BIOLOGY

BOOKS - A2Z BIOLOGY (HINGLISH)

STRUCTURAL ORGANIZATION IN ANIMALS

Section A Topicwise Questions Topic 1 Animal Tissues Epithellial Tissue And Connective Tissue

1. In multicellular animals, a group of similar cells along with intercellular substances perform a specific function. Such an organisation is called

A. Epithelium

B. Organs

C. Tissue

D. Organ system

Answer: C

Watch Video Solution

2. In animals, tissue are broadly classified into...a...types while in plants, tissue are of...b..types.

A. a-two, b-four

B. a-three,b-two

C. a-four, b-three

D. a-four, b-two

Answer: D

Watch Video Solution

3. Animal tissues are broadly classified into four types as

A. Squamous, columnar, cuboidal and ciliated

B. Simple, compound, special and glandular

C. Epithelial, connective, neural and skeletal

D. Neural, connective, epithelial and muscular

Answer: D

Watch Video Solution

4. The epithelial tissues are of

A. Three types, namely, squamous, cuboidal and columnar epithelium

B. Four types, namely, squamous, cuboidal, columnar and ciliated epithelium

C. Two types, as, simple and compound epithelium

D. Two types, as, simple and complex epithelium

Answer: C

Watch Video Solution

5. Fill in the blanks:

a. The...1...consists of two or more cell layers and has protective function as it does in our skin.

b. The...2...is composed of single layer of cells and functions as a lining for body cavities, ducts and tubes.

A. 1-Squamous, epithelium, 2-Cuboidal epithelium

B. 1-Columnar epithelium 2-Squamous epithelium

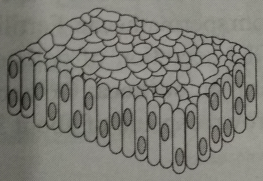
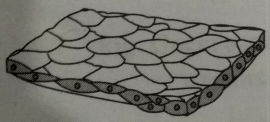
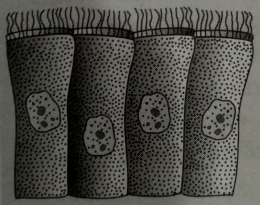
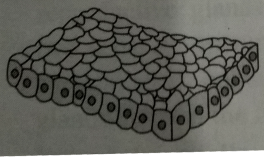
C. 1-Simple epithelium, 2-Compound epithelium

D. 1-Compound epithelium, 2-Simple epithelium

Answer: D

Watch Video Solution

6. Match the columns I, II and IIIand choose the correct combination from the options given.

Column I	Column II	Column III
a. 	1. Squamous epithelium	K. Ducts of glands
b. 	2. Cuboidal epithelium	L. Fallopian tubes
c. 	3. Columnar epithelium	M. Air sacs of lungs
d. 	4. Ciliated columnar epithelium	N. Lining of stomoch

A. $a-3-K, b-2-M, c-1-N, d-4-L$

B. $a-4-N, b-1-K, c-3-L, d-2-M$

C. $a-3-N, b-1-M, c-4-L, d-2-K$

D. $a-3-N, b-1-M, c-4-K, d-2-L$

Answer: C

Watch Video Solution

7. On the basis of structural modification of the cells, simple epithelium is further divided into

A. Two types- ciliated and glandular epithelium

B. Three types-squamous, cuboidal and columnar epithelium

C. Four types-squamous, cuboidal, columnar and ciliated epithelium

D. Two types-unicellular and multicellular epithelium

Answer: B

Watch Video Solution

8. Match the columns I,II and III and choose the correct combination from the options given.

$Column I$	$Column II$	Col
a. Tall and slender cells	1. Cuboidal epithelium	K.
b. Flattened cells with irregular boundaries	2. Columnar epithelium	L.
c. Cilia on their free surface	3. Squamous epithelium	M.
d. Cube like cells	4. Ciliated epithelium	N.

A. $a-2-M, b-3-N, c-4-K, d-1-L$

B. $a-2-K, b-1-L, c-4-M, d-3-N$

C. $a-4-M, b-3-L, c-1-K, d-1-N$

D. $a-2-M, b-3-N, c-4-L, d-1-K$

Answer: A

Watch Video Solution

9. The epithelium of....of nephron in the kidney has microvilli.

A. PCT

B. DCT

C. HL

D. Collecting duct

Answer: A

Watch Video Solution

10. Read the following statements and find out the correct statement(s).

A. The squamous epithelium is involved in fuctions like forming a diffusion boundary.

B. The cuboidal and columnar epithelium help in secretion and absorption.

C. The function of ciliated epithelium is to move particles or mucus in a specific direction over the epithelium

D. All of the above

Answer: D

Watch Video Solution

11. Read the following statements and find out the incorrect statement.

A. The structures of the cells vary according to their function

B. The epithelial cells are compactly packed with little intercellular matrix.

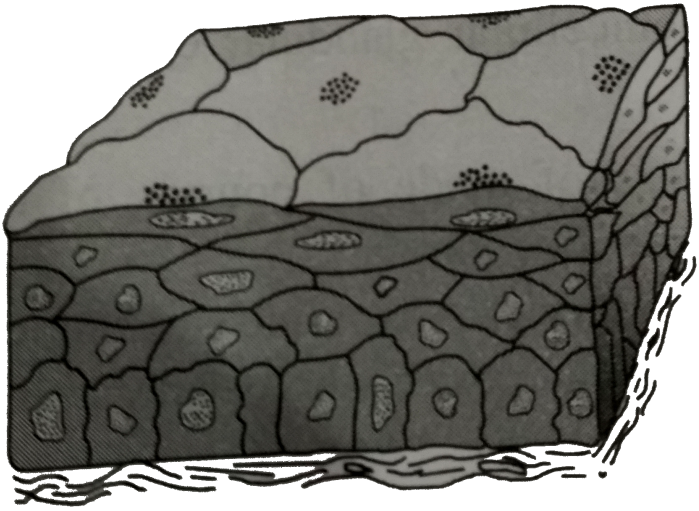
C. Main function of compound epithelium is secretion and absorption.

D. The inner lining of ducts of salivary glands and of pancreatic ducts is covered by compound epithelium

Answer: C

Watch Video Solution

12. Read the following statements and find out how many of these are related to given figure.



a. Multilayered epithelium

b. Limited role in secretion and absorption.

c. Main function is to provide protection aganist chemical and mechanical stresses.

d. They cover the dry surface of skin, moist surface of buccal cavity and pharynx.

A. Four

B. Three

C. Two

D. One

Answer: A

Watch Video Solution

13. Some of the columnar or cuboidal cells get specialised for secretion and are called

A. Ciliated epithelium and are of two types-ciliated columnar and ciliated cuboidal

B. Compound epithelium and are of three types

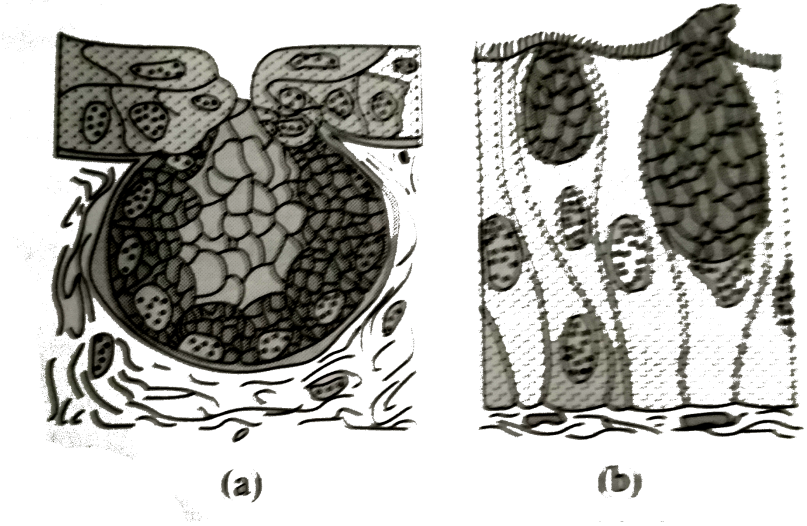
C. Glandular epithelium and are of two types-exocrine and endocrine

D. Glandular epithelium and are of two types-unicellular and multicellular

Answer: D

Watch Video Solution

14. Recognise the figure and find out the correct labelling.



A. a'-unicellular glandular epithelium like goblet cells of alimentary canal 'b'-multicellular glandular epithelium like salivary gland

B. a'-unicellular glandular epithelium like salivary gland 'b'-multicellular glandular epithelium like goblet cells of alimentary canal

C. a'-multicellular glandular epithelium like salivary gland 'b'-unicellular glandular epithelium like goblet cells of alimentary cells

D. a'-multicellular glandular epithelium like goblet cells of alimentary canal 'b'-unicellular glandular epithelium like salivary gland

Answer: C

Watch Video Solution

15. On the basis of mode of pouring of their secretions, glands are divided into

A. Two categories-exocrine and endocrine glands

B. Three categories-holocrine, merocrine and apocrine glands

C. Two categories-exocrine and ductless glands

D. Both A and C

Answer: D

Watch Video Solution

16. There are.....types of cell junctions found in epithelium and nearly all animal tissue which provide both structural and functional links between

its individual cells.

A. Two

B. Three

C. Four

D. Many

Answer: B

Watch Video Solution

17. Match the columns I and II, and choose the correct combination from the options given.

$Column I$	$Column II$
a. Adhering	1.Help of stop substances from leaking across a tissue
b. Gap Junctions	2.Perform comenting to keep neighbouring cells togeth
c. Tight Junctions	3.Facilitate the cells to communicate with each other

A. $a-3, b-2, c-1$

B. $a-2, b-3, c-1$

C. $a-2, b-1, c-3$

D. $a-1, b-3, c-2$

Answer: B

Watch Video Solution

18. In all connective tissues, except....the cells secrete fibres of structural proteins called collagen or elastin.

A. Blood

B. Bone

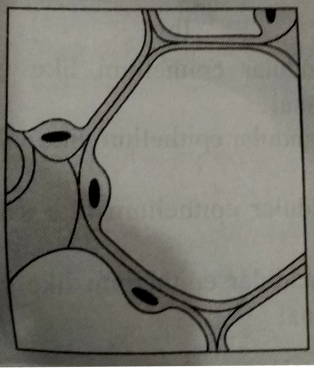
C. Cartilage

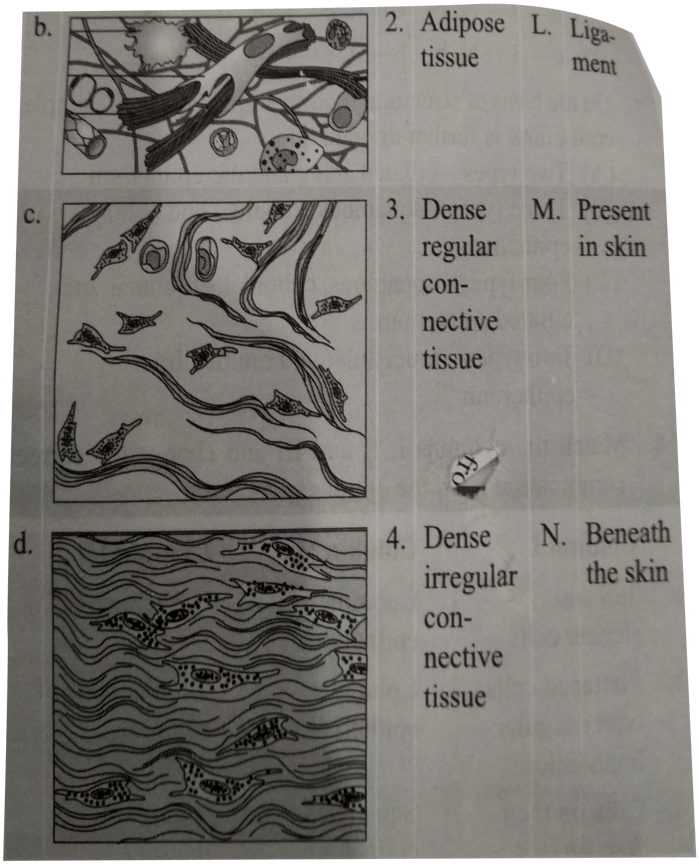
D. Areolar tissue

Answer: A

Watch Video Solution

19. Match the columns I, II and III and choose the correct combination from the options given.

Column I		Column II		Column III
a.		1. Areolar tissue	K.	Tendon



A. $a-1-M, b-2-N, c-4-K, d-3-I$

B. $a-2-N, b-1-M, c-3-L, d-2-K$

C. $a-1-M, b-2-N, c-3-K, d-2-L$

D. $a-2-N, b-1-N, c-4-M, d-3-K$

Answer: D

Watch Video Solution

20. Which of the following connective tissue often serves as a support framework for epithelium?

A. Areolar tissue

B. Adipose tissue

C. Dense regular connective tissue

D. Dense irregular connective tissue

Answer: A

Watch Video Solution

21. The excess of nutrients which are not used immediately are converted into fats and stored in

A. Areolar tissue

B. Adipose tissue

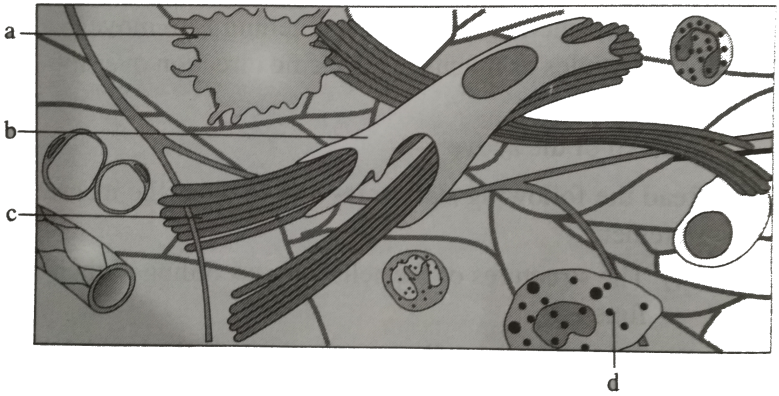
C. Dense regular connective tissue

D. Dense irregular connective tissue

Answer: B

Watch Video Solution

22. Recognize the figure and find out the correct matching.



A. a-Mast cell, d-Macrophage, b-Fibroblast, c-Collagen fibres

B. d-Mast cell, a-Macrophage, b-Fibroblast, c-Collagen fibres

C. d-Mast cell, a-Macrophage, c-Fibroblast, b-Collagen fibres

D. b-Mast cell, d-Macrophage, a-Fibroblast, c-Collagen fibres

Answer: B

Watch Video Solution

23. Which of the following connective tissue contains fibroblasts, macrophage and mast cells?

A. Areolar tissue

B. Adipose tissue

C. Dense regular connective tissue

D. Dense irregular connective tissue

Answer: A

Watch Video Solution

24. Match the columns I and II and choose the correct combination from the options given.

$Column I$	$Column II$
a. Tendon	1. Loose connective tissue
b. Ligament	2. Dense regular connective tissue
c. Areolar tissue	3. Dense irregular connective tissue
d. Adipose tissue	4. Specialised connective tissue

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

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

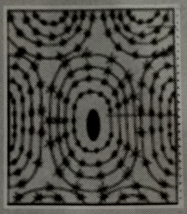
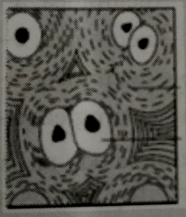
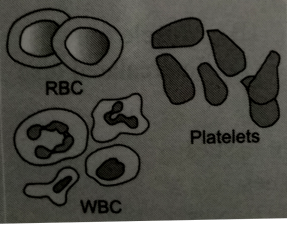
C. $a-2, b-2, c-3, d-1$

D. $a-2, b-2, c-1, d-1$

Answer: D

Watch Video Solution

25. Match the columns I, II and III and choose the correct combination from the options given.

Column I		Column II	Column III
a.		1. Blood	K. Resist compression
b.		2. Bone	L. Site of production of blood cells
c.		3. Cartilage	M. Transport of substances

A. $a-3-K, b-2-L, c-1-M$

B. $a-2-L, b-3-K, c-1-M$

C. $a-3-M, b-1-K, c-2-L$

D. $a-3-M, b-1-K, c-2-L$

Answer: B

Watch Video Solution

26. How many of the following statements are related to bone?

a. It is a specialised connective tissue having hard and pliable ground substance rich in calcium salts and collagen fibres which gives bone its strength.

b. It is the main tissue that provides structural frame to the body.

c. It supports and protects softer tissues and organs.

d. The bone cells, osteocytes are present in the spaces called lacunae.

e. They also interact with smooth muscles attached to them to bring about movements.

