

BIOLOGY

BOOKS - ARIHANT NEET BIOLOGY (HINGLISH)

STRUCTURAL ORGANISATION IN SOME ANIMALS

Checkpoint 14 1

- 1. Earthworm not found in India is
 - A. Megascolex
 - **B.** Lumbricus
 - C. Eutyphaeus
 - D. Drawida

Answer: B



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2. The colour of the body in earthworm is brown due to the presence of

A. haemoglobin

B. porphyrin

C. haemocyanin

D. melanin

Answer: B



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3. Clitellum of Pheretima is thick girdle that is

A. non - glandular around 14 th - 16 th segments

B. glandular around 16th - 18 th segments

C. glandular around 16 th - 18th segments

D. non - glandular around 16 th - 18 th segments	
Answer: B	
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- 4. Intestine of earthworm lies between
 - A. 22 nd 26 th segments
 - B. 20 th 24 th segments
 - C. 15 th to last segment
 - D. 33 th 36 th segments

Answer: C



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5. Locomotion in earthworm is directly facilitated by

A. mucus secreted by the epidermis B. segmentation of the body C. rhythmic contraction of individual segments D. setae **Answer: D Watch Video Solution** 6. The body cavity of earthworm represents a true A. coelenteron B. haemocoel C. coelom D. blastocoel Answer: C **Watch Video Solution**

7. Chloragogen cells are involved in
A. digestion
B. carbohydrate metabolism
C. respiration
D. fat storage
A
Answer: D
Watch Video Solution
Watch Video Solution

C. typhlosole

D. prostomium	
Answer: C	
Watch Video Solution	
9. Respiration in earthworm is	
A. pulmonary	
B. pharyngeal	
C. cutaneous	
D. None of these	
Answer: C	
Watch Video Solution	

10. The only blood vessel in earthworm in which blood flows from the last segment to the first segment is

A. subneural

B. dorsal

C. ventral

D. supraoesophageal

Answer: B



- A. 6 th, 7 th and 9 th , 10 th
 - B. 7 th , 9 th and 12 th, 13 th

11. Four pairs of hearts in earthworm occur in segments

- C. 9 th, 10 th and 14 th, 15 th
- D. None of these

Answer: B



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12. 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



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13. Which of the following nephridia does not found in earthworm

B. Macro nephridia C. Integumentary nephridia D. Pharyngeal nephridia **Answer: B Watch Video Solution** 14. Which of the following structure is not a part of nerve ring in earthworm? A. Subpharyngeal ganglion B. Suprapharyngeal ganglion C. Circumpharyngeal connectives D. Segmental ganglion

A. Septal nephridia

Answer: D

15. Among the sensory receptors the tactile receptors in earthworms are associated with

- A. light
- B. digestion
- C. touch
- D. None of these

Answer: C



as

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16. Self - fertilisation is possible in earthworm due to phenomenon known

A. protandry

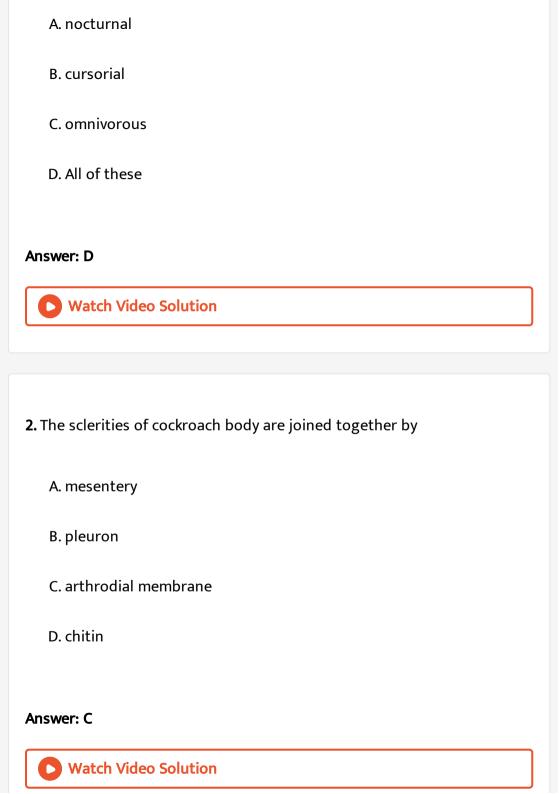
C. parthenogenesis
D. All of these
Answer: A
Watch Video Solution
17. The gateways of sperm reception in earthworms are
A. testes glands
B. spermiducal funnels
C. prostate glands
D. accessory glands
Answer: B
Watch Video Solution

B. protogyny

18. In earthworm ovary is situated in segment
A. 13 th
B. 9 th
C. 10 th
D. 26 th
Answer: A
Watch Video Solution
19. Copulation in earthworm occurs during
19. Copulation in earthworm occurs during A. night in water
A. night in water
A. night in water B. night in winter season

Watch Video Solution 20. Where does fertilisation takes place in earthworm? A. Vasa deferentia B. Spermathecae C. Cocoon D. Clitellum **Answer: C** Watch Video Solution Checkpoint 14 2 1. Cockroaches are

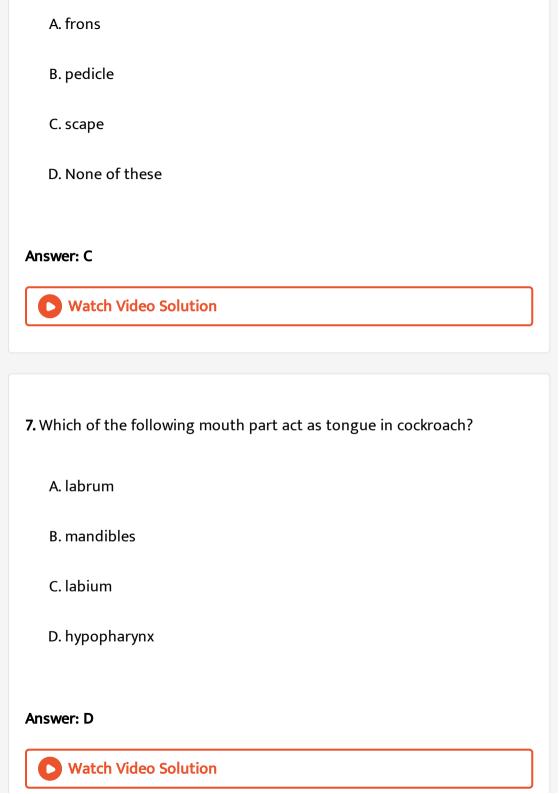
Answer: D



3. Head of cockroach is formed by the fusion of
A. six
B. five
C. nine
D. ten
Answer: A
Watch Video Solution
4. Anal cerci occur in
4. Anal cerci occur in A. male cockroach
A. male cockroach

D. female Ascaris
nswer: C
Watch Video Solution
. The bristles on the body of the cockroach arise from
A. basement membrane
B. epidermis
C. trichogen cell
D. Malpighian cell
nswer: C
Watch Video Solution

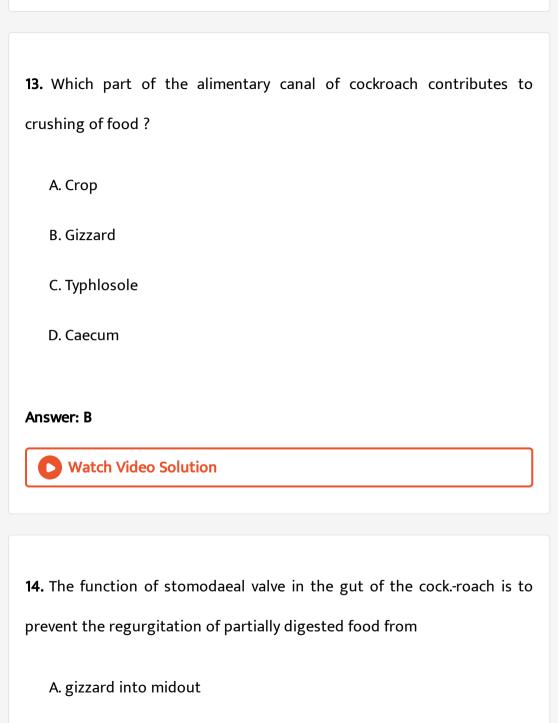
6. The basal podomere of cockroach is known as



8. The longest of the leg of cockroach is
A. coxa
B. femur
C. tibia
D. trochanter
Answer: C
Watch Video Solution
9. Wings of cockroach arise one pair each from
A. prothorax and mesothorax
B. prothorax and metathorax
C. mesothorax and metathorax

D. metathorax and first abdominal segment
Answer: C
Watch Video Solution
10. Elytra is also known as
A. endoskeletal element
B. forewing
C. metathoracic
D. halteres
Answer: B
Watch Video Solution
11. In cockroach, the hindwings are

A. sterna
B. terga
C. metathoracic
D. halteres
Answer: C
Watch Video Solution
12. The largest part of the alimentary canal of cockroach is
A. crop
B. ileum
C. mesenteron
D. rectum
Answer: A
Watch Video Solution



