b)
- d) None of above

Ans: c) both a & b.

Q.22) Which organ help to osmoregulation.

- a) Kidney
- b) lungs.
- c) Liver
- d) None of above.

Ans: a) Kidney

Q.23) Removal of metabolic waste in the form of urea is called —

- a) Ureotelism
- b) Uricotelism.
- c) Aminotelism
- d) Ammonotelism

Ans :— a) Ureotelism.

Q.24) The means which is used by fresh water organisms to prevent net water gain or loss of body salt is —

- a) Loxocytes.
- b) Contractile vacuole
- c) Large volume of dilute urine
- d) All of these .

Ans :— d) All of these .

Q.25) The smallest functional unit of kidney is —

- a) Bowman's capsule
- b) Collecting tube
- c) Nephron
- d) Glomerulus.

Ans: c) Nephron .

Q.26) Which one of the following produced in the kidney

- a) Uricase
- b) Arginase
- c) Rennin
- d) Renin .

Ans :— d) Renin .

- Q.27) fresh water fish maintain osmoregulation by—
- a) Taking both water & salt from the environment
 - b) continuously taking in water & eliminating excess of salt.
 - c) Eliminating excess of water & taking up salts from the environment.
 - d) Eliminating both salt & water in to environment

Ans :- c) Eliminating excess of water & taking up salts from the environment.

- Q.28) the metabolic pathway's involved in the production of urea are termed as ~~what~~ ?
- a) excretion
 - b) citrulline.
 - c) urea cycle
 - d) None of above.

Ans :- c) urea cycle.

- Q.29) the ornithine cycle removes two waste products from the blood in liver these products are—
- | | | |
|---|----------------------------|------------------------|
| A | a) CO_2 & ammonia | b) Ammonia & urea |
| | c) CO_2 & urea | d) Ammonia & uric acid |

Ans. a) CO_2 & ammonia

- Q.30) In ureotelic animals, urea is formed by—
a) Krebs cycle b) EMP pathway
b) ornithine cycle d) Cori's cycle

Ans :— b) ornithine cycle

- Q.31) A condition of failure of kidney to form urine
is called —
a) Anuria b) Deamination.
c) Uremia d) None of these.

Ans :— a) Anuria

- Q.32) The basic functional unit of human kidney is
a) nephridia b) Henle's loop.
c) nephron d) pyramid.

Ans :— c) nephron

- Q.33) Conversion of ammonia to urea is done by —
a) ornithine cycle b) arginine cycle.
c) fumonic cycle d) citrulline cycle

Ans. a) ornithine cycle

Q.34 Animals excreting ammonia are called as —

- a) uricotelic
- b) ammonotelic
- c) ureotelic
- d) protonephridium.

Ans: - b) ammonotelic.

Q.35 Animals excreting urea & uric acid are called as — & — respectively.

- Ans.
- a) Ureotelic & uricotelic
 - b) ammonia & ammonia
 - c) both (a) & (b)
 - d) None of these.

Ans: - a) Ureotelic & uricotelic.

Q.36 Which is does not have specialized excretory structure In it waste products simply diffuse into isosmotic surrounding.

- a) protonephridium
- b) Hydra
- c) Flame cell
- d) Planaria.

Ans: - b) Hydra.

Q.37 Earth worm is a —

- a) terrestrial vertebrate
- b) aquatic vertebrate
- c) aquatic invertebrate
- d) terrestrial invertebrate

Ans: - d) terrestrial invertebrate.

Q.38 Which of the following statements about earth worm is true?

- a) They are vertebrates.
- b) They do not live in burrows.
- c) They can be traced by fecal deposits.
- d) They inhabit the lower layers of the soil.

Ans: - c) They can be traced by fecal deposits.

Q.39 Which of the following statements is true about prostomium?

- a) It is present in the posterior end of the earthworm.
- b) It acts as a wedge to open cracks in the soil.
- c) It is the mouth of the earth worm.
- d) It does not have a sensory function.

Ans: - b) It acts as a wedge to open cracks in the soil.