A. Two

B. Three

C. Four

D. Five

Answer: C

Watch Video Solution

27. Cartilage is present

a. in the tip of nose and middle ear joints

b. between adjacent bones of vertebral column

c. between adjacent bones of limbs and hands in adults

A. a, b and c

B. a and b

C. b and c

D. a and c

Answer: C

Watch Video Solution

28. Mucus, saliva, earwax, oil, milk and digestive enzymes are secreted by

A. Exocrine glands

B. Endocrine glands

C. Heterocrine glands

D. Compound glands

Answer: A

Watch Video Solution

29. Read the following statements and find out the incorrect statement.

A. Long bones of the legs, serve weight bearing funcitons

B. The intercellular material of cartilage is semi-fluid and pliable

C. The products of the exocrine glands are released through ducts or tubes

D. Blood is a fluid connective tissue

Answer: B

Watch Video Solution

Section A Topicwise Questions Topic 2 Muscle Tissue And Neural Tissue

1. Each muscle is made of many long, cylindrical fibres arranged in parallel arrays. These fibres are composed of numerous fine fibrils, called

A. Fascicles

B. Myofibrils

C. Myofilaments

D. Both B and C

Answer: D

Watch Video Solution

2. Based on their location, muscles are classified into

A. Three types- skeletal, smooth and cardiac muscle

B. Three types- skeletal, visceral and cardiac muscle

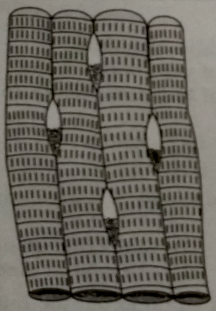
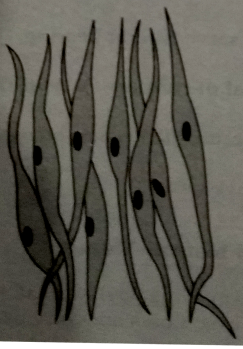
C. Three types- voluntary, involuntary and cardiac muscle

D. All of the above

Answer: A

Watch Video Solution

3. Match the columns I, II and III and choose the correct combination from the options given.

Column I		Column II	Column III
a.		1. Striated muscle	K. Wall of blood vessels
b.		2. Unstriated muscle	L. Nodal tissue
c.		3. Striated involuntary muscle	M. Biceps

A. $a-3-L, b-1-K, c-2-M$

B. $a-1-M, b-2-K, c-3-L$

C. $a-3-l, b-1-M, c-2-K$

D. $a-1-K, b-3-L, c-2-M$

Answer: C

Watch Video Solution

4. Fill in the blanks:

a. The...1...tissue is closely attached to skeletal bones.

b. The...2...fibres taper at both ends (fusiform).

c. The...3...fibres are found in wall of internal organs such as stomach and intestine.

d. Communication junctions or intercalated discs are found in...4....tissue.

A. 1 and 3-skeletal muscle, 2-smooth muscle, 4-cardiac muscle

B. 2 and 4-skeletal muscle, 3-smooth muscle, 1-cardiac muscle

C. 1-skeletal muscle, 2 and 3-smooth muscle, 4-cardiac muscle

D. 1 and 4-skeletal muscle, 3-smooth muscle, 4-cardiac muscle

Answer: C

Watch Video Solution

5. Which of the following tissue exerts the greatest control over the body's responsiveness to changing conditions?

A. Epithelial tissue

B. Connective tissue

C. Muscular tissue

D. Neural tissue

Answer: D

Watch Video Solution

6. Neuroglial cells make up more than

A. One-third the volume of neural tissue in our body and, form and protect the neurons.

B. One-half the volume of neural tissue in our body and, form and support the neurons.

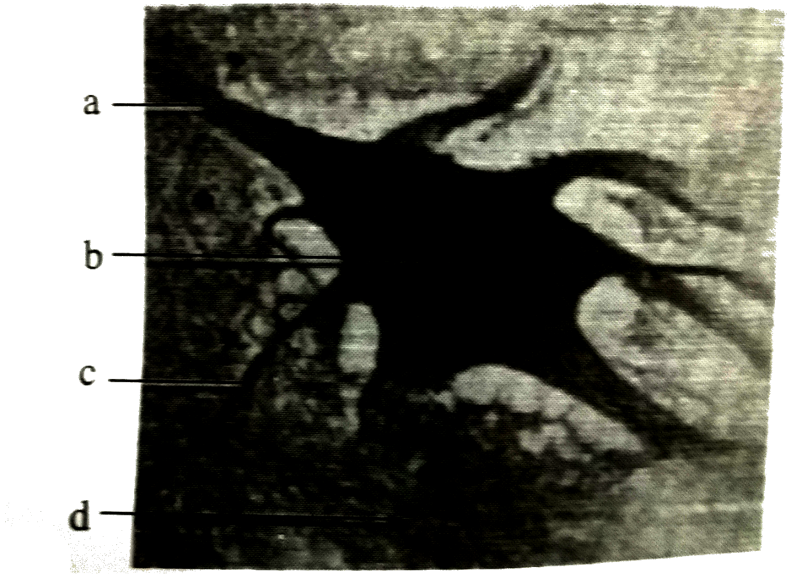
C. One-half the volume of neural tissue in our body and, protect and support neurons.

D. One-third the volume of neural tissue in our body and, protect and support neurons.

Answer: C

Watch Video Solution

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



A. b-cell body, c-dendrite, d-neuroglea, a-axon

B. b-cell body, a-dendrite, d-neuroglea, c-axon

C. d-cell body, c-dendrite, b-neuroglea, a-axon

D. d-cell body, a-dendrite, b-neuroglea, c-axon

Answer: A

Watch Video Solution

8. When a.....is suitably stimulated, an electrical disturbance is generated which swiftly travels along its plasma membrane.

A. Neuron

B. Muscle fibre

C. Myofibril

D. Intercalated disc

Answer: A

Watch Video Solution

9. Human heart consists of

A. Epithelial and connective tissues

B. Muscular and neural tissues

C. Connective and muscular tissues

D. Both A and B

Answer: D

Watch Video Solution

Section A Topicwise Questions Topic 3 Earthworm Morphology And Anatomy

1. Fill in the blanks:

a. In the gardens, the earthworm can be traced by their fecal deposits known as.....1....

b. The process of increasing fertility of soill by the earthworms is called...2...

c. The common..3...earthworms are Pheretima and Lumbrocus.

d. Anterior end of earthworm consists of the mouth and the...4.. which is sensory in function

A. 1-Worm castings, 2-Vermicomposting, 3-European, 4-Peristomium

B. 1-Worm coasting, 2-Vermicomposting, 3-India, 4-Prostomium

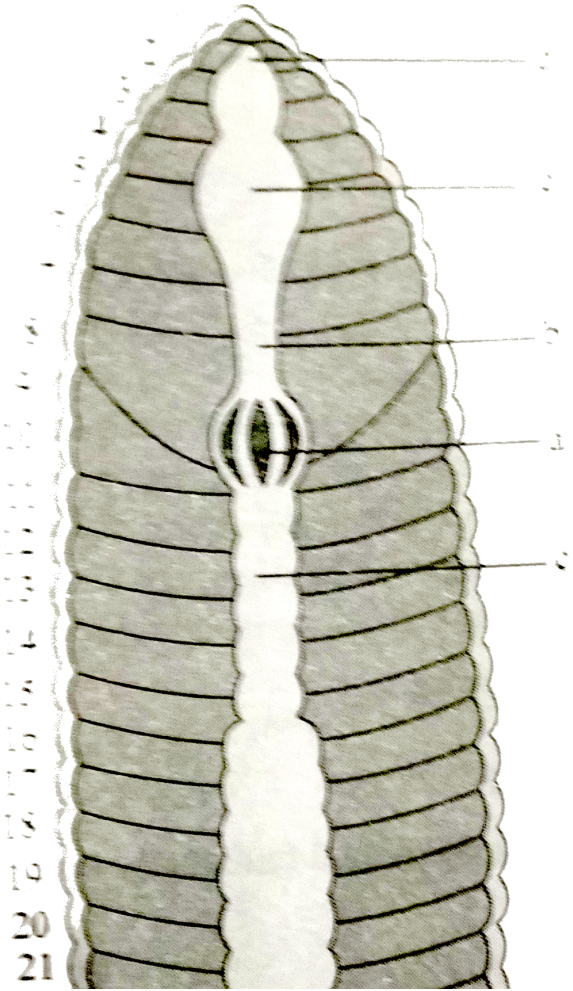
C. 1-Vermicomposting, 2-Worm castings, 3-Indian,4-Prostomiu

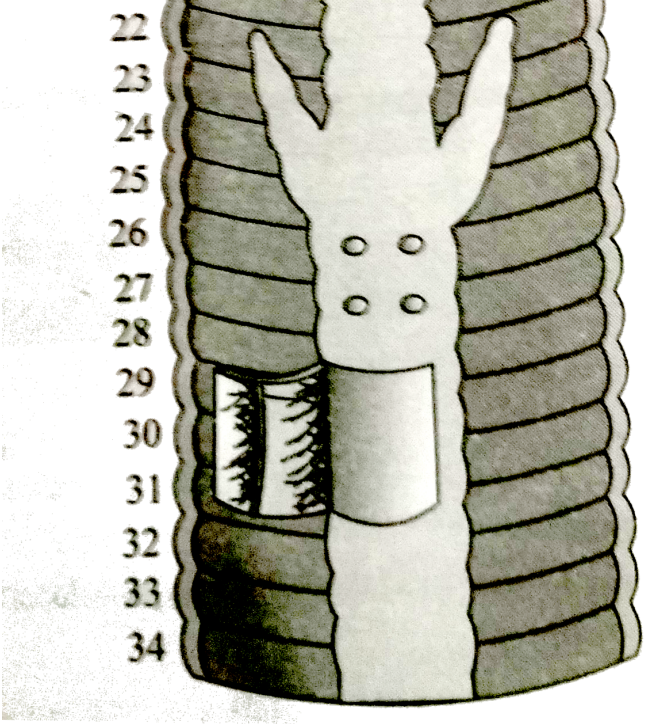
D.

Answer: B

Watch Video Solution

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





A. a-stomach, c-mouth, d-oesophagus, e-gizzard, b-pharynx

B. d-stomach, b-mouth, e-oesophagus, c-gizzard, a-pharynx

C. c-stomach, d-mouth, b-oesophagus, a-gizzard, e-pharynx

D. b-stomach, a-mouth, e-oesophagus, c-gizzard, d-pharynx

Answer: C

Watch Video Solution

3. The dorsal surface and ventral surface of the body of earthworm is marked by

A. A dark median mid dorsal line (dorsal blood vessel and presence of genital pores, respectively

B. The presence of genital openings and a dark mid ventral line (ventral blood vessel), respectively

C. A dark mid dorsal line and a dark mid ventral line, respectively

D. None of the above

Answer: A

 Watch Video Solution

4. Match the columns I, II and III and choose the correct combination from the options given.

$Column I$	$Column II$	$Column III$
a. Male genital pore(s)	1.10^{th} and 11^{th}segment	K. single
b. Female genital pore(s)	2.14^{th}segment	L. 1 Pair
c. Testes	3.18^{th}segment	$M.2Pair$
b. Ovaries	$4.12-13$ intersegmental septum	N. 4Pair

A. $a-2-K, b-3-L, c-1-N, d-4-M$

B. $a-3-L, b-2-K, c-1-M, d-4-L$

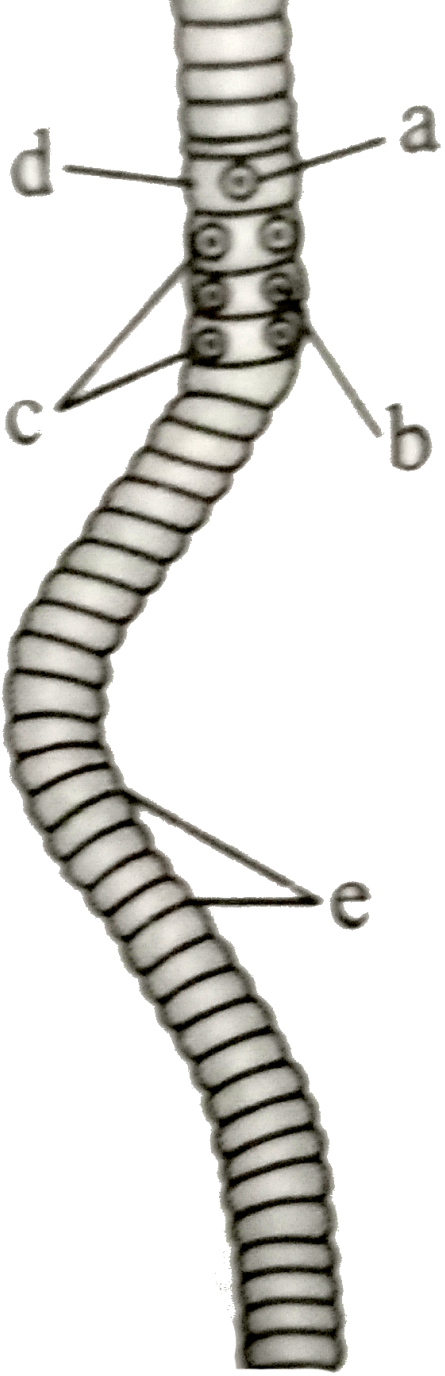
C. $a-3-K, b-2-L, c-1-M, d-4-L$

D. $a-3-L, b-2-K, c-4-N, d-1-M$

Answer: B

Watch Video Solution

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


a
d
c
b
e

A. a-male genital aperture, b-female genital aperture, c-clitellum, e-genital papillae, d-annuli

B. b-male genital aperture, a-female genital aperture, d-clitellum, c-genital papillae, e-annuli

C. c-male genital aperture, b-female genital aperture, d-clitellum, a-genital papillae, e-annuli

D. b-male genital aperture, c-female genital aperture, d-clitellum, a-genital papillae, e-annuli

Answer: B

Watch Video Solution

6. Read the following statements and find out the incorrect statement.

A. Setae are present in all body segments except first, last and clitellum.

B. Nephridia are present in all body segments except first two segments of body.

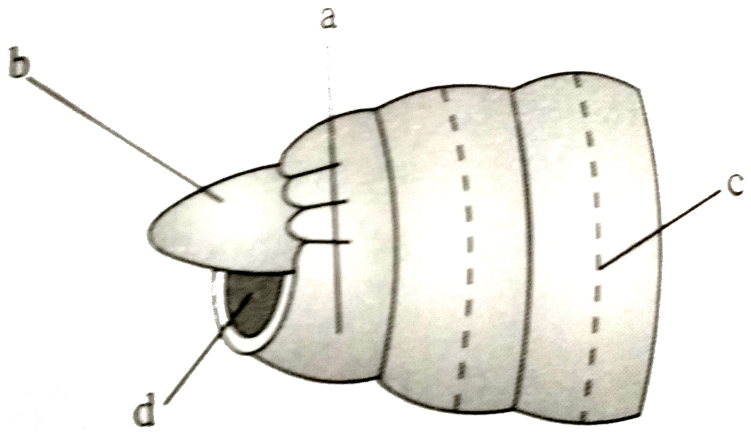
C. Intestine is present only in the postclitellar segments

D. The epidermis of earthworm is made up of a single layer of columnar epithelial

Answer: C

Watch Video Solution

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



A. a-Prostomium, b-Peristomium, d-mouth opening, c-ring of setae

B. b-Prostomium, d-Peristomium, c-mouth opening, a-ring of setae

C. a-Prostomium, c-Peristomium, d-mouth opening, b-ring of setae

D. b-Prostomium, a-Peristomium, d-mouth opening, c-ring of setae

Answer: D

Watch Video Solution

8. The principal role of the setae in earthworm is

A. Excretion

B. Nutrition

C. Respiration

D. Locomotion

Answer: D

Watch Video Solution

9. The correct sequence of different layers in the body wall of the earthworm from outer to inner side is

A. Cuticle, epidermis, circular muscle layer, longitudinal muscle layer and coelomic epithelium

B. Cuticle, epidermis, longitudinal muscle layer, circular muscle layer and coelomic epithelium

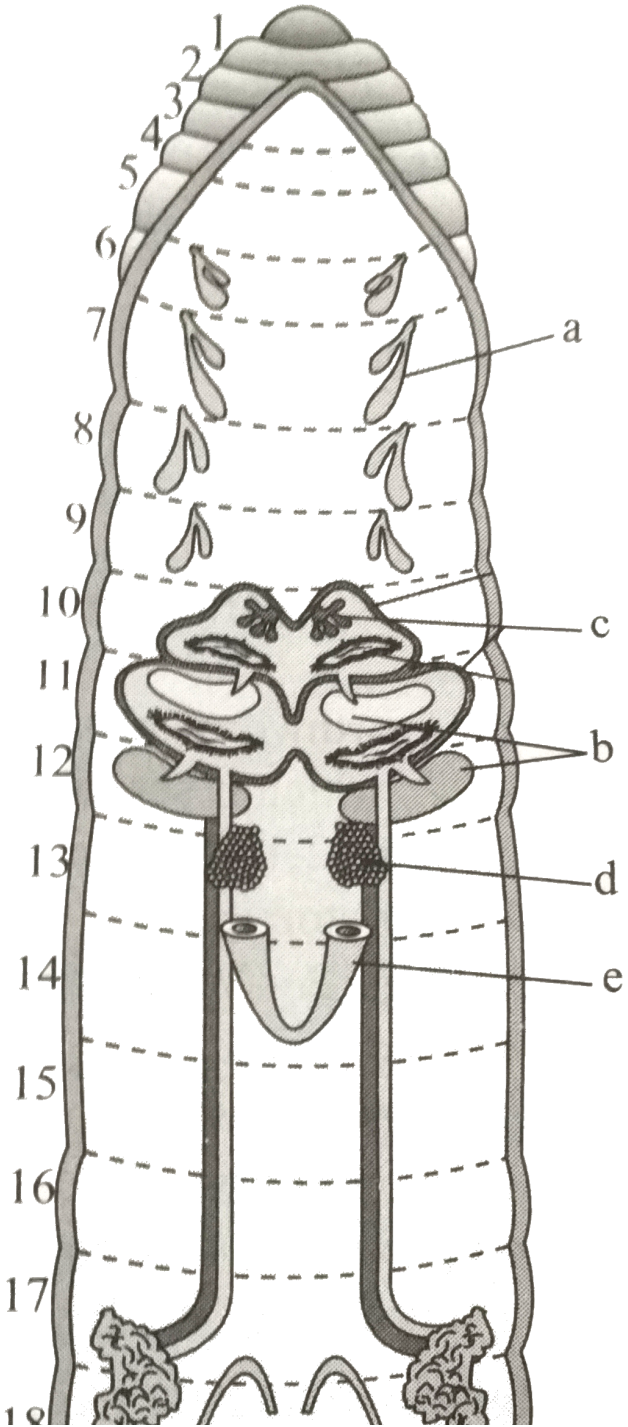
C. Coelomic epithelium, epidermis, longitudinal muscle layer and cuticle