B. preoral cavity

C. hindgut to midgut
D. midgut into gizzard
Answer: D
Watch Video Solution
15. Hepatic caecae in cockroach are derived from :
A. ileum
B. midout
C. oesophagus
D. crop
Anguer P
Answer: B
Watch Video Solution

16. In earthworm the blood from heart is pumped into the sinuses by contraction and relaxation of A. alary muscles B. heart muscles C. setae D. All of these Answer: A **Watch Video Solution**

17. The tracheal tubes in earthworm are lined by

- A. stigmata
- B. epithelial tissue
- C. chitin
- D. taenidia

Answer: D **Watch Video Solution** 18. Main excretory product of cockroach is: A. ammonia B. urea C. uric acid D. guanine **Answer: C Watch Video Solution** 19. The auditory receptors of cockroaches situated on anal cerci are called A. antennae

C. sensillae
D. maxillae
Answer: C
Watch Video Solution
20. The secretions of which gland nouriches the sperms in earthworm ?
A. Phallic gland
B. Ampulla
C. Mushroom gland
D. Seminal vesicle
Answer: C
Watch Video Solution

B. epicranial plate

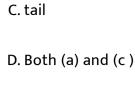
1. The body temperature of frog does not remain constant as it varies
with the temperature of the surrounding, so frog will be called

- A. homeotherm
- B. poikilotherm
- ${\sf C.\,mesotherm}$
- D. psychotherm

Answer: B



- 2. Frogs cal leap on land by means by
 - A. elongated hindlimbs
 - B. elongated forelimbs



Answer: A



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3. Location of eyes in frog is

- A. behind the external nostrils on each side of head
- B. in front of external nostrils on each side of head
- C. behind the external nostril on one side of head
- D. in front of external nostril on one side of head

Answer: A



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4. Which of the following is present in the skin of frog?
A. Mucous gland
B. Poison gland
C. Chromatophores
D. All of the above
Answer: D
Watch Video Solution
5. The most important repiratory organ of frog is
5. The most important repiratory organ of frog is A. buccopharyngeal cavity
A. buccopharyngeal cavity
A. buccopharyngeal cavity B. lungs

Answer: D



Watch Video Solution

- 6. In the buccopharyngeal cavity of frog
 - A. the lower jaw possesses teeth
 - B. the upper jaw lacks teeth
 - C. Both (a) and (b)
 - D. oscillatory movement is seen

Answer: D



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7. Which of the following statements is incorrect about circulatory system of frog ?

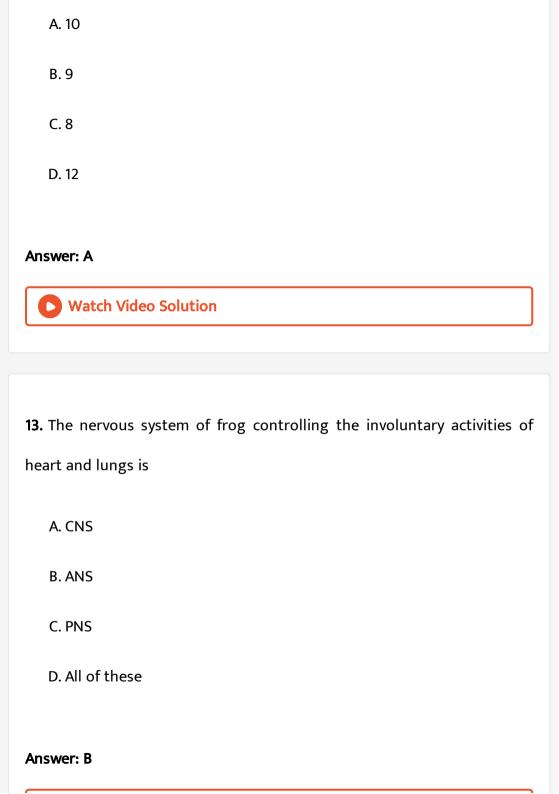
- A. It is of closed type B. There is incomplete double circulation present C. It comprises of heart, blood vessels and blood D. None of the above Answer: D **Watch Video Solution**
- 8. The heart of frog has
 - A. two atria and one ventricle
 - B. one atrium and one ventricle
 - C. one atrium and two ventricles
 - D. two atria and two ventricles

Answer: A



9. In the heart of frog, the ventricles open into
A. sinus venosus
B. conus arteriosus
C. truncus arteriosus
D. pericardium
Answer: B Watch Video Solution
10. In which of the following urinogenital duct is found?
A. Male frog
A. Male frog B. Female frog

D. Birds only
Answer: A
Watch Video Solution
11. Excretory product of frog is
A. ammonia
B. urea
C. uric acid
D. sweat
Answer: B
Watch Video Solution
12. How many pairs of cranial nerves are present in frog?





14. Sensory papillae in frog is

A. organ of taste

B. organ of touch

C. organ of smell

D. organ of vision

Answer: B



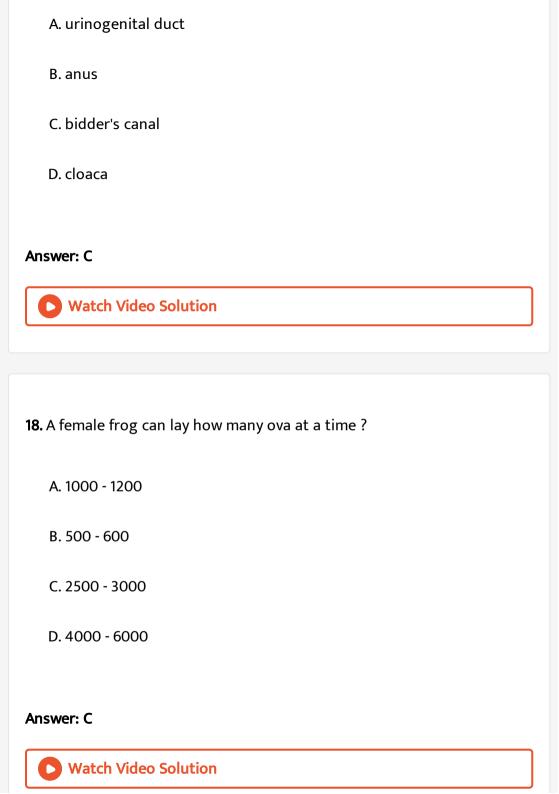
15. Whicch of the following is represented by tympanum in frog?

A. External ear

B. Middle ear

C. Internal ear

D. None of these
Answer: A
Watch Video Solution
16. Mesorchium in frog refers to
A. fold of peritoneum between a kidney and testis
B. internal tissue of testes
C. capsules of testes
D. None of the above
Answer: A
Watch Video Solution
17. Vasa efferentia in male frog opens into



19. What is the sexual embrance of the frog called?
A. Copulation
B. Coitus
C. Conjugation
D. Amplexus
Answer: D
Watch Video Solution
20. Metamorphosis in frog is controlled by
A. oxytocine
B. parathyroid
C. thyroxine

D. testosterone	
Answer: C	
Watch Video Solution	
hapter Exercises A Taking It Together Assorted Questions or Advanced Level Practice	Of The Chapter
I. The main function of clitellum is	
A. cocoon formation	
B. locomotion	
C. excretion	
D. copulation	
Answer: A	
Watch Video Solution	

F

2. In Earthworm genital papillae occur in segments

- A. 16 th and 17 th
- B. 16 th and 18 th
- C. 17 th and 19 th
- D. 17 th and 18 th

Answer: C



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- 3. In pheretima septa are absent
 - A. 5th / 6th , 10 th/ 11th
 - B. 5 th/6th, 7th/8th
 - C. 6th /7th, 7th/8th
 - D. first four segments

Watch Video Solution 4. In Pheretima coelomic fluid contains A. dissolved haemoglobin B. dissoved RBCs C. broken WBCs D. watery plasma Answer: D **Watch Video Solution** 5. Chitogenous glands are found in A. clitellar region forming wall of cocoon

Answer: D

B. prostomium C. suckers D. epidermis Answer: A **Watch Video Solution 6.** In Earthworm the dorsal wall of the intestine from the 26^{th} segment to 95^{th} segment forms a median internal fold called A. trochophore B. typhlosole C. clitellum D. trachea **Answer: B**

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7. Respiratory pigment in Pheretima is present in
A. crythrocytes
B. plasma
C. yellow cells
D. mucocytes
Answer: B
Watch Video Solution
Watch Video Solution
Watch Video Solution 8. Which of the following is absent in the coelomic fluid of earthworm?
8. Which of the following is absent in the coelomic fluid of earthworm ?
8. Which of the following is absent in the coelomic fluid of earthworm? A. Proteins

