

NEET BIOLOGY 2018-19 - Chennai

Periodic Test : 10

Test ID : 022

Number of questions: 150

Test date: 29.03.2019

Name: _____

Time: 3HRS

ID No: _____

Negative Marks : 4 marks for correct attempt & 1 mark deducted for every wrong attempt.

1. Select the correct route for the passage of sperms in male frogs.

- (a) Testes Vasa efferentia Kidney
Seminal vesicle Urinogenital duct Cloaca
- (b) Testes Vasa efferentia Bidder's canal
Ureter Cloaca
- (c) Testes Vasa efferentia Kidney
Bidder's canal Urinogenital duct Cloaca
- (d) Testes Bidder's canal Kidney
Vasa efferentia Urinogenital duct Cloaca

2. Frog's heart when taken out of the continues to beat for some time. Select the best option from the following statements.

- (1) Frog is a poikilotherm.
(2) Frog does not have any coronary circulation.
(3) Heart is "myogenic" in nature.
(4) Heart is auto excitable
- (a) Only (4)
(b) (1) and (2)
(c) (3) and (4)
(d) Only (3)

3. In male cockroaches, sperms are stored in which part of the reproductive system?

- (a) Seminal vesicles
(b) Mush room glands
(c) Testes
(d) Vas deferents

4. Smooth muscles are involuntary,

- (a) Involuntary, fusiform, non striated
(b) voluntary, multinucleate, cylindrical
(c) involuntary, cylindrical, striated
(d) Voluntary, spindle-shaped, uninucleate.

5. Which type of tissue correctly matches with its location?

Tissue	Location
A) Transitional epithelium	Tip of noice
B) Cuboidal epithelium	lining of stomach
C) Smooth muscle	Wall of intestine
D) Areolar tissue	Tendons

6. Which of the following features is not present in *Periplaneta americana*?

- (a) Exoskeleton composed of N-acetylglucos-amine
(b) Metamerically segmented body
(c) Schizocoelom as body cavity
(d) Indeterminate and radial cleavage during embryonic development

7. The body cells in cockroach discharge their nitrogenous waste in the haemolymph mainly in the form of

- (a) urea
(b) calcium carbonate
(c) ammonia
(d) Potassium urate.

8. The function of the gap junction is to
- separate two cells from each other
 - stop substance from leaking across a tissue
 - performing cementing to keep neighbouring cells together
 - facilitate communication between adjoining cells by connecting the cytoplasm for rapid transfer of ions, small molecules and some large molecules.

9. The tergas sterna and pleura of cockroach body are joined by

- arthrodial membrane
- cartilage
- cementing glue
- muscular tissue,

10. Choose the correctly matched pair.

- Tendon - Specialized connective tissue
- Adipose tissue - Dense connective tissue
- Areolar tissue - Loose connective tissue
- Cartilage - Loose connective tissue

11. Choose the correctly matched pair.

- Inner lining of - Ciliated epithelium salivary ducts
- Moist surface - Glandular epithelium of buccal cavity
- Tubular parts of - Cuboidal epithelium nephrons
- Inner surface of - Squamous epithelium bronchioles

12. What external changes are visible after the last moult of a cockroach nymph?

- Both forewings and hindwings develop
- Labium develops
- Mandibles become harder
- Anal cerci develop

13. Select the correct option with respect with cockroaches.

- Malpighian tubules convert nitrogenous wastes into urea
- Males bear short anal styles not present in females.
- Nervous system comprises of a dorsal nerve cord and ten pairs of ganglia.
- The forewings are tegmina which are used in flight.

14. Identify the tissue shown in the diagram and match with its characteristics and its location.



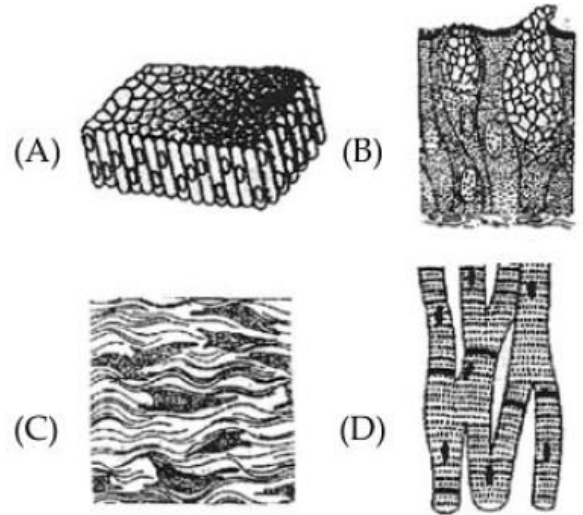
- Smooth muscles, show branching, found in the all of the heart
- Cardiac muscles, unbranched muscles, found in the walls of the heart
- Striated muscles, tapering at both-ends, attached with the bones of the ribs
- Skeletal muscles show striations and are closely attached with the bones of the limbs