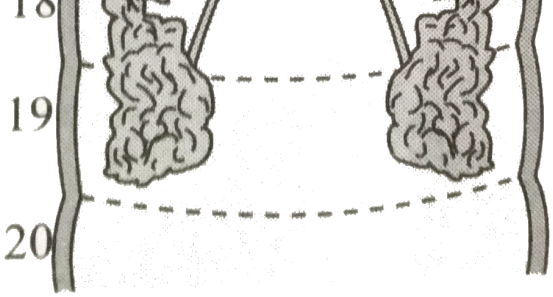
D. Cuticle, epidermis, coelomic epithelium, circular muscle layer and longitudinal muscle layer

Answer: A

Watch Video Solution

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





A. b-seminal vesicle, d-ovary, a-spermathecae, e-ovarian funnel, c-spermiducal funnels

B. c-seminal vesicle, a-ovary, d-spermathecae, b-ovarian funnel, e-spermiducal funnels

C. a-seminal vesicle, c-ovary, e-spermathecae, b-ovarian funnel, d-spermiducal funnels

D. b-seminal vesicles, d-ovary, c-spermathecae, a-ovarian funnel, e-spermiducal funnels

Answer: A

Watch Video Solution

11. The shape of setae is

A. J-shaped

B. C-shaped

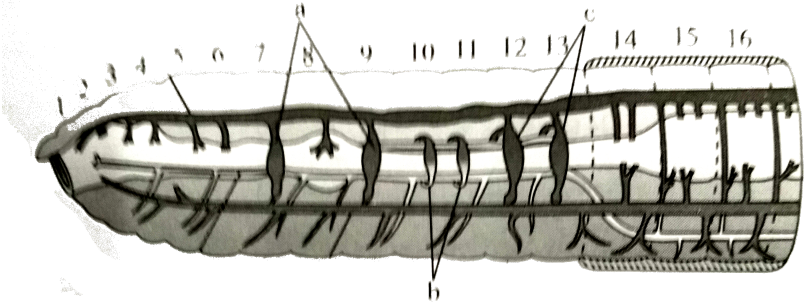
C. S-shaped

D. U-shaped

Answer: C

Watch Video Solution

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



A. a-anterior loops, b-laternal hearts, c-lateral oesophageal hearts

B. b-anerior loops, c-lateral hearts, a-lateral oesophageal hearts

C. c-anterior loops, a-lateral hearts, b-lateral oesophageal hearts

D. b-anterior loops, a-lateral hearts, c-lateral oesophageal hearts

Answer: D

Watch Video Solution

13. Read the following statements and find out the incorrect statement about earthworm.

A. The alimentary canal is a straight tube and runs between first and last segment of the body

B. The nervous system is basically represented by ganglia arranged segmentwise on the ventral paired nerve cord

C. Blood glands produce blood cells and haemoglobin which is dissolved in blood plasma

D. The cerebral ganglia alongwith other nerves in the ring integrate motor input as well as command muscular responses of the body

Answer: D

Watch Video Solution

14. Match the columns I and II, and choose the correct combination from the options given

$ColumnI$	$ColumnII$
a. Gizzard	$J.9-14$
b. Intestine	$K.1-3$
c. Stomach	$L.8-9$
d. Buccal cavity	$M.4$
e. Oesophagus	$N.15-\text{last}$
f. Pharynx	$Q.5-7$

A. $a-Q, b-J, c-N, d-K, e-M, f-L$

B. $a-L, b-N, c-J, d-K, e-Q, f-M$

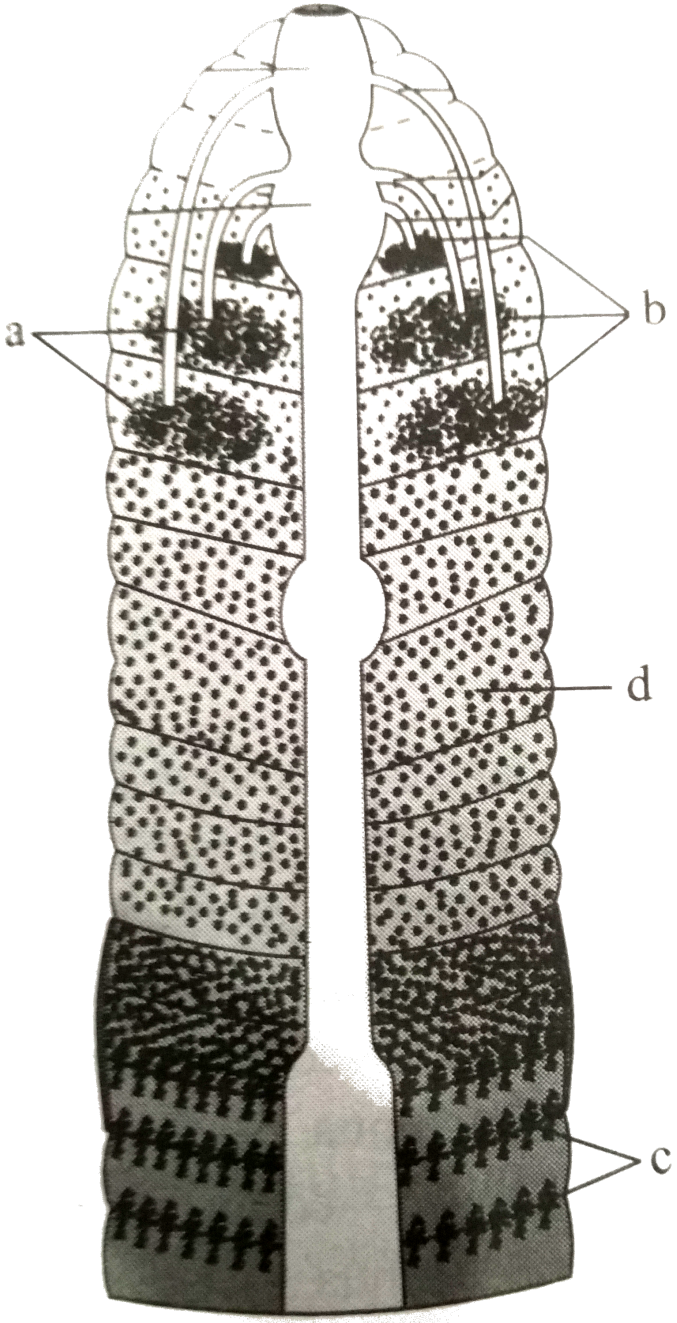
C. $a-L, b-N, c-Q, d-M, e-Q, f-J$

D. $a-L, b-N, c-J, d-M, e-K, f-Q$

Answer: B

Watch Video Solution

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



A. a-blood glands, d-septal nephridia, c-integumentary nephirid, a-pharyngeal nephridia

B. b-blood glands, c-septal nephridia, d-integumentary nephridia, a-pharyngeal nephdridia

C. b-blood glands, a-septal nephridia, c-integummentary nephridia, d-pharyngeal nephridia

D. a-blood glands, c-septal nephridia, d-integumentary nephridia, b-pharyngeal nephridia

Answer: D

Watch Video Solution

16. Which of the following part of alimentary canal of earthworm helps is grinding the soil particle and decaying leaves?

A. Pharynx

B. Gizzard

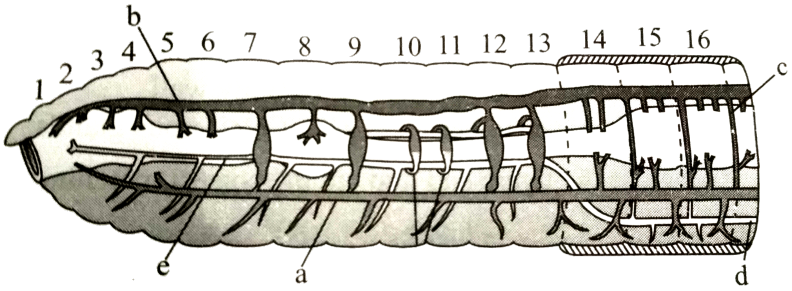
C. Stomach

D. Typhlosole

Answer: B

Watch Video Solution

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



A. b-dorsal vessel, a-ventral vessel, c-commissural vessel, e-lateral oesophageal vessel, d-subneural vessel

B. b-dorsal vessel, a-ventral vessel, c-commissural vessel, d-lateral oesophageal vessel, e-subneural vessel

C. b-dorsal vessel, a-ventral vessel, d-commissural vessel, e-lateral oesophageal vessel, c-subneural vessel

D. a-dorsal vessel, b-ventral vessel, e-commissural vessel, c-lateral oesophageal vessel, d-subneural vessel

Answer: A

Watch Video Solution

18. Fill in the blanks:

a. A pair of short and conical ...K.. caecae project from the intestine on the...L...segment.

b. Typhlosole is the internal median fold of ...M..wall of intestine.

c. Earthworm..N..specialised breathing devices.

d. The nerve cord in the anterior region $\left(3^{rd}\right.$ and 4^{th} segment) bifurcates, laterally encircling the...Q...and joins the cerebral ganglia.

A. K-Gastric, $L-26^{th}$ to 35^{th}, M-Ventral, N-have, Q-Buccal cavity

B. K-Hepatic, $L-26^{th}$, M-Dorsal, N-Lack, Q-Oesophagus

C. K-Intestinal, $L-26^{th}$, M-Dorsal, N-Lack, Q-Pharynx

D. K-Hepatic, $L-26^{th}$ to 35^{th}, M-Ventral, N-Have, Q-Pharynx

Answer: C

Watch Video Solution

19. Match the columns I, II and III and choose the correct combination from the options given.

$ColumnI$	$ColumnII$	$ColumnIII$
a. Intergumentary nephridia	$K.4^{th}$ to 6^{th} segment	1. Exonephric
b. Septal nephridia	$L.15^{th}$ to last segment	2. Enteronephric
c. Pharyngeal nephridia	$M.3^{rd}$ to last segment	

A. $a-M-2, b-L-2, c-K-1$

B. $a-K-1, b-M-1, c-L-2$

C. $a-M-1, b-L-2, c-K-2$

D. $a-L-2, b-L-1, c-M-1$

Answer: C

Watch Video Solution

20. A nephridium starts out as a funnel that collects excess fluid from

A. Intestinal lumen

B. Body wall

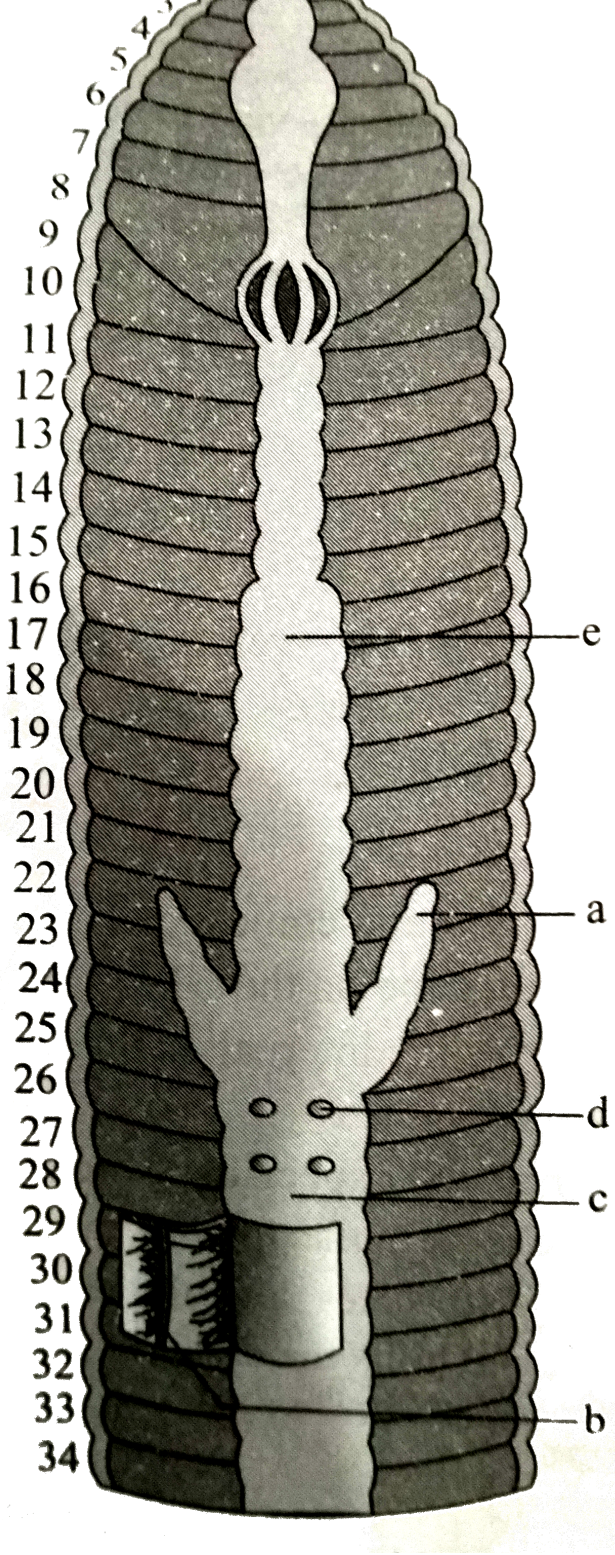
C. Coelomic chamber

D. Calciferous glands

Answer: C

Watch Video Solution

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


4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
e
a
d
c
b

A. b-typhlosole, c-pre-typhlosolar part, e-typhlosolar part, d-intestinal caecum, a -lymph gland

B. e-typhlosole, b-pre-typhlosolar part,c-typhlosolar part,d-intestinal caecum, a-lymph gland

C. c-typhlosole, b-pre-typhlosolar part, e-typhlosolar part, a-intestinal caecum, d-lymph gland

D. b-typhlosole, e-pre-typhlosolar part, c-typhlosolar part, a-intestinal caecum, d-lymph gland

Answer: D

Watch Video Solution

22. In earthworm, accessory gland are present

A. One pair each in the 17^{th} and 19^{th} segments

B. Two pairs each in the 17^{th} and 19^{th} segments

C. One pair each in the 10^{th} and 11^{th} segments

D. Two pairs each in the 12^{th} and 13^{th} segments

Answer: A

Watch Video Solution

23. In earthworm, fertilisation and development occurs within

A. Cocoons

B. Soil

C. Clitellum

D. Spermathecae

Answer: A

Watch Video Solution

24. Fill in the blanks: The cocoon holds worm embroyos. After about...a...weeks, each cocoon produces ...baby worms with an average of...c...