Answer: A Watch Video Solution

9. Which one will excrete silicates consumed by Earthworm along with food

A. Intestinal cells

B. Basal cells

C. Chloragogen cells

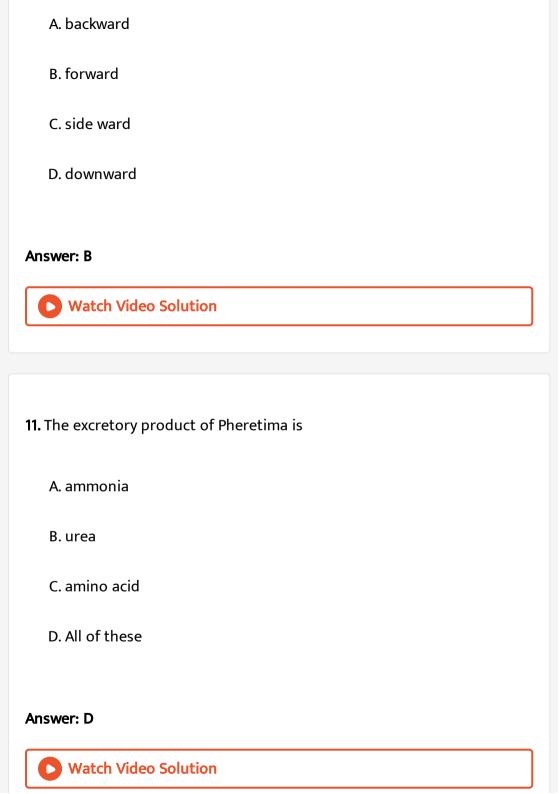
D. Flame cells

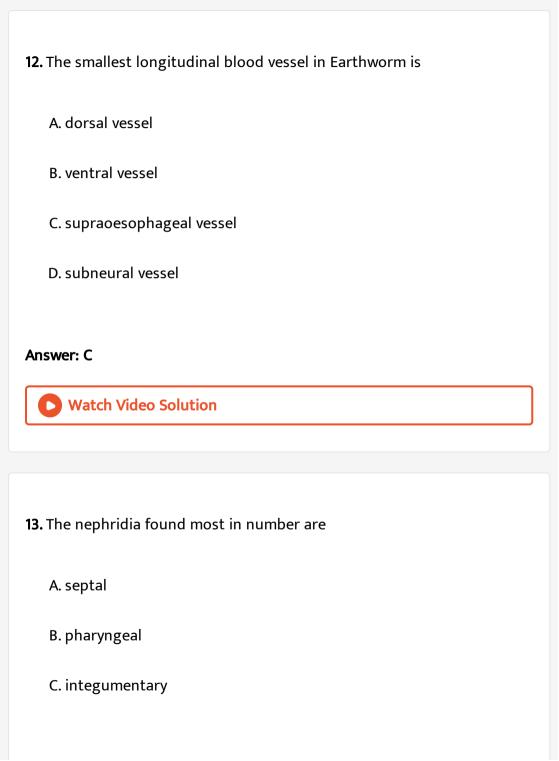
Answer: C



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10. Flow of blood in dorsal blood vessel of Earthworm is





D. oesophageal
Answer: C
Watch Video Solution
14. Region of earthworm, which is referred to as forest of nephridia is
A. clitellar region
B. pharyngeal region
C. typhlosolar region
D. intestinal region
Answer: A
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15. Enteronephric nephridia of earthworm are concerned with

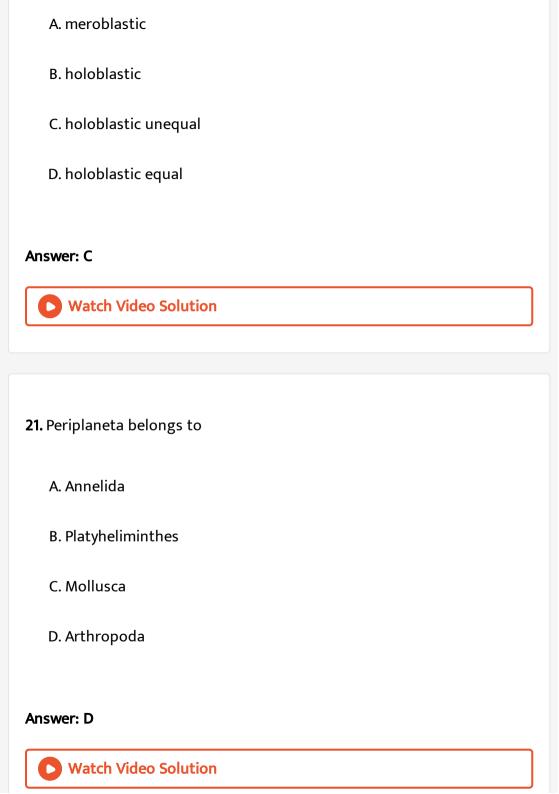
A. excretion B. respiration C. digestion D. osmoregulation **Answer: D Watch Video Solution** 16. Nephridia of Pheretima are A. protonephridia B. solenocytes C. micrometanephridia D. meganephridia **Answer: C Watch Video Solution**

17. Photoreceptors earthworm occur in
A. prostomium
B. peristomium
C. Both (a) and (b
D. None of these
Answer: C Watch Video Solution
Tracal Trace Solution
18. A median aperture (unpaired) on the body of earthworm of
A. nephridiopore

B. spermathecal pore

C. female genital pore

D. male genital pore
Answer: C
Watch Video Solution
19. In earthworm, blood from sminal vesical is collected by
A. ventral vessel
B. lateral oesophageal vessel
C. dorsal vessel
D. supraoesophageal vessel
Answer: B
Watch Video Solution
20. Cleavage in Pheretima zygote is



22. The internal lining of gizzard in cockroach is of
A. endothelium
B. mocous membrane
C. peritrophic membrane
D. cuticle
Answer: D
Average Vision Collection
Watch Video Solution
watch video Solution
23. The dorsal plate of the thorax of cockroach is called
23. The dorsal plate of the thorax of cockroach is called

D. cuticle
Answer: C
Watch Video Solution
24. The endoskeleton in the head of cockroach is known as
A. apodeme
B. tentorium
C. notum
D. pleura
Answer: B
Watch Video Solution
25 Setae occur in Earthwarm in all segments except
25. Setae occur in Earthworm in all segments except

Answer: D Watch Video Solution 26. In Earthworm A. ovaries are larger than testes B. testes are larger than ovaries C. both are equal D. right testes are larger than ovaries Answer: A **Watch Video Solution**

A. Clitellar region

B. Anal segment

C. Peristomium

D. All of these

27. The pincer - like structure presetn on the stripes of maxilla of cockroach are

A. cardo

B. lacinia

C. galea

D. paraglossa

Answer: B



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28. Forewintgs of cockroach are articulated to

A. first abdominal segment

B. prothorax

C. metathorax

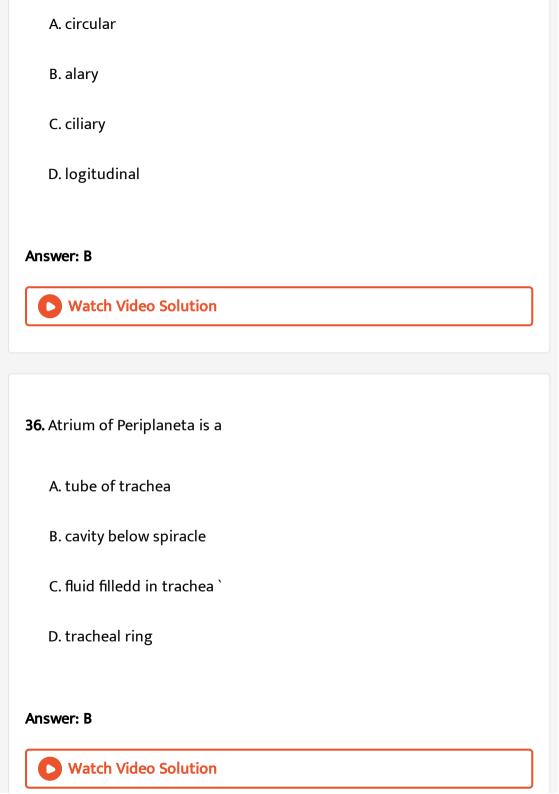
D. mesothorax
Answer: D
Watch Video Solution
29. Which part of cockroach has both exoskeleton and endoskeleton ?
A. Head
B. Thorax
C. Both (a) and (b)
D. None of these
Answer: C
View Text Solution

30. In Cockroach, wings are absent from

A. prothorax B. mesothorax C. metathorax D. None of these Answer: A **Watch Video Solution** 31. Wings of Periplaneta americana mostly help it in A. escaping from danger B. catching preys C. finding a male D. finding a place to lay eggs. Answer: A **Watch Video Solution**

32. How many teeth are present on cockroach's gizzard?
A. 4
B. 8
C. 12
D. 6
Answer: D
Watch Video Solution
33. The body cavity of cockroach is
33. The body cavity of cockroach is A. coelom
A. coelom

D. coelenteron
Answer: B
Watch Video Solution
34. Heart of Cockroach is
A. myogenic
B. morphogenic
C. neurogenic
D. photogenic
Answer: C
Watch Video Solution
35. Pericardial space in Cockroach is regularly altered by muscles



37. In cockroach, ${\cal O}_2$ is carried with air to various tissues	by

- A. tracheal tubes
- B. blood pigment
- C. blood plasma
- D. diffusion through integument

Answer: A



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38. Fat bodies of cockroach are anlogous to vertebrate

- A. spleen
- B. adipose tissue
- C. kidney

D. liver
Answer: D
Watch Video Solution
39. Compound eyes of arthropods form apposition image in
A. dim light
B. bright light
C. Both (a) and (b)
D. None of these
Answer: B
Watch Video Solution
40. Eggs of cockroach are fertilised in

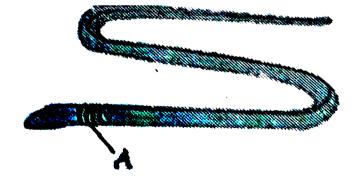
- A. Fallopian tube
- B. ootheca
- C. genitical pouch of female
- D. cocoon

Answer: C



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41. In the given, diagram, what does 'A' represent?



