



# BIOLOGY

## BOOKS - TRUEMAN BIOLOGY

### STRUCTURAL ORGANISATION IN ANIMALS

#### Multiple Choice Questions

1. Which Indian scientist gave extensive information about Pheretima by printing a

memoir ?

- A. Birbal Sahni
- B. Beni Prasad
- C. Karam Narain Bahl
- D. Har Gobind Khorana

**Answer: C**



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2. Segment of earthworm bearing mouth is

A. clitellar

B. peristomium

C. prostomium

D. deuterostomium.

**Answer: B**



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**3. Prostomium is**

A. first anterior most segment

B. outgrowth from the peristomium

C. the second anterior most segment

D. third anterior most segment.

**Answer: B**



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**4. Clitellar segments in earthworm are**

A. 13 – 17

B. 14 – 16

C. 15 – 19

D. 14 – 18

**Answer: B**



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5. In earthworm the buccal cavity extends upto

A. 4th segment

B. 3rd segment

C. 8th segment

D. 9th segment.

**Answer: B**



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**6.** The function of typhlosole (between 26-35 segment) in earthworm is to

A. secrete digestive juice

B. slow down rate of passage of food

C. increase absorptive area of intestinal epithelium

D. have no function

**Answer: C**



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7. Gizzard in Pheretima is an organ

A. that secretes slime

B. for absorption fo digested food

C. for excretion

D. for crushing food

**Answer: D**



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**8.** In earthworm, the stomach is situated in

A. 8-10 segments

B. 9-14 segments

C. 14-25 segments



D. 10-14 segments

**Answer: B**



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**9.** Chromophil cells in earthworm takes part in secretion of mucus and are found in

A. Lymph gland

B. Pharyngeal gland

C. Blood gland

D. All

**Answer: B**



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**10.** The flow of blood in the dorsal blood vessel of earthworm is

A. backwards

B. forwards

C. backwards in half & forward in other half

D. none of the above

**Answer: B**



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**11. Which statement is true about earthworm ?**

A. Blood is blue

B. Blood is red but haemoglobin is dissolved in plasma

C. Blood pigment is haemocyanin

D. Blood is red but haemoglobin is dissolved in RBC's

**Answer: B**



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

A. External fertilization and cross fertilization

B. Cross fertilization and reciprocal fertilization

C. Internal fertilization and cross fertilization

D. Reciprocal fertilization and internal fertilization

**Answer: B**



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**13.** In earthworm, the anterior loops are situated in

- A. 4th and 5th segments
- B. 6th and 8th segments
- C. 10th and 11th segments
- D. 12th and 13th segments.

**Answer: C**



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14. Blood vascular system of earthworm is of

A. open type

B. closed type

C. portal type

D. none of the these.

**Answer: B**



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15. The smallest longitudinal blood vessel in Earthworm is

A. dorsal blood vessel

B. ventral blood vessel

C. sub-neural blood vessel

D. supra-oesophageal blood vessel.

**Answer: D**



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16. Which of the blood vessel may be considered as true heart in earthworm ?

A. dorsal blood vessel

B. ventral blood vessel

C. supra-oesophageal blood vessel.

D. Anterior loop.

**Answer: A**



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17. Four pairs of hearts in earthworm occur in segments

A. 6, 7 and 9, 10

B. 9, 10 and 14, 15

C. 7, 9 and 12, 13

D. none of these.

**Answer: C**



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**18.** In earthworm, the "forest of nephridia" is in

A. Pharyngeal region

B. clitellar region

C. intestinal region

D. typhlosolar region

**Answer: B**



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19. Septal nephridia of earthworm pour excretory matter into

A. coelom

B. intestine

C. buccal cavity

D. body surface

**Answer: B**



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20. Chloragogen cells found in coelomic fluid of earthworms are analogous to vertebrate

A. kidney

B. gut

C. liver

D. lungs

**Answer: B**



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21. Origin of nephridia in earthworm is

A. ectodermal

B. endodermal

C. mesodermal

D. (2) and (3)

**Answer: A**



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22. Which organ in earthworm is analogous to kidney of man ?

A. Nephridium

B. Testis

C. Clitellum

D. Intestine

**Answer: A**



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23. Which of the following is exonephric nephridia ?