Q.40) The first body segment of the earthworm is the

- a) male genital aperture
- b) female genital aperture
- c) peristomium
- d) ~~c~~litellum

Ans:- peristomium.

Q.41) What are the pores present on the surface of the body of the earthworm called?

- a) Polypore
- b) Exospore
- c) Nephridiopore
- d) zoospore

Ans:- c) Nephridiopore.

Q.42) The tubular system opens to the exterior through several.

- a) nephridiophore
- b) nephrostome
- c) protonephridium
- d) Protostome

Ans:- a) nephridiophore

Q.43) The suspended tubular structure with which collect excretory products from hemolymph are called

- a) protonephridium
- b) metanephridium
- c) metanephridium
- d) malpighian tubules

Ans:- d) malpighian tubules.

- Q.44) the network of closed tubules without internal opening are called ?
a) protonephridium
c) Malpighian tubules

b) metanephridium
d) excretory tubules

Ans :- a) protonephridium

- Q.45) In insects, there is no structural or functional relationship between excretory or digestive system except in
a) earthworm
c) lizards

b) cockroach.
d) ants.

Ans:- cockroach.

- Q.46) which of the following is not accumulated by the body of living organisms ?
a) ammonia
c) urea

b) carbon dioxide.
d) oxygen.

Ans :- d) oxygen.

- Q.47) which of the following the most toxic form of nitrogenous waste.
a) Urea
c) uric acid

b) ammonia.
d) uric acid.

Ans :- b) Ammonia.

Q.48) Which of the following organisms is not unicellular?

- a) Bony fishes.
- b) mammals.
- c) Terrestrial amphioxus.
- d) marine fishes.

Ans:- a) Bony fishes.

Q.49) Which of the following is not a unicellular organism?

- a) mammals
- b) Reptiles.
- c) Birds.
- d) Land snails.

Ans:- a) mammals.

Q.50) The homeostatic thermostat which facilitates the process of thermoregulation in man is present in

- a) cerebrum
- b) thalamus.
- c) hypothalamus
- d) medulla

Ans:- c) hypothalamus.

Q.51) The animal which uses saliva & urine for cooling is

- a) lizard
- b) cats.
- c) bears
- d) bats.

Ans:- d) bats.

Q.52) the heat transfer mechanism that occurs between the sun & the outer layer of the skin is called what?

- a) conduction
- b) convection.
- c) Radiation
- d) Evaporation.

Ans: c) Radiation

Q.53) What is the major heat source to retain body temperature for a nude 65 kg adult person in 25°C / 84.2°F environment.

- a) Brain
- b) Brown adipose.
- c) Liver.
- d) Skeletal muscle.

Ans: d) skeletal muscle

Q.54) Which of the following is a human thermogenic response controlled by cholinergic sympathetics.

- a) Brown adipose tissue thermogenesis.
- b) Hand vasodilation.
- c) Shivering thermogenesis.
- d) sweat secretion.

Ans: d) sweat secretion.

Q.55) the principle physical mechanism that accounts for the transfer of heat within the body is what

- a) conduction
- b) convection
- c) Radiation
- d) Evaporation.

Ans : - b) convection.

Q.56) the rate of heat production is increased by increased muscle contraction by movements or shivering so called as —

- a) thermoregulation
- b) shivering thermogenesis
- c) non shivering thermogenesis
- d) none of these.

Ans : - b) shivering thermogenesis.

Q.57) the compensation techniques uses —

- a) transformers
- b) inductors
- c) diodes
- d) capacitor's

Ans : - c) diodes.

Q.58) which of the following has a negative temperature coefficient of resistance.

- a) a) Thermistor
- b) capacitor
- c) sensistor
- d) diode.

Ans : - a) Thermistor.

Q.5) Which type of temperature dependent resistor exhibits a positive temperature coefficient of resistivity?

- a) Thermistor.
- b) sensistor
- c) varistor
- d) photoresistor.

Ans:- b) sensistor.

Q.6) Which of the following is not a pyrogen test.

- a) LAL test
- b) Rabbit test
- c) Sham test
- d) All the above.

Ans:- c) Sham test.