- A. Ventral vessel
- B. Dorsal vessel

C. Heart
D. Lateral vessel
Answer: D
Watch Video Solution
42. Metamorphosis in the life history of Periplaneta is
A. absent
B. incomplete
C. nymph
D. pupa
Answer: B
Watch Video Solution

43. Male frogs can croak lounder than females because of
A. vocal sacs
B. stronger
C. larger in size
D. larger sound box
Answer: A
Watch Video Solution
44. Croaking of frog is
A. hunger call
B. danger call
C. muscial call
D. sex call for female

Answer: C Watch Video Solution 45. In frog, digestion of fats occurs mostly in A. rectum B. stomach C. duodenum D. small intestine **Answer: C** Watch Video Solution **46.** A fully grown tadpole larva of frog respires through A. gills

C. lungs
D. tail fin
Answer: A
Watch Video Solution
47. In frog, glottis is controlled by muscles of
A. sternum
B. vocal cords
C. pectoral girdle
D. arytenoid cartilages
Answer: D
Watch Video Solution

B. skin

48. Chordae tendinae in heart of frog is found in the wall of
A. ventricle
B. left auricle
C. right auricle
D. sinus venosus
Answer: A
Watch Video Solution
49. The opening of rectum in frog is called
A. vestibule
B. cloaca
С. соссух
D. None of these

Answer: B Watch Video Solution 50. Kidney of tadpole is A. pronephros B. mesonephros C. metanephros D. absent Answer: A **Watch Video Solution** 51. What does the cavity of auditory capsule contian in frog? A. Endolymph

C. Otoliths D. Operculum **Answer: B View Text Solution 52.** Where is acoustic ridge found in frog? A. Ampulla B. Utriculus C. Sacculus D. Pars basilaris Answer: A **View Text Solution**

B. Perilymph

53. A frog has

- A. eyes but not lids
- B. jaws but no teeth
- C. hands but not fingers
- D. ears but not pinnae

Answer: D



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54. Seminal vesicles are present in

- A. male frog
- B. female frog
- C. Both (a) and (b)
- D. None of these

Answer: A



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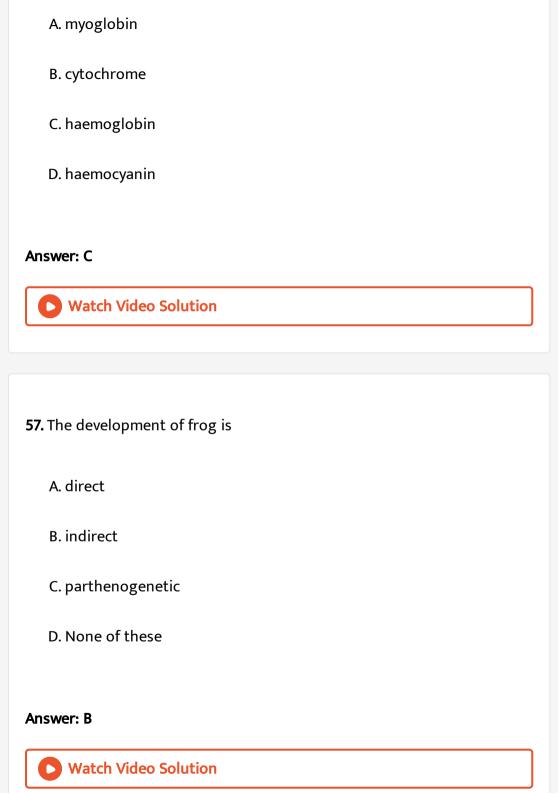
- 55. Ureters act as urinogenital ducts in
 - A. both male and female frog
 - B. male frog
 - C. human males
 - D. human females

Answer: B



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56. Oxygen carrier or the respiratory pigment in blood of frog and other vertebrates is



58. Setae help in locomotion in earthworm but are not uniformly present in all the segments. They are present in

- A. 1st segment
- B. last segment
- C. clitellar segment
- D. 20 th 22 nd segment

Answer: D



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59. The clitellium is a distinct part in the body of earthworm, it is found in

- A. segment 13-14 15
- B. segment 14 15 16
- C. segment 12 13 14

D. segment 15 - 16 - 17
Answer: B
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60. Chloragogen cells are present in
A. body wall of Leucosolenia

C. coelomic fluid of earthworm

D. blood of cockroach

B. blood of earthworm

Answer: C



61. The function of prophyrin which imparts colour to earthworm is to

- A. help in respiration B. help in reproduction C. protect against harmful light rays
- D. protect against harmful germs

Answer: C



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- 62. Of the cells present in the coelomic fluid of earthworm, the most numerous and largest are
 - A. phagocytes
 - B. mucocytes
 - C. RBCs
 - D. chloragogen cells

Answer: A

63. In Pheretima, there are red coloured round bodies in 4^{th} , 5^{th} and 6^{th} segments above the alimentary canal. They are believed to be involved in

- A. excretion
- B. digestion
- C. reproduction
- D. leucocyte production

Answer: D



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64. In Earthworm arrangment of blood vessels is

- A. different in last fifteen segments
- B. different in first thriteen segments

C. same throughout
D. different in middle thirteen segments
Answer: B
Watch Video Solution
65. In which of the following blood vessle, blood flows from anterior to
posterior direction ?
A. Lateral oesophageal vessel
B. Ventral vessel
C. Supraoesophageal vessel
D. All of these
Answer: D
View Text Solution

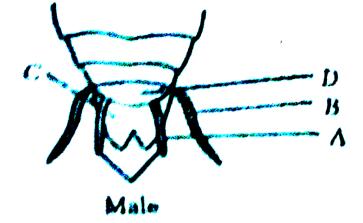
- **66.** Earthworms are commonly
 - A. uricotelic under conditions of water sacrcity
 - B. ammionotelic, when plenty of water is available
 - C. ureotelic, when plenty of water of water is available
 - D. uricotelic, when plenty of water is available

Answer: B



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67. Diagram represents posterior region of male Cockroach. Choose the correct combination of labelling.



A. A - 9th sternum, B - Anal style, C - 10 th tergum, D - Anal circus

B. A - Anal style, B - Anal circus, C - 10 th thergum, D - 9 th sternum

C. A - 9th sterum, B - Anal circus, C - 10 th tergum, D - Anal style

D. A - 9 th sternum, B - Anal style, C - 10 th sternum, D - Anal circus

Answer: B



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68. Which are the two common indian cockroaches?

A. Periplaneta americana and Blatta indica

- B. Periplaneta orientalis and Blatta americana
- C. Periplaneta americana and Blatta orientalis
- D. Periplaneta indica and Blatta orientalis

Answer: C



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- **69.** Function of ampulla of spermatheca is
 - A. store sperms
 - B. nourish sperms
 - C. secrete sticky material during copulation
 - D. None of the above

Answer: B



70. Which one of the following statement is true for cockroach? A. The number of ovarioles in each ovary are ten B. The larval stage is called caterpillar C. Anal styles are absent in females

D. They are ureotelic

Answer: C



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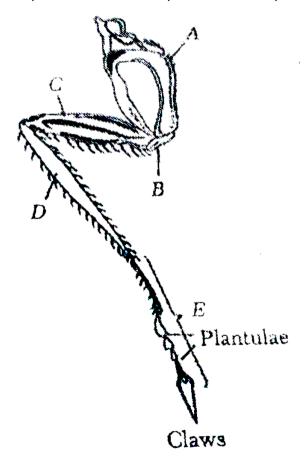
71. Special feature of Pheretima is

- A. S- shaped setae are defensive weapons against enemy
- B. it has long, dorsal tubular heart
- C. fertilisation of eggs occurs inside the body
- D. typhlosoel increases effective absorptive area of digested food.



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72. In the following diagram of a leg of cockroach, parts have been indicated by alphabets. Choose the answer in which these alphabets have been correctly matched with the parts which they indicate.