A. $a-2, b-3, c-4$

B. $a-2, b-4, c-3$

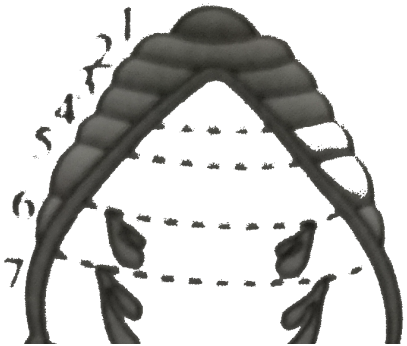
C. $a-3, b-2$ to $20, c-4$

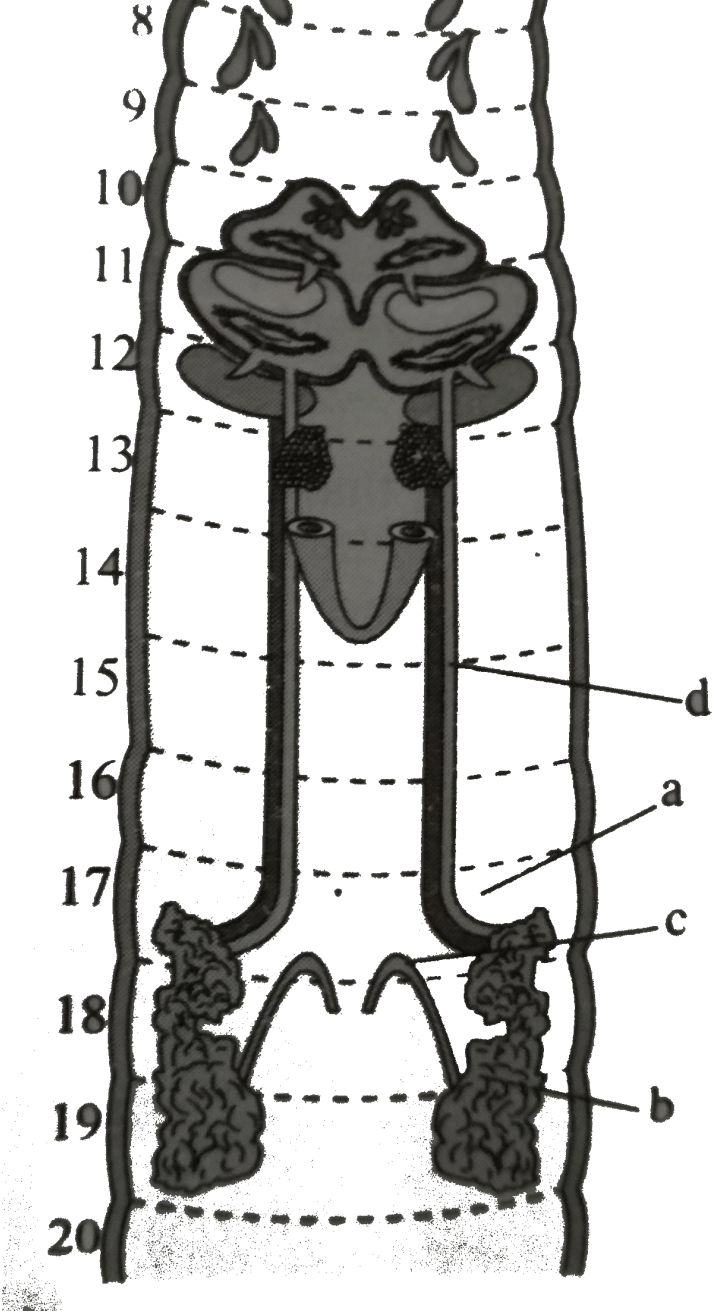
D. $a-2, b-2$ to $20, c-4$

Answer: C

Watch Video Solution

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





A. a-prostate gland, c-common prostatic and spermatic duct, d-vasa deferentia, b-accessory gland

B. b-prostate gland, c-common prostatic and spermatic duct, d-vasa deferentia, a-accessory gland

C. a-prostate gland, d-common prostatic and spermatic duct, c-vasa deferentia, b-accessory gland

D. b-prostate gland, d-common prostatic and spermatic duct, c-vasa deerentia, a-accessory gland

Answer: B

Watch Video Solution

26. In Earthworm development is

A. Direct i.e., there is no larve formed

B. Indirect, i.e., there is no larve formed

C. Direct, i.e.,there are many larval stages

D. Indirect, i.e., there are many larval stages

Answer: A

Watch Video Solution

27. Read the following statements and find out the correct statement(s).

A. Earthworm is hermaphrodite

B. Earthworm is used as bait in game fishing

C. Packets of sperms are called spermatophores

D. All of the above

Answer: D

Watch Video Solution

Section A Topicwise Questions Topic 4 Cockroach Morphology And Anatomy

1. In Peripleneta americana, the wings extends beyond the tip of the abdomen in

A. Males

B. Females

C. Both male and females

D. None of the above

Answer: A

Watch Video Solution

2. Fill in the blanks: The entire body is covered by a hard chitinous exoskeleton. In each segment, exoskeleton has hardened plates called .....a....., ...b... dorsally and ....c...ventrally) that are joined to each other by a thin fexible....d....

A. a-sternites, b-sclerites, c-tergites, d-arthrodial membrane

B. a-sclerites, b-tergites, c-sternites, d-articular membrane

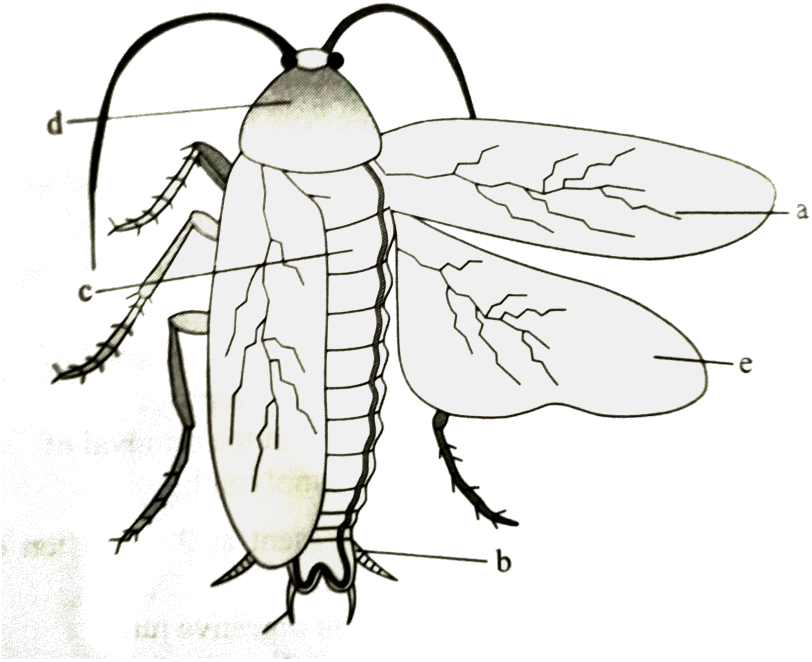
C. a-tergites, b-sternites, c-sclerties, d-articular membrane

D. a-sclerties, b-sternites, c-tergites, d-articular membrane

Answer: B

Watch Video Solution

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



A. a-forewing, b-anal style, c-mesothorax, d-prothorax, e-tegmina

B. a-forewing, b-anal cerci, c-mesothorax, d-pronotum, e-hind wing

C. a-tegmina, b-anal cerci, c-mesothorax, d-pronotum, e-hind wing

D. a-tegmina, b-anal style, c-mesothorax, d-prothorax, e-fore wing

Answer: C

Watch Video Solution

4. Head of cockroach is formed by the fusion of

A. Six segments and triangular in shape

B. Ten segments and trigonal in shape

C. Eleven segments and rectangular in shape

D. Three segments and tetragonal in shape

Answer: A

Watch Video Solution

5. The head shows great mobility in all direction due to

A. Flexible head capsule which also bears compound eyes

B. Flexible neck which is an extension of prothorax

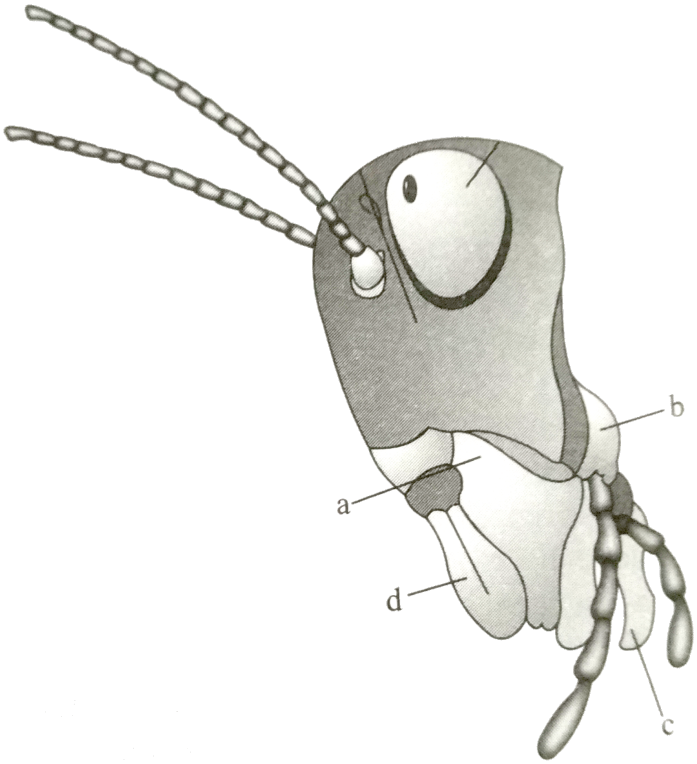
C. Flexible neck which is an extension of mesothorax

D. Flexible neck which is an extension of methathorx

Answer: B

Watch Video Solution

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



A. c-maxilla, d-mandible, a-labium, b-labrum

B. d-maxilla, c-mandible, b-labium, a-labrum

C. b-maxilla, b-mandible, c-labium, d-labrum

D. c-maxilla, b-mandible, d-labium, c-labrum

Answer: C

Watch Video Solution

7. The mouth parts of cockroach are

A. Piercing and sucking type

B. Biting and cutting type

C. Chewing and biting type

D. Siphoning and sponging type

Answer: C

Watch Video Solution

8. In cockroach, walking legs arises from

A. Prothorax and mesothorax and are two pairs

B. Mesothorax and methorax and are two pairs

C. All the throracic segments and are three pairs

D. First three abdominal segments and are three pairs

Answer: C

Watch Video Solution

9. In cockroach, wings arises from

A. Prothorax and mesothorax and are two pairs

B. Mesothorax and metathorax and are two pairs

C. All the throracic segments and are three pairs

D. First three abdominal segments and are three pairs

Answer: B

Watch Video Solution

10. The abdomen in male and females consists of

A. 10 and 11 segments, respectively

B. 9 and 10 segments, respectively

C. 10 and 10 segments, respectively

D. 10 and 9 segments, respectively

Answer: C

Watch Video Solution

11. Which of the following is incorrect for forewings of cockroach ?

A. Also called mesothoracic wings or tegmina

B. Opaque, dark and leathery

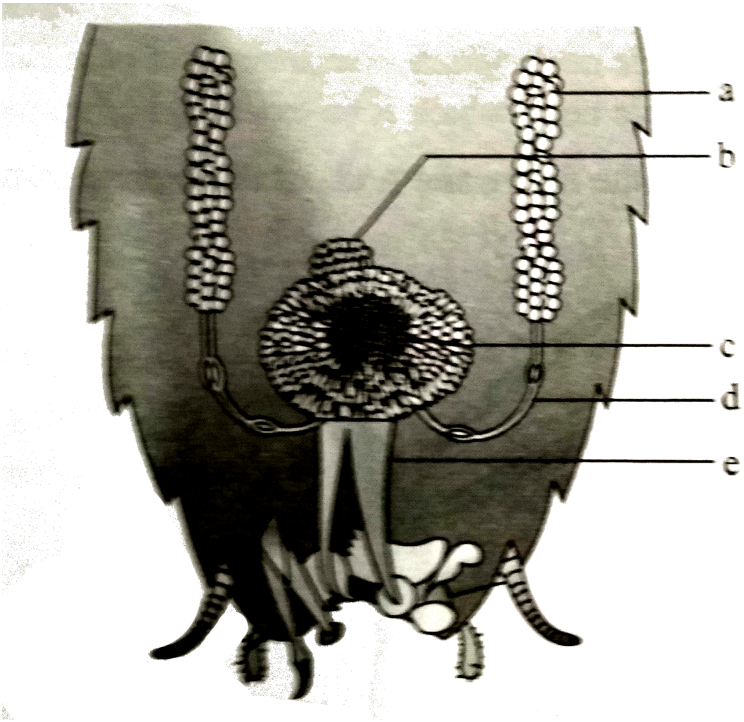
C. Cover the hind wings when at rest

D. Used in flight

Answer: D

Watch Video Solution

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



A. c-seminal vesicle, e-ejaculatory duct, d-vas deferens, a-testis, b-phallic gland

B. e-seminal vesicle, c-ejaculatory duct, a-vas deferes, b-testis, d-phallic gland

C. a-seminal vesicle, d-ejaculatory duct, b-vas deferens, e-testis, c-phallic gland

D. b-seminal vesicle, a-ejaculatory duct, c-vas deferens, e-testis, c-phallic gland

Answer: A

Watch Video Solution

13. Brood pouch is formed in female Cockroach by

A. 7^{th}, 8^{th} and 9^{th} sterna

B. 7^{th} sternum and 8^{th} and 9^{th} terga

C. 9^{th} and 10^{th} terga, and 9^{th} sternum

D. 9^{th} and 10^{th} sterna, and 9^{th} tergum

Answer: A

Watch Video Solution

14. Male genital aperture of earthworms is located in the segment

A. 7^{th}, 8^{th} and 9^{th} sterna

B. 7^{th} sternum and 8^{th} and 9^{th} terga

C. 9^{th} and 10^{th} terga, and 9^{th} sternum

D. 9^{th} and 10^{th} sterna, and 9^{th} tergum

Answer: C

Watch Video Solution

15. Read the following statements and find out the incorrect statement.

A. The blood (haemolymph) is composed of colourless plasma and haemocytes.

B. Heart of cockroach consists of elongated muscules tube lying along mid ventral line of horax and abdomen

C. The hindgut is broader than midgut and differentiated into ileum, colon and rectum.

D. Both gizzard and mandible helps in grinding the food particles.

Answer: B

Watch Video Solution

16. In cockroach, labium, labrum and hypopharynx are commonly called

A. Upper lip, lower lio and crop, respectively

B. Upper lip, lower lip and tongue, respectively

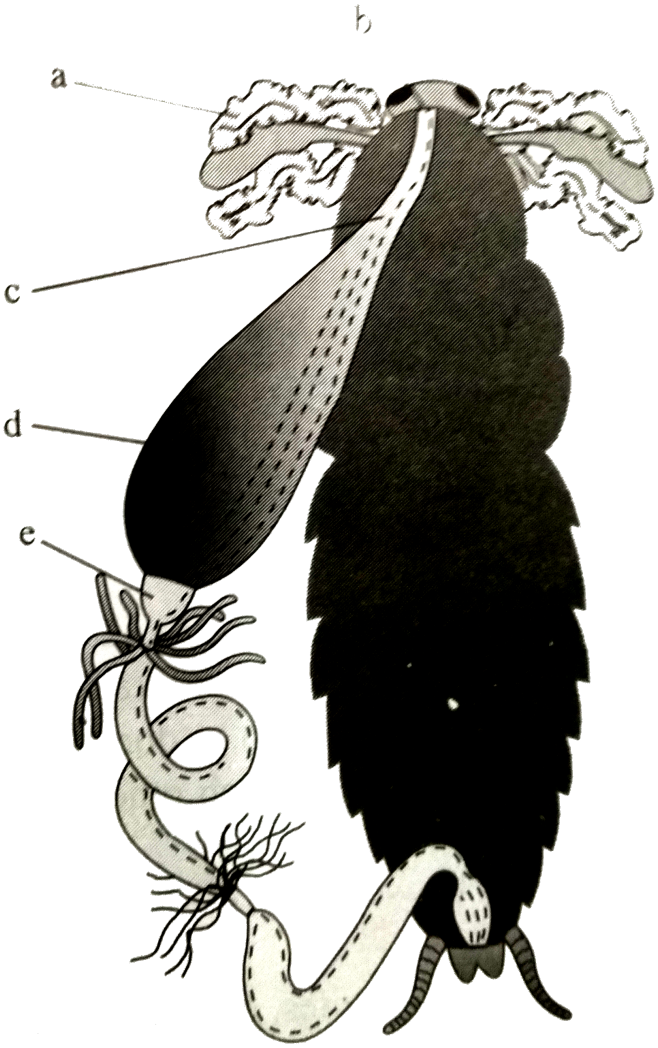
C. Lower lip, upper lip and tongue, respectively

D. Lower lip, upper lip and jaw, respectively

Answer: C

Watch Video Solution

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



A. e-crop, a-oesophagus, c-pharynx, d-gizzard, b-salivary gland

B. d-crop, c-oesophagus, b-pharynx, e-gizzard, a-salivary gland

C. c-crop, b-oesophagus, e-pharynx, d-gizzard, a-salivary gland

D. d-crop, c-oesophagus, e-pharynx, b-gizzard, a-salivary gland

Answer: B

View Text Solution

18. Malpighian tubules are present at the junction of

A. Foregut and midgut, and help in the secretion of digestive enzymes

B. Midgut and hindgut, and help in the grinding the food particles

C. Foregut and midgut, and help in the removal of excretory products from hemolymph

D. Midgut and hindgut, and help in the removal of excretory products from hemolymph

Answer: D

Watch Video Solution

19. A ring of 6-8 blind tubules present at the junction of foregut and midgut and are called

A. Gastric caecae which secrete digestive juice

B. Hepatic caecae which secrete digestive juice

C. Intestinal caecae which help in grinding the food

D. Both A and B

Answer: D

Watch Video Solution

20. Which part of alimentary canal of cockroach has an outer layer of thick circular muscles and inner cuticle forming six highly chitinous plates called teeth?