15. Compared to those of humans, the erythrocytes in frog are

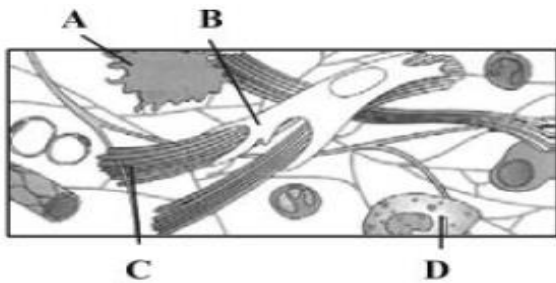
- without nucleus but with haemoglobin
- nucleated and with haemoglobin
- very much smaller and fewer
- Nucleated and without se haemoglobin.

16. Select the correct statement from the ones given below with respect to Periplaneta Americana.

- (a) Nervous system located dorsally, consists of segmentally arranged ganglia joined by a pair of longitudinal connectives.
- (b) Males bear a pair of short thread like anal styles.
- (c) There are 16 very long malpighian tubules present at the junctions of midgut and hindgut.
- (d) Grinding or rood is carried Out only by the mouth parts



17. Given below is the diagrammatic sketch of a certain type of connective tissue. Identify the parts labeled A, B C and D and select the right option about them.



- | A | B | C | D |
|--------------|-----------------|----------------|-----------------|
| A)Macrophage | Fibroblast | Collagen fibre | Mast cell |
| B)Mast cell | Macrophage | Fibroblast | Collagen fibres |
| C)Macrophage | Collagen fibres | Fibroblast | Mast cell |
| D)Mast cell | Collagen fibres | Fibroblast | Macro-phage |

18. The supportive skeletal structures in the human external ears and in the nose tip are examples

- (a) ligament
- (b) areolar tissue
- (c) bone
- (d) Cartilage.

19. The four sketches (A, B, C and D) 'given below, represent four different types of animal tissues. Which one of these is correctly identified in the options given, along with its correct location and function?

Tissue	Location	Function
A)Glandular epithelium	intestine	secretion
B)Collagen	Cartilage	attach skeletal muscles fibres to bones
C)Smooth muscle tissue	Heart	Heart contraction
D)Columnar epithelium	Nephron	Secretion and absorption

20. The ciliated columnar epithelial cells in humans are known to occur in

- (a) Eustachian tube and stomach lining
- (b) bronchioles and Fallopian tube
- (c) bile duct and oesophagus
- (d) Fallopian tube and urethra.

21. One very special feature in the earthworm (Pheretima) is that

- (a) Fertilization of eggs occurs inside the body
- (b) the typhlosole greatly increases the effective absorption area of the digested food in them intestine
- (c) the S-shaped setae embedded in the integument are the defensive weapons used against the enemies
- (d) it has a long dorsal tubular heart

22. Which of the following happens in the common cockroach?

- (a) Malpighian tubules are excretory organs projecting out from the colon.
- (b) Oxygen is transported by haemoglobin in blood.
- (c) Nitrogenous excretory product is urea.
- (d) The food is ground by mandibles and gizzard.
23. Frogs differ from humans in possessing
- (a) Paired cerebral hemispheres
- (b) Hepatic portal system
- (c) Nucleated red blood cells
- (d) Thyroid as well as parathyroid.
24. The cells lining the blood vessels belong to the category of
- (a) Smooth muscle tissue
- (b) Squamous epithelium
- (c) Columnar epithelium
- (d) Connective tissue.
25. Which one of the following structures in Pheretima is correctly matched with its Function?
- (a) Clitellum - Secretes cocoon
- (b) Gizzard - Absorbs digested food
- (c) Setae - Defence against predators
- (d) Typhlosole Storage of extra nutrients
26. Primary function of enteronephric nephridia of Pheretima is
- (a) osmoregulation
- (b) excretion of nitrogenous wastes
- (c) respiration
- (d) locomotion.
27. Ligament is an
- (a) inelastic white fibrous tissue
- (b) modified white fibrous tissue
- (c) modified yellow elastic fibrous tissue
- (d) none of the above,
28. Tendon is made up of
- (a) Yellow fibrous connective tissue
- (b) modified white fibrous tissue
- (c) areolar tissue
- (d) Adipose tissue.
29. In mammals, histamine is secreted by
- (a) lymphocytes
- (b) mast cells
- (c) fibroblasts
- (d) Histiocytes.
30. Protein present in cartilage is
- (a) cartilage
- (b) ossein
- (c) chondrin
- (d) None of these
31. Basement membrane is made up of
- (a) No cell product of epithelial cell
- (b) Epidermal cell only
- (c) Endodermal cell
- (d) Both (b) and (c)
32. Stratum germinativum is an example of which kind of epithelium?
- (a) Columnar
- (b) Squamous
- (c) Cuboidal
- (d) Ciliated
33. The roof of the cranium of frog is formed by
- (a) frontoparietal
- (b) orbitosphenoid
- (c) parasphenoid
- (d) alisphenoid