A. A - Coxa, B - Femur, C - Trochanter, D - Tarsus, E - Tibia

B. A -Coxa, B - Tibia, C - Tarsus, D - Femus, E - Trochanter

C. A - Coxa, B - Trochanter, C - Femur, D - Tibia, E - Tarsus

D. A - Coxa, B - Tarsus, C - Femur, D - Tibia, E - Trochanter

Answer: C



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73. Cockroach has no RBCs or haemoglobin because

A. cockroach does not respire

B. cockroach is invertebrate

C. its blood does not transport O_2 and CO_2 and tissues have direct

exchange of gases from air

D. cockroach respires anaerobically.

Answer: C



74. A Bidder's canal in each kidney of frog

A. runs longitudinally in lateral region of kidney

B. runs logitudinally in medial region of kidney

C. runs transversely across the width of anterior part of kidney

D. runs transverselly across the width of posterior part of kidney

Answer: B



75. In earthworm

A. integumentary and pharyngeal nephridia are exonephric

B. septal nephridia is exonephric

C. integumentary and septal nephridia are enteronephric

D. pharyngeal nephridia is enteronephric	
Answer: D	
View Text Solution	
6. Mycetocyte cells of the fat body of cockroach help in	

A. urea formation

B. food storage

C. synthesis of glycogen from glucose

D. intermediary metabolism

Answer: C



77. In cockroach the brain hormone secreted by the intercerebral glands is responsible for the activation of

A. corpora allata

B. cerebral ganglia

C. prothoracic gland

D. salivary glands

Answer: C



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78. Haemolymph of cockroach contains

A. erythrocytes and plasma

B. respiratory pigments only

C. haemocytes, leucocytes and plasma

D. haemocytes and plasma

Answer: D



Watch Video Solution

79. The hepatic caeca of cockroach

A. store excess food

B. produce digestive enzymes

C. absorb fully digested nutrients

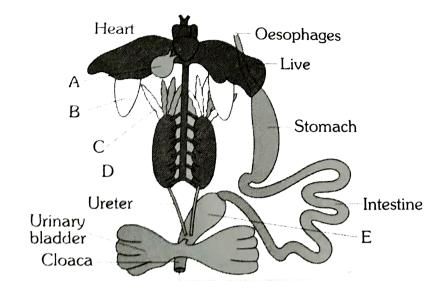
D. remove few excretory products from partly digested food

Answer: B



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80. The given figure is related to diagrammatic representation of internal organs of frog. Identify A to E



٨	A	B	C	D	E
A.	Gall bladder	Lung	Fat bodie	$_{ m S}$ Kidne	ey Rectum
D	A	B	C	D	E
В.	Gall bladder	Lung	Testes	Kidney	Rectum
	A	B	C	D	E
С.	Gall bladder	Lung	Fat bodies	s Teste	s Rectum
D.	A	B	C	D	E
	Gall bladder	Lung	Ovary	Testes	Rectum

Answer: A



81. Chromatophores in frog's skin are controlled by

A. hormones B. environment C. nervous activity D. nervous and hormonal activities Answer: A **Watch Video Solution** 82. The lungs is frogs are A. compact spongy masses B. thin - walled elastic, hollow bags C. thick - walled non - elastic, hollow bags D. thick - walled non - elastic, solid mases Answer: B **Watch Video Solution**

83. The sinus venosus is located on

A. dorsal surface of the heart of frog

B. ventral surface of the heart of frog

C. dorsal surface of the heart of rabbit

D. ventral surface of the heart of rabbit

Answer: A



84. The cloaca in frog is a common chamber for the urinary tract, reproductive tract and

A. alimentary canal

B. portal system

C. hepaticportal vessels

Answer: A Watch Video Solution 35. A frog must swallow air to expand the lungs because frog A. has no diaphragm B. has no vagus nerve C. is relatively primitive vertebrate D. normally breath through its skin	
35. A frog must swallow air to expand the lungs because frog A. has no diaphragm B. has no vagus nerve C. is relatively primitive vertebrate	Answer: A
A. has no diaphragm B. has no vagus nerve C. is relatively primitive vertebrate	Watch Video Solution
B. has no vagus nerve C. is relatively primitive vertebrate	
B. has no vagus nerve C. is relatively primitive vertebrate	35. A frog must swallow air to expand the lungs because frog
C. is relatively primitive vertebrate	A. has no diaphragm
	B. has no vagus nerve
D. normally breath through its skin	C. is relatively primitive vertebrate
	D. normally breath through its skin
Answer: A	∖nswer: A
Watch Video Solution	Watch Video Solution

D. notochord

86. Dissection of frog is done from ventral side because

B. abdominal vein is present ventrally C. vertebral column is present on dorsal side D. All of the above **Answer: C Watch Video Solution** 87. One direct use of earthworms to farmers is A. allowing sunlight to pass in upper layers of soil B. enrichment of soil by nephridial excreptions C. removal of dead leaves D. killing of some harmful insects Answer: B **Watch Video Solution**

A. ventral skin is soft

88. Nephridia of Earthworm are analogous to

A. nematoblasts of Hydra

B. tracheae of insects

C. flame cells of Planaria

D. gills of prawn

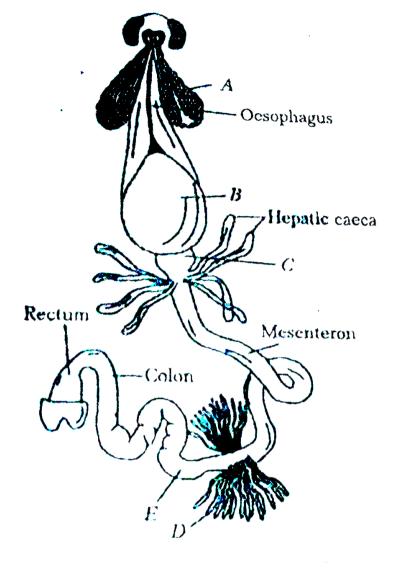
Answer: C



Watch Video Solution

89. Given below the figure of alimentary canael of cockroach. Identify A to

E and choose the correct combination of A to E.



A. A - Salivary gland, B - Gizzard, C - Crop, D - Villi, E - Caecum

B. A - Salivary gland, B -Crop, C - Gizzard, C - Malpighian tubule, D - Cilia,

E - lleum

C. A - Salivary gland, B - Gizzard, C - Malpighian tubule, D - Cilia , E - lleum

D. A - Salivary gland, B - Crop, C - Malpighian tubule, D- Gizzard, E - lleum

Answer: B



90. Which one of the following is correctly matched regarding earthworm ?

A. (a) Buccal cavity – 1st - 5th segments

B. (b) Stomach – 11th - 12th segments

C. (c) Typhlosole – 26 th - 95 th segments

D. (d) Testes - 10th - 14th segments

Answer: C

91. Pheretima posthuma (earthworm) is highly useful as or Most important use of earthworm is

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 birds due to biomagnification of chlorinated hydrocarbons

Answer: B



A. epidermis of ventral body wall B. epidermis of dorsal body wall C. skin of peristomium D. None of the above **Answer: B Watch Video Solution** 93. Intergumentary nephridia of Earthworm occur in A. all segments except the first two B. first two segments of the body C. first fifteen segments e D. all the segments

Watch Video Solution

Answer: A

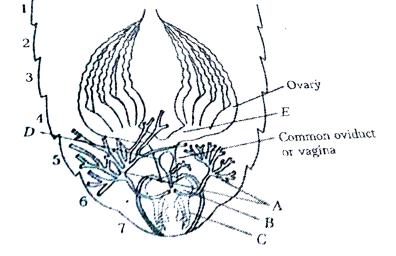
94. Pheretima posthuma and Periplanata are similar in which aspect

- A. Both have nephridia as excretory organs
- B. Both have ventral nerve cord
- C. Both belong to same taxonomical group
- D. All of the above

Answer: B



95. Identify A to E in the given diagram of female reproductive system of cockroach.



- A. A Collateral glands, B Vestibulum, C Genital chamber, D Spermatheca, E Gonapohysis
- B. A -Vestibulum, B Collateral gland, C Gonapophysis, D Sperma theca, E Oviduct
- C. A Collateral gland, B Genital chamber, C -Vestibulum, D Sperma theca, E Oviduct
- D. A Genital chamber, B Spermatheca, C Collateral gland, D Gonapophysis, E Vestibulum

Answer: C

- **96.** One of the main functions of frog's skin is
 - A. diffusion of repiratory gases
 - B. absorbtion of ultraviolet rays to produce vitamin -D
 - C. storage of excess food in the form of subcutaneous fat
 - D. excretion of nitrogenous waste in the form of uric acid

Answer: A



- 97. Which one of the following is not a characteristic feature of frog
 - A. The skin is moist and slimy
 - B. Each of the forelimbs and hindlimbs end in five digits
 - C. Hepatic portal and renal portal systems are present

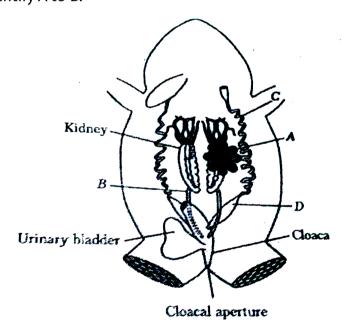
D. Skin, buccal cavity and lungs are the respiratory organs

Answer: B

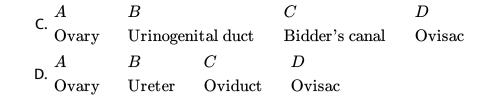


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98. The given figure is related to female reproductive system of frog. Identify A to D.



A.	\boldsymbol{A}	A B			D
	Ovary	Urinogenital duct	Bidder's c	anal	Oviduct
В.	\boldsymbol{A}	B	C	D	
	Ovary	Urinogenital duct	Ovisac	Oviduc	\mathbf{t}



Answer: D



99. How do you differentiate a frog from a toad

- A. Frog has no exoskeleton, but toad had scales
- B. Frog respires through lungs, but toad respires through skin
- C. Frog has a tail, but toad has not tail
- D. Frog has no perotid glands, but toad has a pair of parotid glands

Answer: D



100. Which is correct respiration in Earthworm?

 $\mbox{A.}\,O_2$ from atomosphere diffuses into blood and combines with haemoglobin of blood plasma

B. Blood does not have any important role in \mathcal{O}_2 transport

C. Respires anaerobically

 $\operatorname{D.}{\cal O}_2$ diffused from air combines with haemoglobin of RBCs.