A. Gizzard

B. Crop

C. Proventriculus

D. Both A and C

Answer: D

Watch Video Solution

21. The correct sequence of the parts of alimentary canal is cockroach.

A. Mouth $\rightarrow$ pharynx $\rightarrow$ oesophagus $\rightarrow$ crop $\rightarrow$ gizzard $\rightarrow$ midgut $\rightarrow$ caecum $\rightarrow$ colon $\rightarrow$ rectum $\rightarrow$ anus

B. Mouth $\rightarrow$ pharynx $\rightarrow$ oesophagus $\rightarrow$ gizzard $\rightarrow$ crop $\rightarrow$ midgut $\rightarrow$ ileum $\rightarrow$ colon $\rightarrow$ rectum $\rightarrow$ anus

C. Mouth $\rightarrow$ pharynx $\rightarrow$ oesophagus $\rightarrow$ crop $\rightarrow$ proventriculus $\rightarrow$ midgut $\rightarrow$ ileum $\rightarrow$ colon $\rightarrow$ rectum $\rightarrow$ anus

D. Mouth $\rightarrow$ pharynx $\rightarrow$ oesophagus $\rightarrow$ stomach $\rightarrow$ crop $\rightarrow$ midgut $\rightarrow$ hindgut $\rightarrow$ anus

Answer: C

Watch Video Solution

22. Malpighian tubules are

A. 100-120 yellow coloured filamentous structure

B. 100-120 brown coloured filamentous structure

C. 100-150 yellow coloured filamentous structure

D. 100-150 yellow coloured chitinous structure

Answer: C

Watch Video Solution

23. The 10^{th} segment bears a pair of jointed filamentous structure called

A. Anal cerci, in both sexes

B. Anal style, in both sexes

C. Anal cerci, in male cockroach only

D. Anal style, in male cockroach only

Answer: A

Watch Video Solution

24. Sexual dimorphism in cockroach is shown by

A. Anal cerci which are present in males only

B. Anal styles which are present in males only

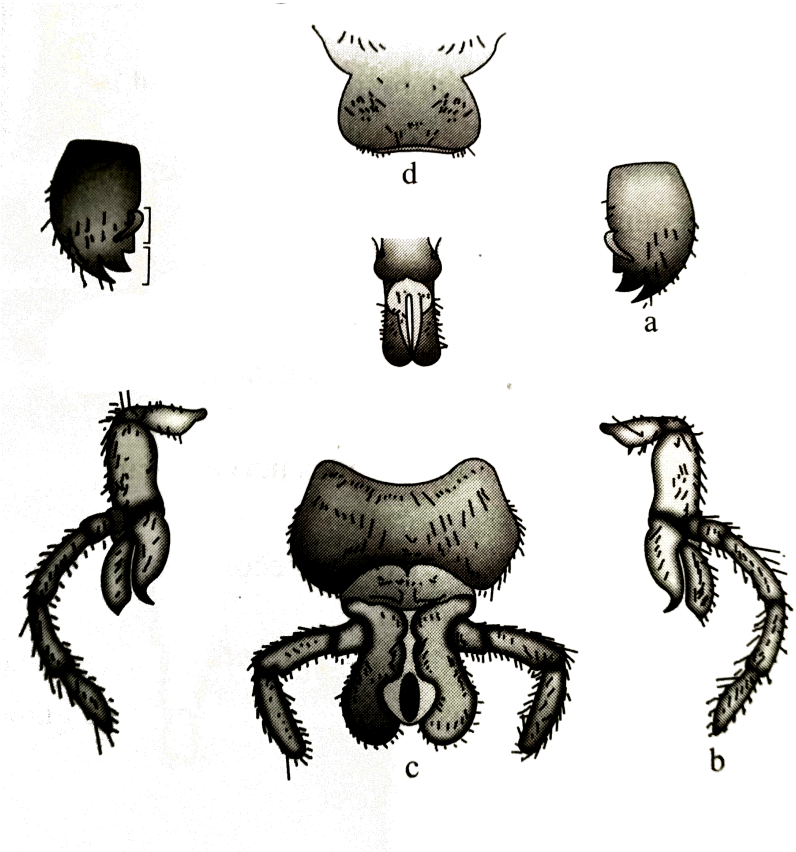
C. Anal cerci which are present in females only

D. Anal styles which are present in females only

Answer: B

Watch Video Solution

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



A. c-maxilla, d-mandible, a-labium, b-labrum

B. d-maxilla, c-mandible, b-labium, a-labrum

C. b-maxilla, b-mandible, c-labium, d-labrum

D. c-maxilla, b-mandible, d-labium, c-labrum

Answer: C

View Text Solution

26. In cockroaches, the respiratory system consists of a network of trachea that open outside through small holes hat are present on lateral side of the body are called

A. Tracheoles and are of 9 pairs

B. Spiracles and are of 10 pairs

C. Sphincters and are of 8 pairs

D. Ostia and are of 13 pairs

Answer: B

Watch Video Solution

27. Exchange of gases takes place at the tracheoles by

A. Diffusion

B. Active transport

C. Imbibition

D. Osmosis

Answer: A

Watch Video Solution

28. The opening of the spiracles is regulated by the

A. Ostia

B. Sphincters

C. Values

D. Sinuses

Answer: B

Watch Video Solution

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

A. a-midgut, c-ileum, e-malpighian tubules, f-hepatic caecae, b-rectum, d-colon

B. a-midgut, c-ileum, f-malpighian tubules, e-hepatic caecae, b-rectu, d-colon

C. c-midgut, a-ileum, e-malpighian tubules, f-hepatic caecae, d-rectum, b-colon

D. c-midgut, a-ileum, f-malpighian tubules, e-hepatic caecae, d-rectum, b-colon

Answer: D

View Text Solution

30. Which is incorrect about cockroach ?

A. The anterior part of female genital pouch contains female gonopore, spermathacal pores and collaterial glands

B. Male genital pouch contains ventral anus, dorsal male genital pore and gonapophysis.

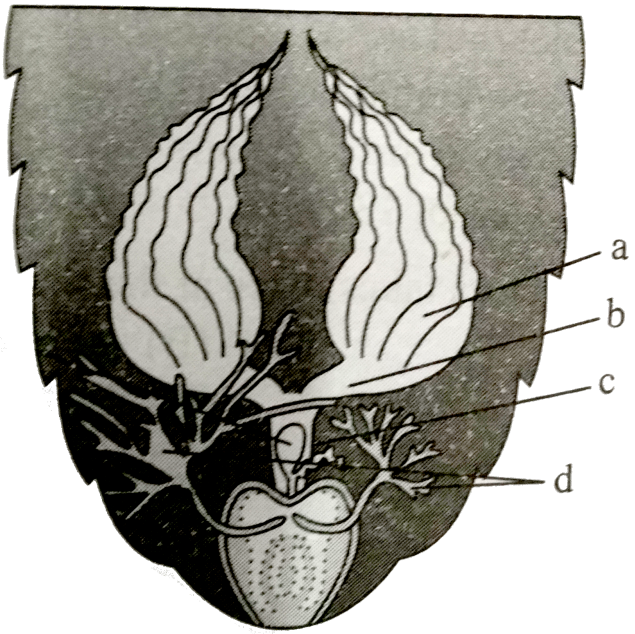
C. The heart is differentiated into funnel shaped chambers with ostia on either side

D. Blood vascular system is open type in which blood from sinuses enter heart through ostia and pumped anteriorly to sinuses again.

Answer: B

Watch Video Solution

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



A. a-ovary, b-oviduct, c-vagina, d-collaterial glands

B. b-ovary, a-oviduct, d-vagina, c-collaterial glands

C. c-ovary, d-oviduct, b-vagina, a-collaterial glands

D. d-ovary, c-oviduct, a-vagina, b-collaterial glands

Answer: A

Watch Video Solution

32. Match the columns I, II and III and choose the correct combination from the options gives.

$Column I$	$Column II$	$Column III$
a. Testes	$K. 2^{nd} - 6^{th}$ segments	w. 1pair
b. Ovaries	$L. 4^{th} - 6^{th}$ segments	x. 2pairs
c. Spermathecae	$M. 6^{th} - 7^{th}$ segments	y. 4pairs
d. Mushroom shaped gland(s)	$N. 6^{th}$ segments	z. single

A. $a - L - y, b - K - x, c - M - z, d - N - w$

B. $a - L - w, b - K - w, c - N - w, d - M - z$

C. $a - K - x, b - L - w, x - N - y, d - M - z$

D. $a - N - x, b - M - w, c - K - z, d - L - y$

Answer: B

Watch Video Solution

33. In female cockroach, how many ovarian tubules or ovarioles are present ?

A. 8

B. 16

C. $14 - 16$

D. $9 - 10$

Answer: B

Watch Video Solution

34. In cockroach, brain is present in head region and represented by

A. Supra-pharyngeal ganglion

B. Supra-oesophageal ganglion

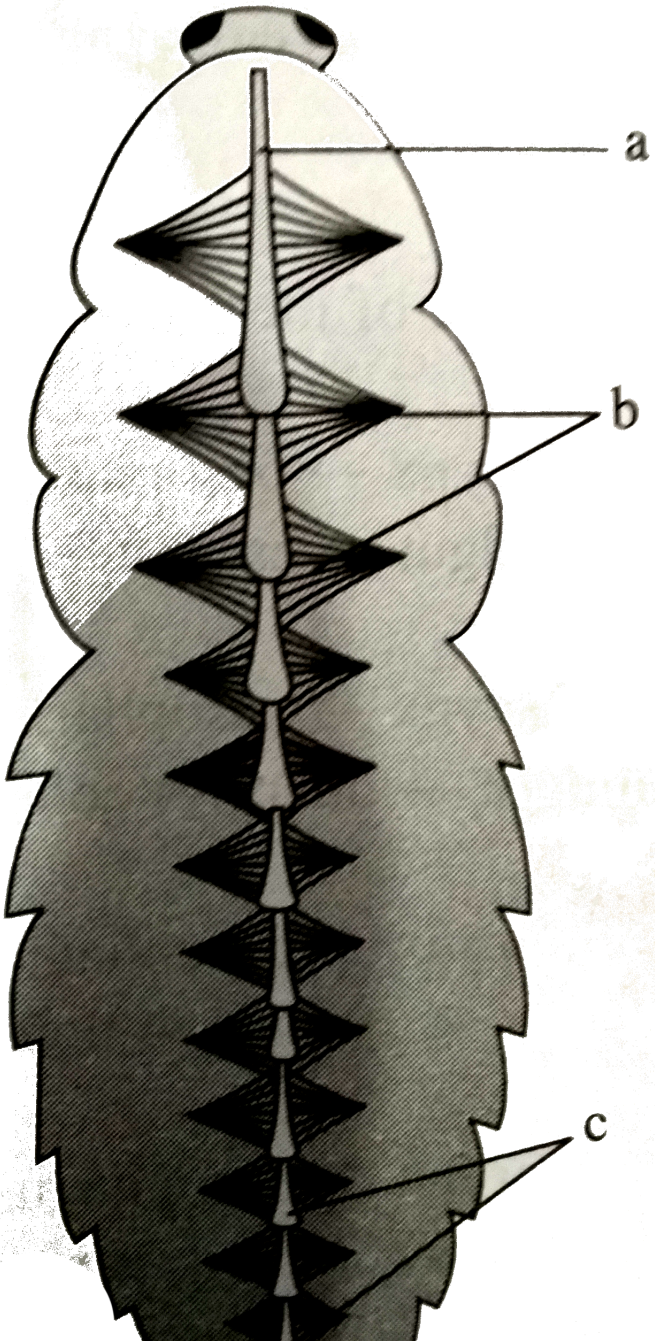
C. Gastro-oesophageal ganglion

D. Cerebral ganglion

Answer: B

Watch Video Solution

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



A. a-dorsal blood vessel, b-chambers of hear, c-alary muscles

B. a-dorsal aorta, b-alary muscles, c-chambers of heart

C. a-anterior aorta, b-alary muscles, c-chambers of heart

D. a-posterior aorta, b-alary muscles, c-chambers of heart

Answer: C

View Text Solution

36. With the help of several ommatidia, a cockroach can receive several images of an object. This kind of vision is called

A. Nocturnal vision, being common during night

B. Mosaic vision, with more sensitivity but less resolution

C. Mosaic vision, with more resolution but less sensitivity

D. Nocturnal vision, with more sensitivity and more resolution

Answer: B

Watch Video Solution

37. Read the following statements and find out the incorrect statement.

A. Mosaic vision is common during night hence called nocturnal vision

B. In cockroach, brain supplies nerves to antennae and compound eyes

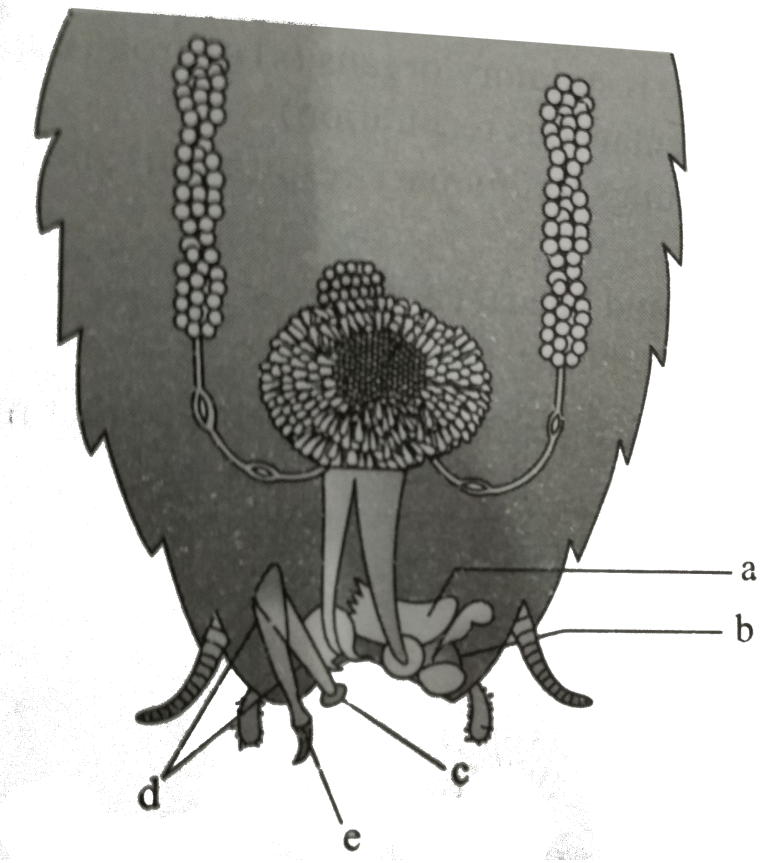
C. Fat body, hephrocytes and urecose glands helps in excretion in cockroach

D. Male cockroach bears one pair of collaterial glands which functions as accessory reproductive glands

Answer: D

Watch Video Solution

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



A. a-ventral phallomere, b-right phallomere, e-left phallomere, c-titillator, d-pseudopenis

B. b-ventral phallomere, a-right phallomere, d-left phallomere, e-titillator, c-pseudopenis

C. c-ventral phallomere, e-right phallomere, b-left phallomere, d-titillator, a-pseudopenis

D. d-ventral phallomere, c-right phallomere, a-left phallomere, b-titilatore, e-pseudopenis

Answer: B

Watch Video Solution

39. In male cockroach, the external genitalia is represented by

A. Three phallomeres-right, left and dorsal

B. Three gonapophyes-right, left and ventral

C. Three phallomeres-right, left and lateral

D. Chitinous symmetrical structures

Answer: C

Watch Video Solution

40. On a average, female cockroach produces...a...oothecae, each containing..b....eggs. The nymph grows by molting about...c...times to reach the adult form