34. In frog, the surface of attachment of tongue is
- (a) Pterygoid
 - (b) Hyoid apparatus
 - (c) Parasphenoid
 - (d) Palatine
35. In frog, "fenestra ovalis" is
- (a) the communication between the pharynx and the tympanic cavity
 - (b) the external opening of the tympanic cavity which is covered by the tympanic membrane
 - (c) the air filled cavity of the middle ear
 - (d) the opening in the auditory capsule which separates the middle ear from the internal ear.
36. The kidney of an adult frog is
- (a) metanephros
 - (b) opisthonephros
 - (c) pronephros
 - (d) mesonephros.
37. An epithelial tissue which has thin flat cells, arranged edge to edge so as to appear like closely packed tiles, is found to be present at
- (a) outer surface of ovary
 - (b) inner lining of fallopian tube
 - (c) inner lining of stomach
 - (d) inner lining of cheeks,
38. Hair present in the skin are
- (a) epidermal in origin and made of dead cells
 - (b) epidermal in origin and made of living cells
 - (c) dermal in origin and made of living cells
 - (d) dermal in origin and made of dead cells
39. The layer of actively dividing cells of skin is termed as
- (a) stratum compactum
 - (b) stratum corneum
 - (c) stratum malpighii/stratum germinativum
 - (d) stratum lucidum.
40. Formation of cartilage bones involves
- (a) deposition of bony matter by osteoblasts and resorption by chondroclasts
 - (b) deposition of bony matter by osteoclasts
 - (c) deposition of bony matter by osteoclasts only
 - (d) deposition of bony matter by osteoblasts only.
41. Mucus helps frog in forming
- (a) thick skin
 - (b) dry skin
 - (c) smooth skin
 - (d) moist skin
42. Characteristics of smooth muscle fibres are
- (a) spindle-shaped, unbranched, nonstriated, uninucleate and involuntary
 - (b) spindle-shaped, unbranched, unstriated, multinucleate and involuntary
 - (c) cylindrical, unbranched, unstriated, multinucleate and involuntary
 - (d) Cylindrical, unbranched, striated, multinucleate and involuntary.
43. Male and female cockroaches can be distinguished externally through
- (a) anal styles in male
 - (b) anal cerci in female
 - (c) anal style and antennae in females
 - (d) both (b) and (c).
44. Earthworm possesses hearts
- (a) 6 pairs
 - (b) 4 pairs
 - (c) 2 pairs
 - (d) 1.

45. Blood of Pheretima is
- (a) blue with haemocyanin in corpuscles
 - (b) blue with haemocyanin in plasma
 - (c) red with haemoglobin in corpuscles
 - (d) red with haemoglobin in plasma.
46. Pheretima posthuma is highly useful as
- (a) their barrows make the soil loose
 - (b) they make the soil porous, leave their castings and take organic debris in the soil
 - (c) they are used as fish meal
 - (d) they kill the birds due to biomagnifications of chlorinated hydrocarbons
47. Haversian canals occur in
- (a) humerus
 - (b) pubis
 - (c) scapula
 - (d) clavicle
48. Histamine secreting cells are found in
- (a) connective tissues
 - (b) lungs
 - (c) muscular tissue
 - (d) nervous tissue.
49. Mineral found in red pigment of vertebrate blood is
- (a) magnesium
 - (b) iron
 - (c) calcium
 - (d) copper,
50. Photoreceptors of earthworm occur on
- (a) Clitellum
 - (b) Many eyes
 - (c) Dorsal surface
 - (d) Lateral sides