Answer: A



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101. Earthworms obtain oxygen for respiration through moist skin. They do not have respiratory organs because

A. absorptive area of earthworm is more than its volume

B. they are burrowing

C. there is no sufficient space of such organ

D. they do not need them

Answer: C



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102. The septal and pharyngeal nephridia open into alimentary canal and are of enteronephric type. It is an adaptation for

- A. conservation of heat
- B. conservation of water
- C. regulation of temperature
- D. regulation of amino cells

Answer: B



103. Which one correctly describes the location of body parts in

Pheretima?

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

B. Two pairs of testes in 10 th - 11 th segments

C. Four pairs of spermathecae in 4 th - 7th segments

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

Answer: B



104. Nephrostome occurs in

A. septal nephridia

B. integumentary nephridia

C. pharyngeal and septal nephridia

D. pharyngeeal an integumentary nephridia



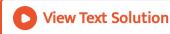
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105. The body wall of earthworm is covered by which of the following layers

(externally - internally)?

- A. Epidermis, cuticle, coelomic epithelium, longitudinal muscle, circular muscles.
- B. Cuticle, epidermis, circular muscles, coelomic epithelium, longitudinal muscles
- C. Non cellular cuticle, epidermis , circular muscles , longitudinal muscles, coelomic epithelium.
- D. Coelomic epithelium, epidermis, cuticle, circular muscles , longitudinal muscles.

Answer: C



106. Choose the correct statement regarding frog from the following.

- A. Frog do not have a lymphatic system
- B. Frogs are ammonotelic animals
- C. Hindlimbs of frog ends in five digits and forelimbs ends in four digits.
- D. Female frog contains sound producing vocal sacs which are absent in male frog

Answer: C



- A. air filled cavity of middle ear
- B. communication between pharynx and tympanic cavity
- C. external opening of tympanic cavity covered by tympanic membrane
- D. opening of auditory capsule which separates middle ear from internal ear.

Answer: D

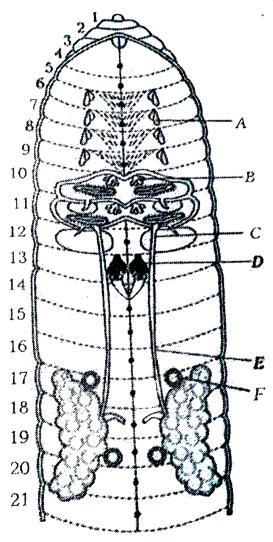


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- 108. Acrosome of the sperm of frog helps in fertilization by
 - A. activating the oocyte to engulf the sperm
 - B. inducing formation of cone of reception in oocyte
 - C. stimulating oocyte to undergo second maturation division
 - D. secreting sperm lysin to dissolve covering membrane of oocyte

Answer: D

109. Choose the correct combination of labelling.



A. A - Testic, B - Spermatheca, C - Seminal vesicale, D - Ovary, E - Vas

deferens F - Accessory gland

B. A - Spermatheca, B - Testis, C - Ovary, D - Seminal vesicle, E - Vas

deferens, F - Accessory gland

C. A -Spermatheca, B -Testis, C - Accessory gland, D - Ovary, E -Vas deferens, F - Seminal vesicle

D. A - Spermatheca, B - Testic, C - Seminal vesicle, D - Ovary, E - Vas deferens, F - Accessory gland

Answer: D



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

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

B. Nephridia in earthworm Malpighian tubules in cockroach and urinary tubules in rat

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

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

Answer: B



Chapter Exercises B Medical Entrances Special Format Questions Statement Based

- 1. Consider the following statements related to Pheretima and select the correct option starting, which one are True (T) and False (F)?
- I. It exhibits closed type of blood vascular system.
- II. It lacks specialised breathing device.
- III. Typhosole increases the effective area of absorption in intestine.
- IV. There are two pair of tests present in 10th and 11 th segments.
 - IIIIIIVFTFIIIIIIVFTT $II \quad III$ IVT TFIIIIIIVTTT

Answer: D



2. Which of the following match are correct in earthworm?					
I Pharynx – 1st segment					
II Stomach $-$ 10th to 14th segment					
${ m III}~{ m Gizzard}~-~26{ m th~segment}$					
${ m IV \ \ Mouth \ \ -Ist \ segment}$					
Choose the correct option.					
A. I and II					
B. I and III					
C. III and IV					
D. I and III					
A					
Answer: C					



- 3. Conside the following statements in accordance to the excretory system of the earthworm.
- I. Nepridia is segmentally arranged coiled tublue.
- II. Nephridia regulates the volume and composition of the body fluids.

III. There are three types of nephridia found in the earthworn. IV. Pharyngel nephridia is present as three paried trufts in the 4th, 5th and 6th segments. Which of the above statements is/ are correct? A. Only I

B. I and IV

C. I,II and III

D. All of these

Answer: D



- 4. Read the given statements in reference to the digestive system of cockroach.
- I. Alimentary canal is divided into three regions.
- II. Oesophagus opens into a sac like structure called crop.
- III. The hindgut is broader than midgut.

IV. The rectum opens through the anus.

Which of the statements given above is/are incorrect?

A. I and IV

B. II and IV

C. III and IV

D. None of these

Answer: D



- **5.** Read the given statements in reference to the digestive system of cockroach.
- I. Alimentary canal is divided into three regions.
- II. Oesophagus opens into a sac like structure called crop.
- III. The hindgut is broader than midgut.
- IV. The rectum opens through the anus.
- Which of the statements given above is/are incorrect ?

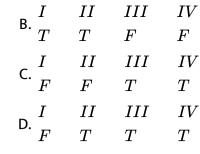
- A. I and IV
- B. II and III
- C. III and IV
- D. None of these

Answer: D



- **6.** Consider the given statements about Pheriplaneta and select the correct option stating which ones are True (T) and False (F)?
- I. Blood vascular systme is of open type.
- II. Malpighian tubules helps in the removal of excretory products from the haemolymph.
- III. They bear no eyes.
- IV. Female bears mushroom glands and male bears collateral glands.

A.
$$\frac{I}{T}$$
 $\frac{II}{F}$ $\frac{III}{T}$ $\frac{IV}{F}$



Answer: B



I. It is of closed type.

III. Heart is 6 chambered.

- **7.** Read the given statements aboue blood vascular system of cockraoch.
- II. It contains no blood vessels except aorta.
- •
- IV. The haemolymph is composed of colourless plasma and haemocytes.
- Choose the option with the incorrect statements.
- A. Only I
 - B. I, II and III
 - C. I and III

D. Only IV

Answer: C



- 8. Respiratory system of cockroach
- I. consists of tracheae, tracheoles and spiracles.
- II. are coordinates and regulated by nerve centres in thoracic genglia which are stimulated by low ${\cal O}_2$ and higher $C{\cal O}_2$ concentration in tissue fluids.
- III. contains mainly four types of cells trophocytes, mycetocytes, oenocytes and urate cells.
- IV. is open or lacunar type.
- Choose the option for the correct statements.
 - A. I, II and III
 - B. I and II
 - C. II and IV

D. I and III

Answer: B



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- **9.** Which of the following statements are correct with reference to the frog ?
- I. Eyes are bulged and covered by nictitating membrane.
- II. Membranous tympanum recieves the sound signals.
- III. The frog never drinks water.
- IV. A pair of nostrils is present above the mouth.
 - A. I and II
 - B. III and IV
 - C. I and IV
 - D. All of these

Answer: D

10. Consider the following statements about respiratory system of frog.

I. Skin acts a respiratory organ in water only.

II. Dissolved oxygen is exchanged through the skin by the process of diffusion in water.

III. Lungs are paired and present in thorax.

IV. Gaseous exchange take place through the skin during hibernation and aestivation.

Which of the statement (s) given above is/are incorrect?

A. Only I

B. I and III

C. I, II and III

D. II and IV

Answer: A



- **11.** Read the statements with regard to frog. Which of the statement (s) is/are correct and incorrect?
- I. The medulla oblongata passes out through foramen of Monro and continues into spinal cord.
- II. Vasa efferentia are 10 12 in number thar arise from testes.
- III. Ovaries have no functional connection with kidneys.
- IV. Frogs are uricotelic.
 - A. I, II and III are correct while IV is incorrect
 - B. I and II are correct while III and IV are incorrect
 - C. II and III are correct while I and IV are incorrect
 - D. II, III and IV are correct while I is incorrect

Answer: C



12. Consider the following statements related to Rana tigrina and select the correct option stating which are True (T) and which are False (F).