A. a-9 to 10, b-14 to 16, c-13

B. a-14 to 16, b-9 to 10, c-13

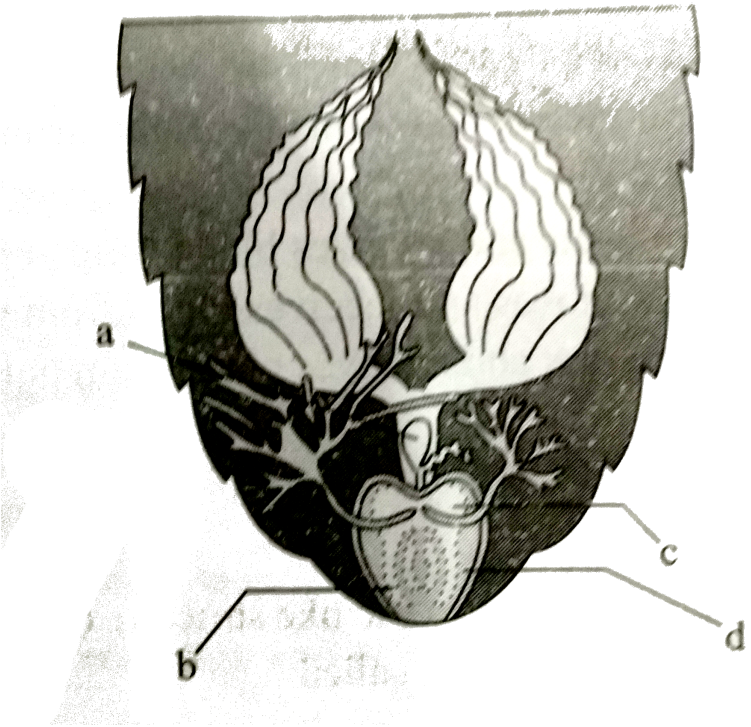
C. a-9 to 10, b-15 to 40, c-10

D. a-2 to 20, b-14 to 16, c-13

Answer: A

Watch Video Solution

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



A. b-vestibulum, a-genital chamber, c-spermathecae, d-gonapophyes

B. a-vestibulum, b-genital chamber, d-spermathecae, c-gonapophyes

C. d-vestibulum, c-genital chamber, a-spermathecae, b-gonapophyes

D. c-vestibulum, d-genital chamber, b-spermathecae, a-gonapophyes

Answer: C

View Text Solution

View Text Solution

42. Read the followig statements and find out the incorrect statement.

A. The next to last nymphal stage has wing pads but only adult cockroaches have wings

B. Many species of cockroaches are wild and are of no economic importance

C. They can transmit a variety of bacterial diseases by contaminating food material

D. None of the above

Answer: D

Watch Video Solution

1. Frogs have the ability to change the colour to hide them from their enemies (camouflage). This protective coloration is called

A. Aestivation

B. Concealment

C. Mimicry

D. Hibernation

Answer: C

Watch Video Solution

2. During the peak summer and winter the frogs take shelter in deep burrows to protect them from extreme heat and cold. This is called as

A. Summer sleep (aestivation) and winter sleep (hibernation)

B. Summer sleep (hibernation) and winter sleep (aestivation)

C. Summer sleep (diapause) and winter sleep (suspend)

D. Summer sleep (dormancy) and winter sleep (diapause)

Answer: A

Watch Video Solution

3. Read the following statements and find out the incorrect statement about frog.

A. Frog never drinks water

B. In frog, neck and tail are absent

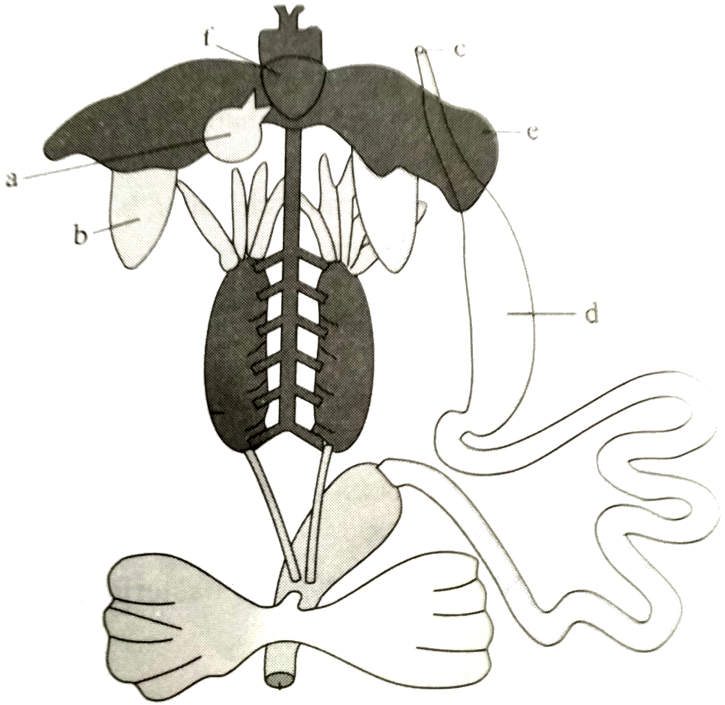
C. The duodenum receives bile from gall bladder and pancreatic juices from the pancreas through the hepato-pancreatic duct

D. Eyes of frog are covered by nictiating membrane that protects them while in water

Answer: C

Watch Video Solution

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



A. d-liver, a-heart, c-lung, b-oesophagus, f-gall bladder, e-stomach

B. e-liver, f-heart, b-lung, c-oesophagus, a-gall bladder, d-stomach

C. e-liver, f-heart, a-lung, c-oesophagus, b-gall bladder, d-stomach

D. e-liver, f-heat, b-lung, d-oesophagus, a-gall bladder, c-stomach

Answer: B

View Text Solution

5. In frogs, sexual dimorphism is shown by

A. Presence of sound producing vocal sacs in male frogs which are absent in female frogs

B. Male frogs have a copulatory pad on the first digit of the hind limbs which are absent in female frogs

C. Both A and B

D. None of the above

Answer: A

Watch Video Solution

6. In frog, the duodenum receives bile from gall bladder and pancreatic juices from the pancreas through a

A. Common bile duct

B. Hepato-pancreatic duct

C. Cystic duct

D. Hepatic duct

Answer: A

Watch Video Solution

7. Read the following statements and find out the incorrect statement about frogs.

A. Frog respire on land and in water by two different methods

B. Liver secrets bile that is stored in the gall bladder

C. Three chambered heart is situated in the upper part of body cavity

D. RBCs are enucleated and contain red coloured pigment called haemoglobin

Answer: D

Watch Video Solution

8. In water, the aquatic respiratory organ(s) of frog is/are

A. Skin (cutaneous respiration)

B. Skin, lungs (pulmonary respiration) and buccal cavity

C. Lungs and buccal cavity

D. Skin and buccal cavity

Answer: A

Watch Video Solution

9. On land, the respiratory organ(s) of frog is/are

A. Skin (cutaneous respiration)

B. Skin, lungs (pulmonary respiration) and buccal cavity

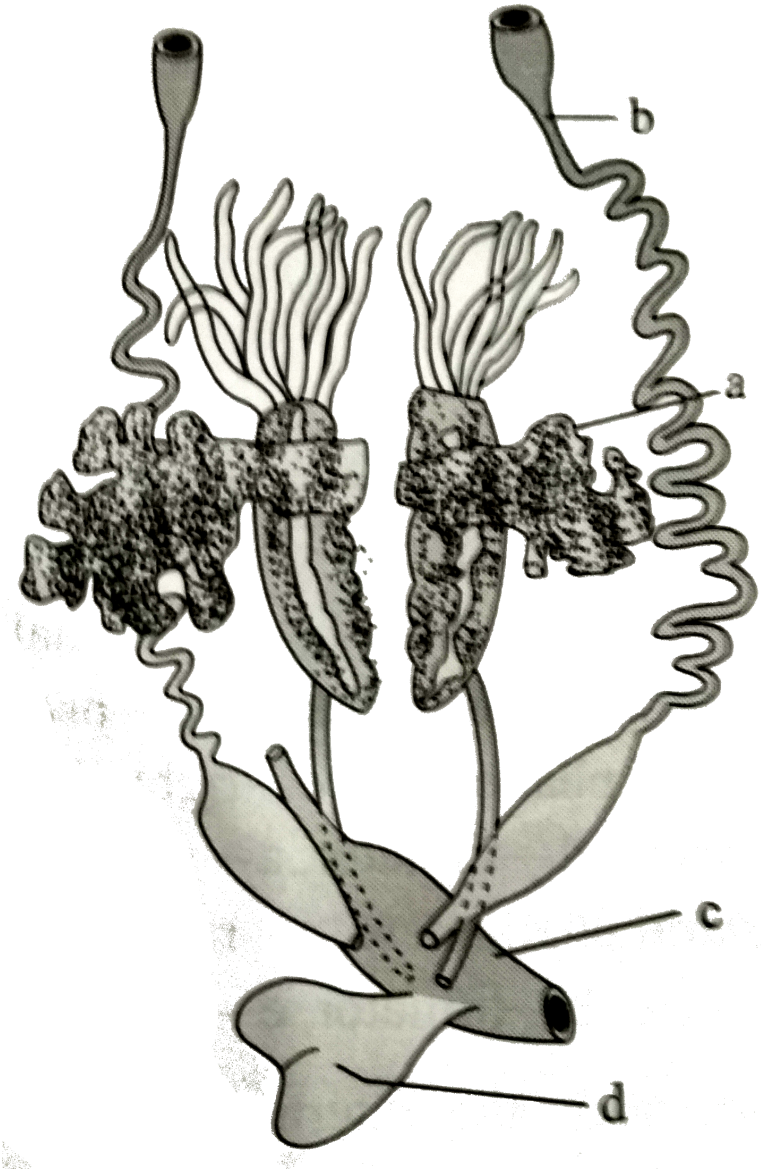
C. Lungs and buccal cavity

D. Skin and buccal cavity

Answer: B

 Watch Video Solution

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



A. a-cloaca, b-ovary, d-oviduct, c-urinary bladder

B. c-cloaca, a-ovary, b-oviduct, d-urinary bladder

C. b-cloaca, d-ovary, c-oviduct, a-urinary bladder

D. d-cloaca, c-ovary, a-oviduct, b-urinary bladder

Answer: B

Watch Video Solution

11. During aestivation and hibernation in frog, gaseous exchange takes place through

A. Skin (cutaneous respiration)

B. Skin, lungs (pulmonary respiration) and buccal cavity

C. Lungs and buccal cavity

D. Skin and buccal cavity

Answer: A

Watch Video Solution

12. A triangular structure that joins the right atrium of heart in frog is called

A. Sinus venosus and receives blood from vena cava

B. Conus arteriosus and receives blood from vena cava

C. Sinus venosus and receives blood from pulmonary artery

D. Conus arterious and receives blood from pulmonary vein

Answer: A

Watch Video Solution

13. The ventricle opens into a sac like structure on the ventral side of the heart of frog is called

A. Conus areriosus

B. Sinus venosus

C. Dorsal aorta

D. Renal portal vein

Answer: A

View Text Solution

14. Special venous connection between liver and intestine as well as the kidney and lower parts of body are present in frog that is called

A. Hepatic poral system

B. Renal portal system

C. Hepatic portal system and renal portal system, respectively

D. Renal portal system and hepatic portal system respectively

Answer: C

Watch Video Solution

15. Read the following statements and find out the incorrect statement about frog

A. The blood cells are RBC , WBC and platelets

B. The lymph is different from blood as it lacks few proteins and RBCs

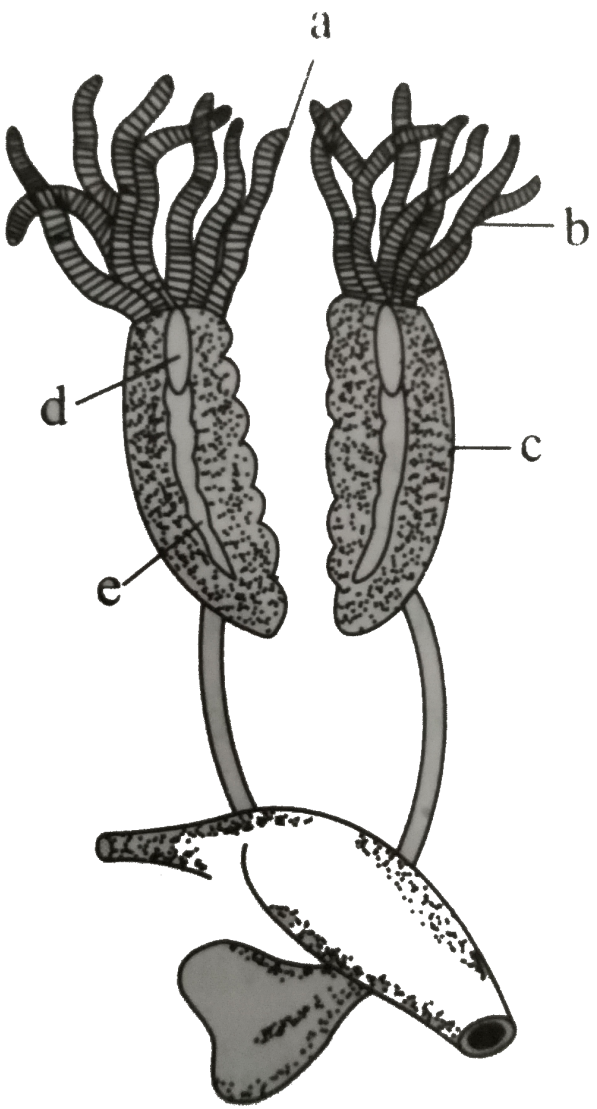
C. Kidneys are bean shaped structures, situated a little anteriorly in the body cavity on both sides of vertebral column

D. In male frogs, ureters acts as urinogenital duct which opens into cloaca

Answer: C

Watch Video Solution

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



A. c-kidney, d-testis, b-fat bodies, e-adrenal gland, a-vasa efferentia

B. e-kidney, d-testis, b-fat bodies, k-adrenal gland, a-vasa efferentia

C. c-kidney, e-testis, b-fat bodies, d-adrenal gland, a-vasa efferentia

D. c-kidney, d-testis, a-fat bodies, e-adrenal gland, b-vasa efferentia

Answer: A

Watch Video Solution

17. Fill in the blanks:

a. In female frogs, the ureters and oviduct open...1...into the cloaca.

b. The thin walled urinary bladder is present ventral to ...2...which also opens in the cloaca.

c. Frogs is ...3...animal.

d. In frog, there are ..4...of cranial nerves arising from brain.

A. a-collectively, b-kidney, c-uricotelic, d-ten pairs

B. a-separately, b-rectum, c-ureotelic, d-twelve pairs

C. a-separately, b-rectum, c-ureotelic, d-ten pairs

D. a-collectively, b-rectum, c-ureotelic, d-twelve pairs

Answer: C

Watch Video Solution

18. The nervous system of frog is organised ino

A. Central nervous system and peripheral nervous system

B. Central nervous system and autonomic nervous system

C. Central nervous system, peripheral nervous system and autonomic nervous system

D. Brain and spinal cord

Answer: C

Watch Video Solution

19. Central nervous system is divided in frog in

A. Brain and spinal cord

B. Cranial and spinal nerves

C. Sympathetic and parasympathetic

D. Forebrain, midbrain and hindbrain

Answer: A

Watch Video Solution

20. Autonomic nervous system in frog is divided into

A. Brain and spinal cord

B. Cranial and spinal nerves

C. Sympathetic and parasympathetic

D. Forebrain, midbrain and hindbrain

Answer: C

Watch Video Solution

Section B Assertion Reasoning Questions

1. Assertion: Epithelial tissue provides a covering or a lining for some parts of the body.

Reason: Epithelial tissue has a free surface, which faces either a body fluid or the outside environment.

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

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

C. If assertion is true but reason is false

D. If both assertion and reason are false

Answer: A

Watch Video Solution

2. Assertion: The product of endocrine gland is secreted directly into the fluid bathing the gland.

Reason: Endocrine gland are ductless or tubeless glands.

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

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

C. If assertion is true but reason is false

D. If both assertion and reason are false

Answer: A

Watch Video Solution

3. Assertion: Smooth muscles are involuntary in nature.

Reason: The functioning of smooth muscles cannot be directly controlled. A person will not be able to make it contract by merely thinking about it.

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

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

C. If assertion is true but reason is false

D. If both assertion and reason are false

Answer: A

Watch Video Solution

4. Assertion: In cardiac muscle tissue, the communication junctions (intercalated discs) at some fusion points allow the cells to contract as a

unit.

Reason: When one cell of cardiac muscle tissue recieves a signal to contract, its neighbours are also stimulated to contract.

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

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

C. If assertion is true but reason is false

D. If both assertion and reason are false

Answer: A

 Watch Video Solution

5. Assertion: The indian bull frog Rana tigrina is cold blooded or poikilothermic animal.

Reason: Frogs do not have constant body temperature i.e, their body temperature varies with the temperature of the environment.

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

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

C. If assertion is true but reason is false

D. If both assertion and reason are false

Answer: A

Watch Video Solution

6. Assertion: In frog, the alimentary canal is short and length of intestine is reduced.

Reason: Frog is carnivorous in nature.

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

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

C. If assertion is true but reason is false

D. If both assertion and reason are false

Answer: A

Watch Video Solution

7. Assertion: Periplaneta americana is uricotelic insect.

Reason: Malpighian tubules absorb nitrogenous waste products and convert them into uric acid which is excreted out through the hindgut.

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

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

C. If assertion is true but reason is false

D. If both assertion and reason are false

Answer: A

Watch Video Solution

8. Assertion: The nervous system of cockroach is spread throughout the body.

Reason: Three ganglia lies in the thorax and six in the abdomen.

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

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

C. If assertion is true but reason is false

D. If both assertion and reason are false

Answer: B

Watch Video Solution

9. Assertion: If the head of a cockroach is cut off, it will still live for as long as one weak.

Reason: The head holds a bit of nervous system while the rest is situated along the ventral (belly side) part of its body.

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

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

C. If assertion is true but reason is false

D. If both assertion and reason are false

Answer: A

Watch Video Solution

10. Assertion: The development of Periplaneta americana is Paurometabolous.

Reason: In the development of the cockroach there are many nymphal stages. The nymph looks very much like adults.

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

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

C. If assertion is true but reason is false

D. If both assertion and reason are false

Answer: A

Watch Video Solution

11. Assertion: In cockroach the sense organs are antennae, eyes, maxillary palps, labial palps and anal cerci

Reason: In cockroach, compound eyes consists of about 2000 hexagonal ommatidia.

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

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

C. If assertion is true but reason is false

D. If both assertion and reason are false

Answer: C

Watch Video Solution

Section D Chapter End Test

1. All complex animals consist of only four basic types of tissues. These tissues are organised in specific proportion and pattern to form an

A. Organ like stomach, lung, heart and kidney

B. Organ system like digestive system and respiratory system

C. Organ like digestive system and respiratory system

D. Organ system like stomach, lung, heart and kidney

Answer: A

Watch Video Solution

2. Read the following statements and find out the incorrect statement.

A. In unicellular organisms, all functions like digestion, respiration and reproduction are performed by a single cell.

B. In the complex body of multicellular animals different basic functions are carried out by different groups of cells.

C. The body of Hydra is made of different types of cells and the number of cells in each type can be in thousands.

D. When two or more organs perform a common function by their physical and/or chemical interaction they together form an organism.

Answer: D

Watch Video Solution

3. Transitional epithelium occurs in

A. Blood vessles

B. Trachea

C. Kidney

D. Ureter/Urinary bladder

Answer: D

Watch Video Solution

4. Ligament connects

A. Muscle to skin

B. Bone to bone

C. Muscle to muscle

D. Muscle to bone

Answer: B

Watch Video Solution

5. Epithelium present in cornea , oesophagus , urethra and vagina is

A. Glandular

B. Ciliated

C. Stratified Columnar

D. Stratified Squamous

Answer: D

Watch Video Solution

6. In Camel, the hump is mainly made of which tissue

A. Areolar

B. Adipose

C. Muscular

D. Skeleton

Answer: B

Watch Video Solution

7. The epithelium found in the lining layer of stomach and intestine is

A. Columnar epithelium

B. Squamous

C. Stratified

D. Pseudostratified

Answer: A

Watch Video Solution

8. The most abundant and widely distributed tissue in the body of complex animals is

A. Epithelial tissue

B. Connective tissue

C. Muscular tissue

D. Neural tissue

Answer: B

Watch Video Solution

9. Connective tissues are classified into

A. Three types, viz., loose connective tissue, dense regular tissue and dense irregular tissue

B. Two types, viz,. Areolar tissue and adipose tissue

C. Three types, viz., loose connective tissue, dense connective tissue and specialised connective tissue

D. Four types, viz., blood, bone, cartilage and adipose

Answer: C

Watch Video Solution

10. Read the following statements and find out the correct statement(s).

A. Ligaments, which attach skeletal muscles to bones and tendons which attach one bone to another are examples of dense regular connective tissue

B. Blood, bones and cartilage are various types of specialised muscular tissues.

C. Most of the bones in vertebrate embryos are replaced by cartilages in adults

D. None of the above

Answer: D

Watch Video Solution

11. Which of the following tissues perform special function of linking and supporting other tissues organs of the body?

A. Epithelial tissue

B. Connective tissue

C. Muscular tissue

D. Neural tissue

Answer: B

Watch Video Solution

12. Read the following statements and find out the incorrect statement about earhworm.

A. Three different types of nephridia are basically similar in structure.

B. Earthworms have no eyes

C. Earthworms have taste receptors/chemoreceptors

D. Earthworm do not have light and touch sensitive organs

Answer: D

Watch Video Solution

13. Which part of alimentary canal of cockroach is used for storing of food?

A. Crop

B. Gizzard

C. Stomach

D. Gastric caecae

Answer: A

Watch Video Solution

14. Primitive nervous system is formed in

A. Porifera

B. Coelentrate

C. Plathyelminthes

D. Aschelminthes

Answer: B

Watch Video Solution

15. Juvenile hormone in insects is released from

A. Protocerebrum

B. Corpora cardiaca

C. Corpora allata

D. Prothoracic gland

Answer: D

Watch Video Solution

16. The number of abdominal segements in male and female cockroach is

A. 10,10

B. 9,10

C. 10,11

D. 8,10

Answer: A

Watch Video Solution

17. Nitrogenous waste in the Malpighian tubule flows into

A. Haemocoel

B. Intestine

C. Vacuole

D. Duodenum

Answer: B

Watch Video Solution

18. The correct sequence of arrangements of segments in the leg of cockroach is

A. Tibia, trochanter, femur, tarsus and coxa

B. Trochanter, coxa, tibia, femur and tarsus

C. Coxa, femur, trochanter, tibia and tarsus

D. Coxa, trochanter, femur, tibia and tarsus

Answer: D

Watch Video Solution

19. Which of the following is the correct statement about the circulatory system of cockroach

A. It has closed type of circulatory system

B. It has a complicated type of circulatory system.

C. It has 13-chambered heart with a pair of ostia in each chamber.

D. It takes place without perticipation of tissues

Answer: C

Watch Video Solution

20. Basic unit in the eye of cockroach/insect is

A. Retina

B. Rhabdome

C. Corneal facet

D. Ommatidium

Answer: D

Watch Video Solution

21. In Cockroach moulting is induced by secretion of

A. Corpus Iuteum

B. Corpora allata

C. Corpus callosum

D. Corpus spongiosum

Answer: B

Watch Video Solution

22. Metamorphosis of insects is regulated through hormone

A. Pheromone

B. Thyroxine

C. Ecdysone

D. All of the above

Answer: C

Watch Video Solution

23. In mouthparts of Cockroach, galea and lacinia from part of

A. Labrum

B. Labium

C. Mandible

D. Maxilla

Answer: D

Watch Video Solution

24. Which of the following is absent in the coelomic fluid of earthworm ?

A. Proteins

B. Corpuscles

C. Haemoglobin

D. Salts

Answer: C

Watch Video Solution

25. Lateral hearts of Earthworm have

A. Two pairs of values, segments 6 and 11

B. Three pairs of values, segments 8 and 10

C. Four pairs of values, segments 7 and 9

D. Two pairs of values, segments 6 and 8

Answer: C

Watch Video Solution

26. Which is corrout respiration in Earthworm?

A. O_2 from atmosphere diffuses into blood and combines with haemoglobin of blood plasma

B. Blood does not have any important role in O_2 transport

C. Respires anaerobically

D. O_2 diffused from air combines with haemoglobin of RBCs

Answer: A

Watch Video Solution

27. Haemoglobin is found dissolved in plasma of

A. Earthworm

B. Cockroach

C. Planaria

D. Sepia

Answer: A

Watch Video Solution

28. How do you differentiate a frog from a toad

A. Frog has no exoskeleton but toad has scales

B. Frog respires through lungs but toad respires through skin

C. Frog has no parotid glands but toad has a pair of them

D. Frog has a tail toad has no tail

Answer: C

Watch Video Solution

29. Maximum number of ganglia are present in Cockroach in

A. Neck

B. Thorax

C. Abdomen

D. Head

Answer: C

Watch Video Solution

30. In Earthworm, cocoon is formed by

A. Epidermal muscles

B. Setae

C. Cuticle

D. Clitellum

Answer: D

Watch Video Solution

31. In earthworm fertilization occurs in

A. Oviduct

B. Spermatheca

C. Clitellum

D. Cocoon

Answer: D

Watch Video Solution

32. The gland whose secretion facilitates attachment of two earthworms during copulation is located in segment

A. 14

B. 18

C. 19

D. 22

Answer: C

Watch Video Solution

33. Spermathecae of Earthworm take part in

A. Collection of sperms of other animal

B. Collection of sperms of the same animal

C. Sperm maturation

D. Fertilisation

Answer: A

Watch Video Solution

34. Which one does not occur in Earthworm

A. Septal nephridia

B. Macronephridia

C. Integumentary nephridia

D. Pharyngeal nephridia

Answer: B

Watch Video Solution

35. Respiration without a distinct respiratory organ occurs in

A. Cockroach

B. Frog

C. Earthworm

D. Fish

Answer: C

Watch Video Solution

36. Region of Earthworm which is forest of nephridia is

A. Clitellar region

B. Pharyngeal region

C. Typhlosolar region

D. Intestinal region

Answer: A

Watch Video Solution

37. Spermathecal pores of Pheretima are present in

A. $5/6, 6/7, 7/8$ and $8/9$

B. $6/7, 7/8, 8/9$ and $9/10$

C. $1/2, 2/3, 3/4$ and $4/5$

D. $14/15, 15/16, 16/17$ and $17/83$

Answer: A

Watch Video Solution

38. Pheretima posthuma is highly useful as

A. Their burrows 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 brids due to biomagnification of chlorinated hydrocarbons.

Answer: B

Watch Video Solution

39. Blood of Pheretima is

A. Blue with haemocyanin in corpuscles

B. Blue with haemocyanin in plasma

C. Red with heamoglobin in corpuscles

D. Red with haemoglobin in plasma

Answer: D

Watch Video Solution

40. Read the following statements and find out the incorrect statement about frog.

A. The brain is divided into fore-brain, mid-brain and hind-brain

B. Fore-brain includes olfactory lobes, paired cerebral hemispheres and unpaired diencephalon

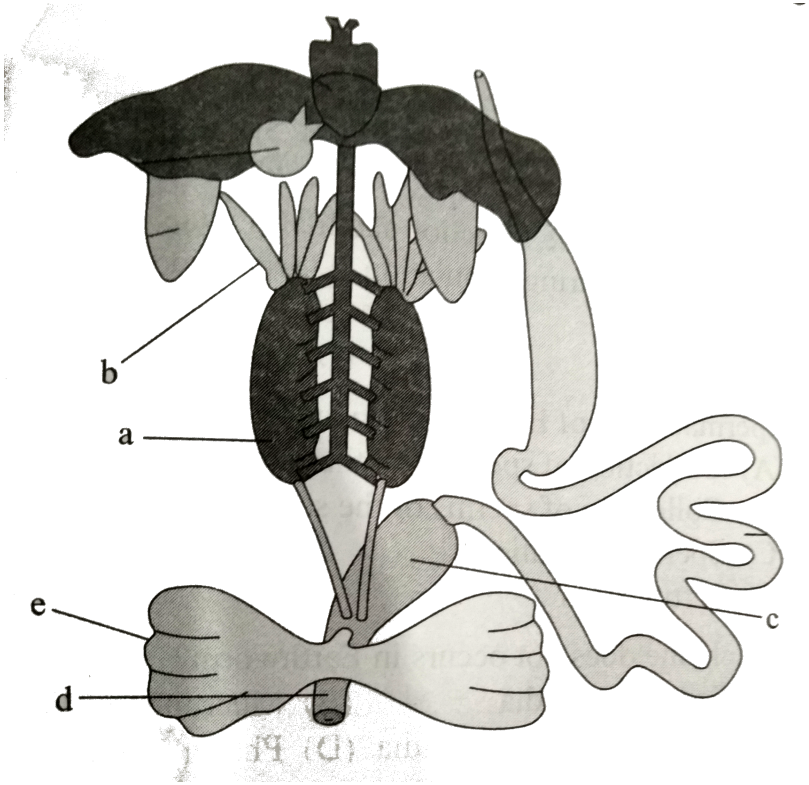
C. The mid-brain is characterised by a pair of optic lobes.

D. Hind-brain consists of cerebellum, pons and medulla oblongata.

Answer: D

Watch Video Solution

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



A. e-rectum, d-cloaca, c-urinary bladder, a-fat bodies, b-kidney

B. c-rectum, d-cloaca, a-urinary bladder, b-fat bodies, e-kidney

C. a-rectum, e-cloaca, d-urinary bladder, b-fat bodies, c-kidney

D. c-rectum, d-cloaca, e-urinary bladder, b-fat bodies, a-kidney

Answer: D

Watch Video Solution

42. In frog, the medulla oblongata passes out through a foramen and continues into spinal cord. This foramen is called

A. Foramen ovule

B. Foramen magnum

C. Foramen megendie

D. Foramen luschka

Answer: B

Watch Video Solution

43. Eyes in a frog are a pair of spherical structures situated in the

A. Cranium in skull

B. Sella tursica in skull

C. Orbit in skull

D. Glenoid cavity in cranium

Answer: C

Watch Video Solution

44. Read the following statements and find out the incorrect statement about frog.

A. In frog, external ears are absent

B. Ear is an organ of hearing as well as balancing

C. In male, testes are adhered to the upper part of kidneys by a double fold of peritoneum called mesothelium

D. Vasa efferentia are 10-12 in number that arise from testes

Answer: C

Watch Video Solution

45. In male frog, vasa efferentia enter the kidney and open into

A. Ureter

B. Urinogenital duct

C. Cloaca

D. Bidder's canal

Answer: D

Watch Video Solution

46. Read the following statements and find out the incorrect statement.

A. In male frog, cloaca is used to pass faecal matter, urine and sperms to the exterior.

B. There is no functional connection of ovaries and kidneys in female frog

C. A mature female frog can lay 2500-3000 ova at a time

D. In frog, fertilisation is external and development is direct through a larval stage called tadpole.

Answer: D

Watch Video Solution

47. What is the economic importance of frog?

A. They eat insects and protect the crop

B. Frogs maintain ecological balance as these serve as an important link of food chain and food web

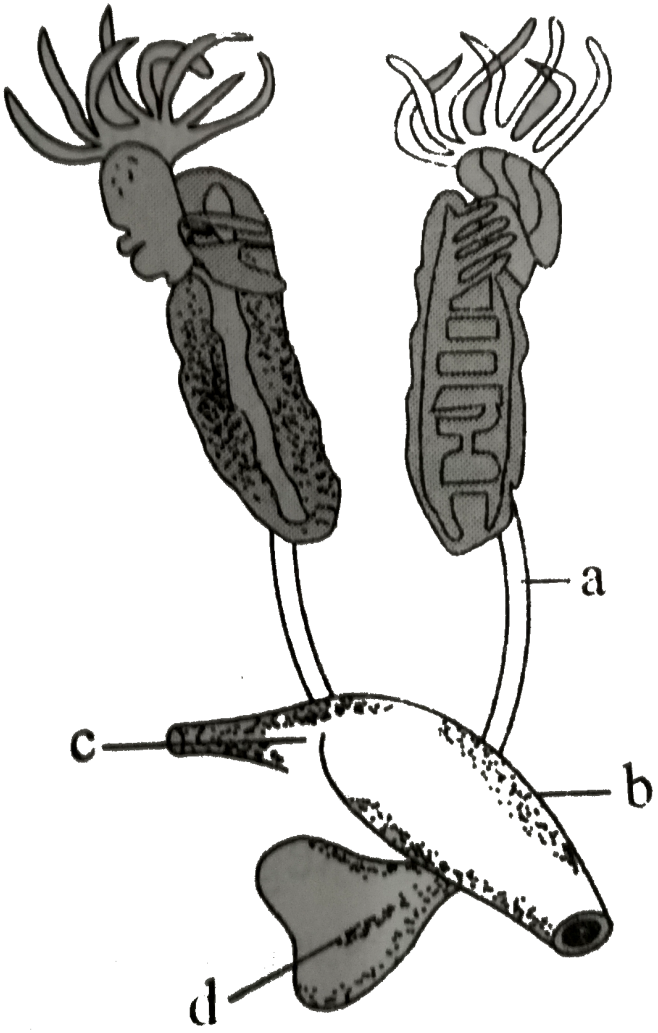
C. In some countries the muscular legs of the frog are used as food by man

D. All of the above

Answer: D

Watch Video Solution

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



A. a-cloaca, b-rectum,c-urinary bladder, d-urino-genital duct

B. c-cloaca, d-rectum, a-urinary bladder, b-urino-genital duct

C. b-cloaca, c-rectum, d-urinary bladder, a-urino-genital duct

D. d-cloaca, a-rectum, b-urinary bladder, c-urino-genital duct

Answer: C

View Text Solution

49. Select the incorrect statement about frog.

A. Body is divisible into head and trunk only

B. Forelimbs ends in five digits and they are larger and muscular than hind limbs that ends in four digits

C. The forelimbs and hind limbs help in swimming, walking, leaping and burrowin. Feet have webbed digits that help in swimming.