- I. Hindlimbs are larger and muscular than forelimbs.
- II. The alimentary canal of frog is short.
- III. They respire on the land through skin only.
- IV. They contain two chambered heart.
 - A. $\frac{I}{T}$ IIIIIIVFTFIIIIIIVFTTIIIIIIVTTFD. $\frac{I}{T}$ IIIIIIVTFF

Answer: D



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13. Consider the following four statements (A-D) related to the common frog rane tigrina and select the correct option stating which

ones are true (T) and which ones are false (F)

Statements:

(A) On dry land it would die due to lack of ${\cal O}_2$ of its mouth is farcibly kept closed for a few days

- (B) It has four-chambered heart
- (C) ON dry land it turns uricotelic from ureotelic
- (D) Its life-history is carried out in pond water
 - A. $\frac{I}{F}$ $\frac{II}{F}$ $\frac{III}{T}$ $\frac{IV}{T}$ B. $\frac{I}{F}$ $\frac{II}{T}$ $\frac{III}{T}$ $\frac{III}{T}$ $\frac{IV}{T}$ C. $\frac{I}{T}$ $\frac{II}{F}$ $\frac{III}{T}$ $\frac{III}{T}$ $\frac{IV}{T}$ D. $\frac{I}{T}$ $\frac{II}{T}$ $\frac{III}{T}$ $\frac{IV}{T}$

Answer: C



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Chapter Exercises B Medical Entrances Special Format Questions Match The Columns

1. Match the following Columns.

Column I

(Parts of reproductive system or earthworm)

Column II

(Respective seg

10 th - 11 th

11 th - 12 th

17 th - 19 th 6 th - 9 th

1.

2.

3.

4.

Testes B. Seminal vesicles

C. Accessory gland

A.

D. Spermathecae

BCD

23 4 $B \quad C \quad D$ 3 2 1

 $B \quad C \quad D$ 1 4 2

BCD41 3

Answer: A



2. Match the following Columns.

		Column I				Column II
A.		Anal	cerci		1.	4 th and 6 th segments
B.		Tegm	$_{ m ina}$		2.	10 th segments
C.		Teste	s		3.	Forewings
D.		Ommatidia			4.	Sclerites
E.		Exoskeleton			5.	Visual unit
	A.	\boldsymbol{A}	B	C	D	E
F		2	3	1	5	4
		A	B	C	D	E
t	В.	4	3	2	5	1
	_	A	B	C	D	E
(C.	3	4	5	2	1
		A	B	C	D	E

Answer: A



3. Match the following Columns.

Column I **Brain Box** A.

B.

C.

D.

E.

Midbrain

Hindbrain

Forebrain

Peripheral nervous system

B

2

3 B

1

C

3

D

4

D

4

D

1

D

2

E

5

E

5

 \boldsymbol{E}

5

 \boldsymbol{E}

1

B3 $\mathbf{2}$

2

B4

Answer: C



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- 4. Match the following and choose the correct answer
- Α. Hermaphrodite (i) Produces blood cells and haemoglobi

Column II

Cerebellum

Optic lobes

Cranial nerves

Cranium

Unpaired diencephalon

1.

2.

3.

4.

5.

- В. Direct development (ii) Testis and ovary in the same animal C. Chemoreceptor (iii) Larval form absent
- D. Blood gland in earthworm (iv) Sense of chemical substances

- CD1 D4 1 CD24 CD3 1
- **Answer: A**

D.

 \boldsymbol{A}

B

3

B

2

B

3

B

4



Α.

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5. Match the following with reference to cockroach and choose the correct option

Chain of developing ova

В. (ii) Bundles of sperm Gonopore

(i)

- C. Spermatophore (iii) Opening of the ejacultory duct Ovarioles D. (iv) The external genitalia
- BD4 2 1 BD3 2 1 BCD2 3 1

Phallomere

D. $\begin{pmatrix} A & B & C & D \\ 2 & 4 & 3 & 1 \end{pmatrix}$

Answer: B



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Chapter Exercises B Medical Entrances Special Format Questions Assertion Reason

1. Assertion Chloragogen cells behave like vertebrate liver.

Reason Chloragogen cells are present in earthworm.

A. Both Assertion and Reason are true and Reason is the correct explanation of Assertion.

B. Both Assertion and Reason are true, but Reason is not correct

explanation of Assertion

C. Assertion is true, but Reason is false

D. Assertion is false, but Reason is true.

Answer: B



2. Assertion In earthworn, setae are formed by a horny nitrogenous organic substance.

Reason. Setae are present in persitomiun, pygidium and clitellum only.

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

Answer: C



3. Ascertion Body cavity of earthworn has coelomic fluid within it.

Reason Coelom has no such significance.

A. Both Assertion and Reason are ture and Reason is the correct explanation of Assertion.

B. Both Assertion and Reason are true, but Reason is not correct explanation of Assertion

C. Assertion is true, but Reason is false

D. Assertion is false, but Reason is true.

Answer: C



Watch Video Solution

4. Assertion Earthworn possess both male and female reproductive organs.

Reason Self - fertilisation

A. Both Assertion and Reason are ture and Reason is the correct explanation of Assertion.

B. Both Assertion and Reason are true, but Reason is not correct explanation of Assertion

C. Assertion is true, but Reason is false

D. Assertion is false, but Reason is true.

Answer: B



Chapter Exercises C Medical Entrances Gallery Collection Of Questions Asked In Neet Various Entrance Exams

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

A. Seminal vesicles

C. Testes D. Vas deferens Answer: A **Watch Video Solution** 2. Which of the following features is not present in Periplaneta americana? A. Indeterminate and radial cleavage during embryonic development B. Exoskeleton composed of N - acetyglucosamine C. Metamerically segmented body D. Schizocoelom as body cavity Answer: A **Watch Video Solution**

B. Mushroom glands

- 3. Which of the following statements is incorrect pertaining to cockroach
 - A. Ostia have valves which allow the blood to pass only into the heart
 - B. Thoracic and abdominal spiracles are valvular
 - C. The wall of the trachea is made with lamina propria endothelium and taenidia
 - D. The taenidia keep the trachea always open and prevent it from collapsing

Answer: B



- **4.** Which among the following are fat secreting cells present in the haemocoel of cockroach
 - A. Trophocytes

C. Mycetocytes					
D. Oenocytes					
Answer: C					
Watch Video Solution					
5. The targa, sterna and pleura of cockroach body are joined by					
A. cemanting glue					
B. muscular tissue					
C. arthrodial membrane					
D. cartilage					
Answer: C					
Watch Video Solution					

B. Urate cells

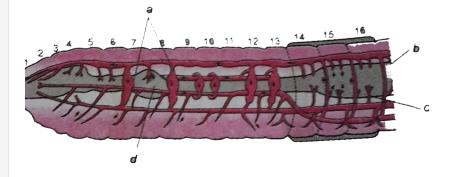
- 6. Type of respiration in Cockroach is
 - A. cutaneous
 - B. tracheal
 - C. pulmonary
 - D. brahcheal

Answer: B



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7. In the circulatory system of Pheretima a, b, c, and d respresent



A. A - Lateral hearts, B - Subneural vessel , C - Commissural vessel, D -

Lateral oesophageal vessel

B. A - Lateral hearts, B - Lateral oesphageal vessel, C - Subneural vessel,

D - Commissural vessel

C. A - Lateral hearts, B - Commissural vessel, C - Subneural vessel , D -

Subneural vessel

D. A - Commissural vessels, B - Lateral vessel, C - Subneural vessel, D - Lateral oesphageal vessel

Answer: C



8. The structure in earthworm which serves as a wedge to force open cracks in the soil is

A. peristomium

C. clitellum
D. prostomium
Answer: D
Watch Video Solution
9. Which among these is not involved in excretion in cockroaches
A. Malpighian tubules
B. Nephrocytes
C. Uricose glands
D. Maxillary palps
Answer: D
Watch Video Solution

B. setae

10. Frogs A. are uricotelic B. have olfactory lobes in midbrain C. do not have renal portal system D. have lymphatic system **Answer: D Watch Video Solution** 11. In Cockroach, the common duct of salivary reservoir opens at the base of..... A. pharynx B. maxilla C. mandible

D. hypopharynx

Answer: D Watch Video Solution 12. The total number of podomeres in the leg of Cockroach is A. 5 B. 6 C. 7 D. 8 Answer: A Watch Video Solution 13. Which is not a sensory structure in Cockroach A. Antennae

- B. Eyes

 C. Anal cerci

 D. Proventriculus

 Answer: D

 Watch Video Solution
- **14.** Choose the wrongly matched pair ragarding the position of reproductive structures in earthworm
 - A. Testes 10 th 11 th segments
 - B. Spermathecae 6th 9 th segments
 - C. Male genital pore 9 th segment
 - D. Female genital pore 14 th segment

Answer: C



15. In Cockroach, the arthrodial membrane

- A. forms the hind wings
- B. covers the compound eyes
- C. forms the hypopharynx
- D. joins the sclerities

Answer: D



- 16. Choose the wrong statement regarding the circulatory sytem of Frog
 - A. Sinus venosus receives blood through major veins called vena cava
 - B. The ventricle opens into a sac like conus arteriosus
 - C. The erythrocytes are nucleated

D. Special venous connection between liver and intestine called renal portal system is present

Answer: D



17. In Periplaneta, which one helps in nourishing the sperms

- A. Ejaculatory duct
- B. Vas deferens
- C. Utriculi majores
- D. Utriculi breviores