D. The digestive system of frog consist of alimentary canal and digestive glands

Answer: B

Watch Video Solution

50. Peripheral nervous system is divided in frog in

A. Brain and spinal

B. Cranial and spinal nerves

C. Sympathetic and parasympathetic

D. Forebrain, midbrain and hindbrain

Answer: B

Watch Video Solution

Others

1. Spermathecae occur in Earthworm in

A. 6-9 segments

B. 6-10 segments

C. 6-11 segments

D. 5-8 segments

Answer: A

Watch Video Solution

2. Somites/metamers/segemnts present in the body of earthworm are

A. 60-80

B. 80-100

C. 100-120

D. 120-160

Answer: C

Watch Video Solution

3. In the $4^{th} 5^{th}$ and 6^{th} segments of earthworms lying above pharyngeal mass and connected with pharyngeal glands are found small, red coloured follicular bodies called

A. Septal glands

B. Blood glands

C. Salivary glands

D. Nephridia

Answer: B

Watch Video Solution

4. Blood glands of Pheretima take part in

A. Formation of red blood corpuscles

B. Formation of phagocytes

C. Maintenance of blood volume

D. Maintenance of blood circulation

Answer: B

Watch Video Solution

5. Earthworms have no skeleton but during burrowing, the anterior end becomes turgid and acts as a hydrauluc skeleton. It is due to

A. Gut peristalsis

B. Setae

C. Coelomic fluid

D. Blood

Answer: C

Watch Video Solution

6. A feature absent in annelids in

A. Clitellum

B. Pseudocoelom

C. Metameric segmentation

D. Nephridia

Answer: B

Watch Video Solution

7. In Earthworm, typhlosole occurs between

A. 20-90 segments

B. 26-95 segments

C. 20-95 segments

D. 21-100 segments

Answer: B

Watch Video Solution

8. In Earthworm male genital apertures are present ventrally in the segment

A. 14^{th}

B. 15^{th}

C. 17^{th}

D. 18^{th}

Answer: D

Watch Video Solution

9. Which one is correct?

A. Rat-Left kidney is slightly higher in position than the right one

B. Cockroach-10 pairs of spiracles (2 pairs of thorax, 8 pairs of abdomen)

C. Earthworm-Alimentary canal has pharynx, oesophagus, stomach, gizzard and intestine

D. Frog-Body divisible into head, neck and trunk and tail

Answer: B

Watch Video Solution

10. A respiratory pigment is absent in

A. Earthworm

B. Frog

C. Rabbit

D. Cockroach

Answer: D

Watch Video Solution

11. In earthworm

A. Integumentary and pharyngeal nephridia are exonephric

B. Pharyngeal and septal nephridia are exonephric

C. Integumentary and septal nephridia are enteronephric

D. Pharyngeal and septal nephridia are enteronephric

Answer: D

Watch Video Solution

12. If a live earthworm is pricked with a needle on its outer surface without damaging its gut, the fluid that comes out is

A. Coelomic fluid

B. Excretory fluid

C. Slimy mucus

D. Haemolymph

Answer: A

Watch Video Solution

13. Which one correctly describes the location of body parts in Pheretima?

A. Two pairs of accessory glands in 16-18 segments

B. Two pairs of testes in 10^{th} and 11^{th} segments

C. Four pairs of spemathecae in 4-6 segments

D. One pair of ovaries attached over septum 14-15 segments

Answer: B

Watch Video Solution

14. In Earthworm, gizzard occurs in segment

A. 5

B. 6

C. 8 and 9

D. 10

Answer: C

Watch Video Solution

15. Endothelium lining a blood vessel is formed of

A. Ciliated epithelium

B. Columnar epithelium

C. Cuboidal epithelium

D. Simple sqamous epithelium

Answer: D

Watch Video Solution

16. Cockroach is

A. Diurnal and herbivorous

B. Nocturnal and carnivorous

C. Diurnal and omnivorous

D. Noctural and omnivorous

Answer: D

Watch Video Solution

17. Mushroom glands is a part of

A. Male reproductive system of Cockroach

B. Female reproductive system of Cockroach

C. Male reproductive system of Rabbit

D. Female reproductive system of Rabbit

Answer: A

Watch Video Solution

18. Single large blood vessel in Cockroach is

A. Lateral artery

B. Ventral aorta

C. Posterior aorta

D. Anterior aorta

Answer: D

Watch Video Solution

19. Compound eyes are found in

A. Earthworm

B. Cockroach

C. Roundworm

D. Flatworm

Answer: B

Watch Video Solution

20. In Cockroach, gizzard contains

A. Four teeth

B. Six teeth

C. Eight teeth

D. Five teeth

Answer: B

Watch Video Solution

21. Which reference to external features of Cockroach, which among the following statements is not correct?

A. Body is covered by chitinous exoskeleton

B. Hind wings are protective and are not useful in flight

C. Fore wings are elytra

D. Gonapophyses help in copulation

Answer: B

Watch Video Solution

22. About how many times does the nymph of Periplaneta americana undergo moulting before becoming an adult ?

A. 2

B. 3

C. 4

D. 13

Answer: D

Watch Video Solution

23. Fertilized eggs of Periplaneta americana are encased in

A. Ootheca

B. Cocoon

C. Phallomere

D. Genital chamber

Answer: A

Watch Video Solution

24. In cockroaches, digestive juice is secreted by the

A. Gizzard

B. Malpighian tubules

C. Crop

D. Hepatic caeca

Answer: D

Watch Video Solution

25. Which of the following is correct for the common cockroach ?

A. Nitrogeneous excretory products is urea

B. Food is grind by mandibles and gizzard

C. Malpighian tubules are excretory organs that project out from coelom

D. Oxygen is transported by haemoglobin in blood

Answer: B

Watch Video Solution

26. 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

Answer: A

Watch Video Solution

27. Fat is stored in

A. Liver cells

B. Alveolar tissue

C. Adipose tissue

D. Lymph glands

Answer: C

Watch Video Solution

28. Which one neutralises humic acid present in humans in the body of Earthworm

A. Intestinal caecum

B. Typhlosole

C. Gizzard

D. Calciferous glands

Answer: D

Watch Video Solution

29. Special feature of Pheretima is

A. S-shaped setae are defensive weapons against enemy

B. It has long, dorsal tubular heart

C. Fertilization of eggs occurs inside the body

D. Typhlosole increases effective absorptive area for digested food

Answer: D

Watch Video Solution

30. In Earthworm mouth is situated on

A. Prostomium

B. Peristomium

C. Stomium

D. Protostomium

Answer: B

Watch Video Solution

31. Locomotory organ of annelida is

A. Suckers

B. Parapodia

C. Setae

D. All of the above

Answer: D

Watch Video Solution

32. 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

Answer: A

Watch Video Solution

33. Cockroach crushes foof with the help of its

A. Labium

B. First maxillae

C. Mandibles

D. Antennae

Answer: C

Watch Video Solution

34. Excretory organs of Cockroach and other insects are

A. Nephridia

B. Flame cells

C. Malpighian tubules

D. Gizzard

Answer: C

Watch Video Solution

35. In Pheretima, clitellum occurs in segments

A. 15-17

B. 43813

C. 13-15

D. 14-16

Answer: D

Watch Video Solution

36. Choose the correctly matched pair

A. Inner surface of bronchioles-Squamous epithelium

B. Inner lining of salivary ducts -Ciliated epithelium

C. Moist surface of buccal cavity-Glandular epithelium

D. Tubular parts of nephrons-Cuboidal epithelium

Answer: D

Watch Video Solution

37. Choose the correctly matched pair

A. Cartilage-Loose connective tissue

B. tendon-Specialized connective tissue

C. Adipose tissue-Dense connective tissue

D. Arolar tissue-Lose connective tissue

Answer: D

Watch Video Solution

38. type of ovariole found in cockroach is

A. Metrotrophic

B. Telotrophic

C. Polytrophic

D. Paniostic

Answer: D

Watch Video Solution

39. Neurohaemal organ in cockroach is

A. Corporis aleatum

B. Corporis Cardiacum

C. Prothoracic gland

D. Prothoracic ganglion

Answer: B

Watch Video Solution

40. The fluid floweing in the circulatory system of cockroach is known as

A. Haemolymph

B. Lymph

C. Extracellular fluid

D. Plasma

Answer: A

Watch Video Solution

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

A. Potassium urate

B. Urea

C. Calcium carbonate

D. Ammonia

Answer: A

Watch Video Solution

42. The targa, sterna and pleura of cockroach body are joined by

A. Arthrodial membrane

B. cartilage

C. Cementing glue

D. Muscular tissue

Answer: A

Watch Video Solution

43. The function of the gap junction is to

A. Facilitate communication between adjoining cells by connecting the cytoplasm for rapid transfer of ions, small molecules and some large molecules

B. Separate two cells from each other

C. Stop substance from leaking across a tissue

D. Performing cementing to keep neighbouring cells together

Answer: A

Watch Video Solution

44. A single layer to tall and slender cells found in the lining of human stomach which helps in secretion and absorption is comprised of

A. Columnar epithelium

B. Cuboidal epithelium

C. Squamous epithelium

D. Glandular cells

Answer: A

Watch Video Solution

45. Connective tissues are derived from embryonic

A. Ectoderm

B. Endo-mesoderm

C. Endoderm

D. Mesoderm

Answer: D

Watch Video Solution

46. Earthworm has no skeleton but during burrowing, the anterior end becomes turgid and acts as a hydraulic skeleton. It is due to

A. Setae are present in all body segments except first, last and clitellum.

B. Gut peristalsis

C. Septum

D. Coelomic fluid

Answer: D

Watch Video Solution

47. Which type of tissue correctly matched with its location?

A.

Tissue	Location
Smooth muscle	Wall of intestine

B.

Tissue	Location
Areolar tissue	Tendons

C.

Tissue	Location
Transitional epithelium	Tip of nose

D.

Tissue	Location
Cuboidal epithelium	Lining of stomach

Answer: A

Watch Video Solution

48. Smooth muscles are

A. Involuntary, cylindrical striated

B. voluntary, spindle-shaped, uninucleate

C. Involuntary, fusiform, non-striated

D. Voluntary, multinucleate, cylindrical

Answer: C

Watch Video Solution

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

A. Testes $\rightarrow$ Vasa efferentia $\rightarrow$ Kidney $\rightarrow$ Seminal vesicle $\rightarrow$ Urinogenital duct $\rightarrow$ Cloaca

B. Testes $\rightarrow$ vasa efferentia $\rightarrow$ Bidder's canal $\rightarrow$ Ureter $\rightarrow$ Cloaca

C. Testes $\rightarrow$ Vasa efferentia $\rightarrow$ Kidney $\rightarrow$ Bidder's canal $\rightarrow$ Urinogenital duct $\rightarrow$ Cloaca

D. Testes $\rightarrow$ Bidder's canal $\rightarrow$ Kidney $\rightarrow$ Vasa efferentia $\rightarrow$ Urinogenital duct $\rightarrow$ Cloaca

Answer: C

Watch Video Solution

50. Which of the following animals does not undergo metamorphosis

A. Earthworm

B. Tunicate

C. Moth

D. Starfish

Answer: A

Watch Video Solution

51. Which of the following features is used to identify a male cockroach from a female cockroach?

A. Presence of a boat shaped sternum on the 9th abdominal segment

B. Presence of caudal styles

C. Forweings with darket tegmina

D. Presence of anal cerci

Answer: B

Watch Video Solution

52. Major protein of connective tissue is

A. myosin

B. collagen

C. melanin

D. keratin

Answer: B

Watch Video Solution

53. Outer covering of cartilage is called

A. perichondrium

B. periosteum

C. endosternum

D. peritoneum

Answer: A

Watch Video Solution

54. Which one of the following groups of structures/organs have similar function?

A. Typhlosole in earthworm, intestinal villi in rat and contractile vacuole in Amoeba

B. Nephridia in earthworm, malpighian tubules in cockrach and urinary tubules in rat

C. Antennae of cockroach, tympanum of frog and clitellum of earthworm

D. Incisors of rat, gizzard (proventriculus) of cockroach and tube feet of starfish

Answer: B

Watch Video Solution

55. The type of epithelial cells which line the innert surface of fallopian tubes, bronchioles and small bronchi are known as

A. squamous epithelium

B. Columnar epithelium

C. ciliated epithelium

D. cubical epithelium

Answer: C

Watch Video Solution

56. Which of the following type of cell junction is not found in animal tissues?

A. Adhering junction

B. Tight junction

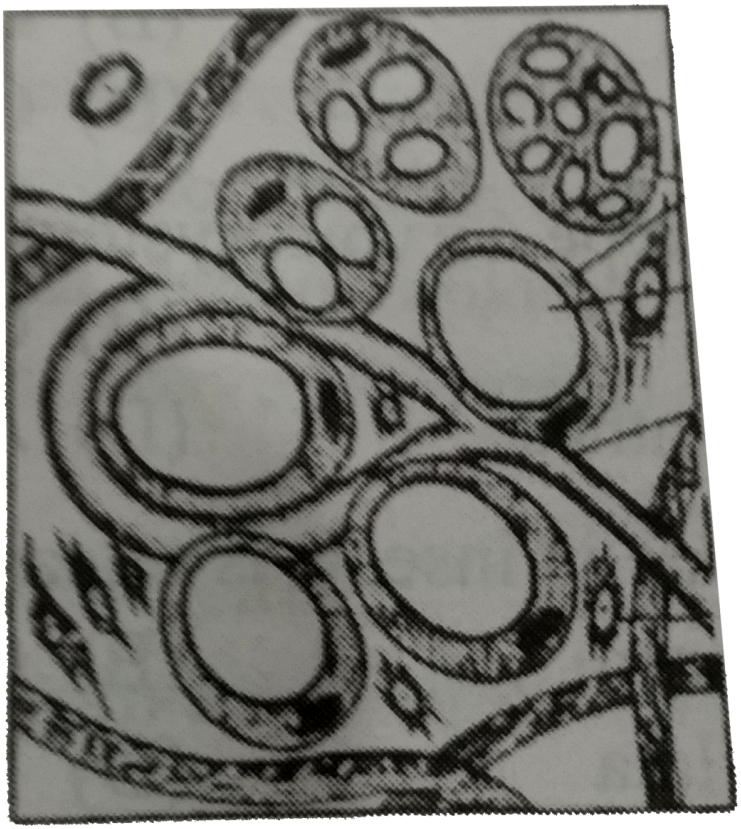
C. Gap junction

D. Plasmodesmata

Answer: D

Watch Video Solution

57. Identify the figure with its correct function.



A. Areolar connective tissue-Serves as a suport framework for epithelium

B. Adipose tissue-Store fats and act as heat insulators

C. Dense regular tissue-Provide flexibility

D. Dense irrengular tissue-Provide strength and elasticity

Answer: B

Watch Video Solution

58. Cockroaches are

A. ureotelic

B. ureotelic or ammonotelic

C. uricotelic

D. Ammontelic

Answer: C

Watch Video Solution

59. Male cockroach can be identified from the female by the presence of

A. long antennae

B. wingless body

C. elongated abdomen

D. Anal styles which are present in males only

Answer: B

Watch Video Solution

60. The sensory papillae in frogs are associated with

A. smell

B. hearing

C. respiration

D. touch

Answer: D

Watch Video Solution

61. In earthworm setae are present in all segments except

A. first and the last segments

B. first segment and the clitellum

C. first segment

D. clitellum and last segments

Answer: B

Watch Video Solution

62. Assertion: Cartilage and bone are rigid connective tissues.

Reason: Blood is a connective tissue.

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

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

C. If the assertion is true but reason is false

D. If the assertion is false but the reason is true

Answer:

Watch Video Solution

63. Assertion: Intercalated discs are important regions of cardiac muscle cells.

Reason: Intercalated discs function as boosters for muscle contraction waves.

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

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

C. If the assertion is true but reason is false

D. If the assertion is false but the reason is true

Answer: A

Watch Video Solution

64. Given below are assertion and reason. Point out if

Assertion : Blood of cockroach is colourless haemolymph with no respiratory pigments

Reason : Respiration in Cockroach occurs through diffusion in haemolymph

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

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

C. If the assertion is true but reason is false

D. If the assertion is false but the reason is true

Answer: C

Watch Video Solution

65. Assertion : Gap junctions perform cementing function to keep the neighbouring cells together

Reason : Tight junction facilitates the cells to communicate with each other by connecting the cytoplasm of adjoining cells, for rapid transfer of ions, small and big molecules

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

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

C. If the assertion is true but reason is false

D. If the assertion is false but the reason is true

Answer: D

Watch Video Solution

66. Assertion: The squamous epithelium is made of a single thin layer of flattened cells with irrengular boundaries.

Reason: They are found in walls of blood vessels and air sacs of wings.

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

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

C. If the assertion is true but reason is false

D. If both assertion and reason are false

Answer: B

Watch Video Solution