Answer: D



A. 7 th segment				
B. 8 th segment				
C. 5 th segment				
D. 6 th segment				
Answer: A				
Watch Video Solution				
19. Statement a. : Secretion of colleterial gland forms the egg case in				
Cockroach				
Statement b.: The development of Cockroach is hemimetabolous				
A. Both the statements, I and II are correct and II is the reason for I				
B. Both the statements, I and II are correct, but II is not the reason for				
I				

18. In Periplaneta, ductus ejaculatorius of male reproductive system lies in

C. Statement I is correct, but statement II is incorrect

D. Statement II is correct, but statement I is incorrect

Answer: C



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20. Flow of haemolymph in Cockroach is

A. Heart $\,
ightarrow\,$ Ostia $\,
ightarrow\,$ Perivisceral sinus $\,
ightarrow\,$ Peridcardial sinus $\,
ightarrow\,$

 $\mathsf{Head} \ \to \ \mathsf{Heart}$

B. Heart ightarrow Pericardial sinus ightarrow Head ightarrow Perivisceral sinus ightarrow

Ostia \rightarrow Heart

C. Heart $\,\,
ightarrow\,$ Head $\,\,
ightarrow\,$ Perivisceral sinus $\,\,
ightarrow\,$ Pericardial sinus $\,\,
ightarrow\,$

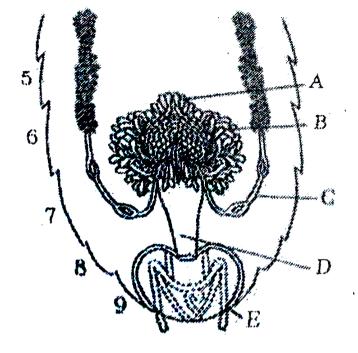
Ostia ightarrow Heart

D. Heart ightarrow Head ightarrow Perivisceral sinus ightarrow Ostia ightarrow Pericardial

 $\mathsf{sinus} \, o \, \mathsf{Heart}$

Watch Video Solution 21. Which part of Cockroach leg is attached to thorax ventrally A. Trochanter B. Claw C. Femus D. Coxa **Answer: D** Watch Video Solution 22. In the male reproductive system of cockroach A, B, C, D and E rpresents.

Answer: C



- A. A Phallic gland, B Small tubules, C Vas deferens, D Ejaculatory duct, E Right phallomere `
- B. A Phallic gland, B Vas deferens, C Small tubules , D Ejaculatory duct, E Right phallomere.
- C. A Phallic gland, B Ejaculatory duct, C Vas deferens, D Right phallomere, E Small tubules
- D. A Small tubules, B Phallic gland, C Vas deferens , D Ejaculatory duct, E Testes

Answer: A



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

- A. Anal cerci develop
- B. Both forewings and hindwings develop
- C. Labium develops
- D. Mandiles become harder

Answer: B



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24. The nerve chord in earthworm originates from

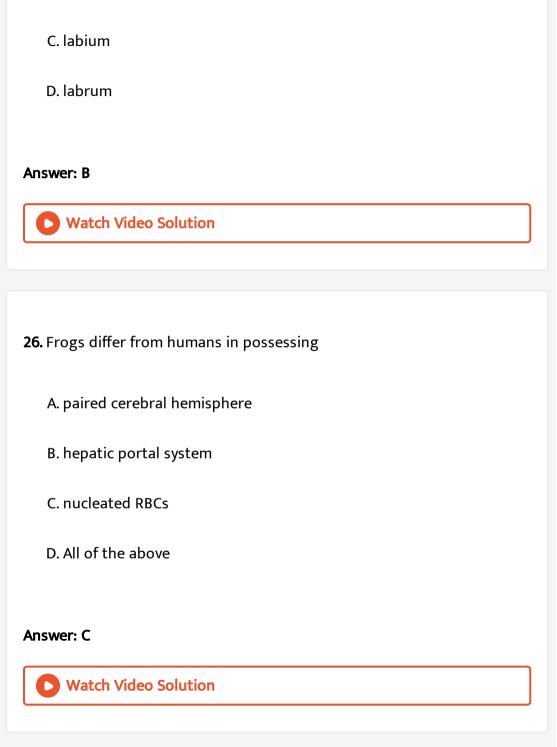
- A. suprapharyngeal ganglia and has a fused pair of ganglia in each segment from 3rd to the last
- B. suprapharyngeal ganglia and has a fused pair of ganglia in each segment from 4 th to the last
- C. suprapharyngeal ganglia and has a fused pair of ganglia in each segment from 5th to the last
- D. suprapharyngeal ganglia and has a fused pair of ganglia in each segment from 6th to the last

Answer: C



25. In the mouth parts of cockroach the galea and lacinia form parts of the

A. mandibles



B. maxilla

27. The tympanic cavity, in frog communicates with pharynx ventrally
through
A. Bidder's canal
B. horizontal canal
C. Eustachian tube
D. semicircular canal

Answer: C



28. Which of the following correctly descirbes the location of some body parts in the earthworm (Pheretima) ?

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

B. Four pairs of spermathacae in 4 th - 7 th segments

C. One pair of ovaries attached at intersegmental septum of 14th and 15th segments

D. Two pairs of testes in 10 th and 11 th segments

Answer: D



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

A. excretory fluid

B. coelomic fluid

C. haemolymph

D. slimy mucus

Answer: B



30. Blood of earthworm is

A. red in colour, due to dissolved haemoglobin in corpscle

B. red in colour , due to dissolved haemoglobin in plasma

C. blue in colour , due to dissolved haemocyanin in plasma

D. blue in colour , due to dissolved haemocyanin in corpuscles

Answer: B



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31. In Pheretima, septa are absent between which segments

A. 3th / 4th and 9th / 10th

B. 4 th / 5 th and 8 th / 9 th

C. 5 th / 6 th and 7 th / 8 th

D. 7 th / 8 th and 6 th / 7 th

Answer: A Watch Video Solution

32. In which of the following animals, respiration occurs without any respiratory organ ?

- A. Frog
- B. Fish
- C. Cockroach
- D. Earthworm

Answer: D



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33. In a copulating pair of earthworm, which two processes take place?

- A. Reciprocal fertilisation and internal fertilisation
- B. Cross fertilisation and reciprocal fertilisation
 - C. Interal fertilisation and cross-fertilisation
- D. External fertilisation and internal fertilisation

34. What is the common between earthworm, leech and centipede?

Answer: B



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- - A. They have Malpighian tubules
 - B. They are hermaphrodites
 - C. They have ventral nerve cord
 - D. They have no legs

Answer: C



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

A. It has 13 th chambered heart and in each segment one pair of ostia are present

B. It is closed type of circulatory system

C. It is a complicated type of circulatory system

D. It takes place without the participation of tissue

Answer: A



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36. Salivery gland in earthworm is found in

A. dorsal wall of buccal cavity

B. ventral wall of buccal cavity

C. pharyngeal wall
D. None of the above
Answer: C
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37. How many ovarioles are found in each ovary of cockroach?
A. 32
B. 16
C. 8
D. 4
Answer: C
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- 38. Stink gland is found in
 - A. 4 th and 5 th terga of cockroach
 - B. 5 th and 6 th terga of cockroach
 - C. 5 th and 6th sterna of cockroach
 - D. 4 th and 5 th sterna of cockroach

Answer: B



- 39. Earthworms have no special sense organs still they are sensitive to
 - A. touch and sound
 - B. light and sound
 - C. touch taste and sound
 - D. touch taste and light

Answer: D View Text Solution 40. The role of typhlosole of earthworm is to A. emulsify food B. kill bacteria C. increase absorptive area D. secrete saliva **Answer: C Watch Video Solution** 41. How many lateral 'hearts' are found in earthworm? A. 8 (four pairs)

B. 6 (three pairs)
C. One pair
D. 12 (six pair)
Answer: C
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42. Alary muscles in cockroach are related to
A. heart
B. brain
C. gut
D. legs
Answer: A
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A. and cerci
B. long wing
C. Both (a) and (b)
D. anal style
Answer: D
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44. Efferent salivary ducts in Periplaneta open into
44. Efferent salivary ducts in Periplaneta open into
44. Efferent salivary ducts in Periplaneta open into A. stomach

43. Male cockroach has

Answer: D



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- 45. Periphlaneta americana has thermoreceptor sensillae on
 - A. 1 st , 2 nd and 3 rd segments of tarsus of legs
 - B. 3 rd, 4 th and 5 th segments of tarsus of legs
 - C. 15 th segment of anal cerci
 - D. pedicel of antennae

Answer: D



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46. Which one of the following is correctly matched regarding earthworm

?

- A. Buccal cavity 1 st to 5 th segments B. Gizzard - 6 th to 8 th segments
 - C. Stomach 11 th to 12 th segments
- D. Typhlosole 26 th to 95 th segments

Answer: D



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- 47. Cockroach has a stomadaeal valve between
 - A. ileum and colon

B. crop and gizzard

- C. mesenteron asnd ileum
- D. gizzard and mesenteron

Answer: D



48. Trophocyte, mycetocytes, oencytes and urate cells are found in the fat body of cockroach, which statement is true ?

- A. Trophocyte contain reserve food
- B. Oenocytes secrete wax and urate cells contains uric acid
- C. Mycetocytes contain symbiotic bacteria
- D. All of the above

Answer: D