A. Pharyngeal nephridia

B. Septal nephridia

C. Integumentary nephridia

D. Integumentary and pharyngeal nephridia

**Answer: C**



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24. Pharyngeal nephridia of Pheretima are found in segments

A. 6, 7, 8

B. 5, 6, 7

C. 3, 4, 5

D. 4, 5, 6

**Answer: B**



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25. Similarly between septal nephridia and Malpighian tubule is that

A. both excrete urea

B. both open in body cavity

C. both leave excretory products in alimentary canal

D. none

**Answer: A**



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

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

**Answer: B**



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27. Earthworm is

A. ammonotelic

B. ureotelic

C. uricotelic

D. both (1) & (2)

**Answer: D**



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28. Which is correct about earthworm ?

A. It can crawl on smooth surface easily

B. It secretes cocoon around unfertilized  
eggs

C. It has brain but not head

D. It has no locomotory organs.

**Answer: C**



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29. Brain in earthworm is formed of

- A. subpharyngeal ganglia
- B. infrapharyngeal ganglia
- C. suprapharyngeal ganglia
- D. all of the above

**Answer: C**



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30. Nerve cord in earthworm is

- A. single, ventral, solid
- B. single, dorsal, hollow
- C. double, ventral, solid
- D. double, dorsal, hollow

**Answer: C**



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**31. Earthworm has**

- A. no eyes

B. one eyes

C. many eyes

D. two eyes

**Answer: A**



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**32.** Spermathecae in earthworm are found in segments

A. 6, 7, 8, 9



B. 4, 5, 6, 7

C. 5, 6, 7, 8

D. 3, 4, 5, 6

**Answer: A**



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**33.** Which one of the following correctly describes the location of some body parts in the earthworm *Pheretima*

A. four pairs of spermathecae in 4-7 segments

B. one pair of ovaries attached at intersegmental septum of 14th and 15th segments

C. two pairs of testes in 10th and 11th segments

D. two pairs of accessory glands in 16-18 segments

**Answer: C**



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**34.** Accessory glands in earthworm are found in segments

A. 17, 18

B. 17, 19

C. 19, 20

D. 18, 19

**Answer: B**



35. In earthworm, the prostate glands are

- A. one pair
- B. two pairs
- C. three pairs
- D. four pairs

**Answer: A**



**36.** Fertilization in *Pheretima posthuma* occurs  
in

A. spermathecae

B. cocoon

C. coelom

D. seminal vesicles.

**Answer: B**



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37. Cocoon of earthworm can produce an average of ..... worms.

A. 16

B. 10

C. 8

D. 4

**Answer: D**



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**38.** coelom in earthworm is

A. schizocoelom

B. enterocoelom

C. both (1) and (2)

D. pseudocoelom

**Answer: A**



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**39.** Life span of Earthworm is

A. 1-3 years

B. 2-8 years

C. 3.5-10.5 years

D. 6-8 years

**Answer: C**



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**40.** In *Pheretima* nephridia occur in

A. all segments except 1-4 and 10-14

B. all segments except first two segments

C. mega nephridia in pre-clitellar and micro  
nephridia in post-clitellar segments

D. micronephridia in all segments,  
meganephridia from clitellar region to  
end

**Answer: B**

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41. 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**



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42. Photoreceptors are unicellular in Earthworm and are most abundant in the skin of

- A. Prostomium
- B. peristomium
- C. Clitellum
- D. both (1) & (2)

**Answer: D**



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**43. Skeleton in Pheretima is**

A. bony

B. cartilaginous

C. hydrostatic

D. dermal

**Answer: C**



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44. Which one of the following correctly matched regarding earthworm ?

A. Buccal cavity - 1st to 5th segment

B. Stomach - 11th to 12th segment

C. Typhlosole - between 26th to 35th  
segment

D. Testes - 10th to 14th segment

**Answer: C**



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**45.** Earthworm possesses hearts

- A. one pair
- B. 12 (six pairs)
- C. 8 (four pairs)
- D. 6 (three pairs)

**Answer: C**



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**46.** The location of lymph glands in Pheretima is

A. 4, 5 and 6

B. 7, 8 and 9

C. 14, 15 and 16

D. 26th and behind

**Answer: D**



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47. Brown colour of Earthworm is due to

A. Melanin

B. Porphynin

C. Haemoglobin

D. both (1) and (2)

**Answer: B**



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48. Type of feeding in Earthworm is



A. fluid feeding

B. filter feeding

C. detritus feeding

D. tentacle

**Answer: C**



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**49. Earthworm are**

A. ureotellic when plenty of water is available

B. uricotelic when plenty of water is available

C. uricotelic under conditions of water scarcity

D. ammonotelic when plenty of water is available

**Answer: D**



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50. The highly degraded organic matter rich in nitrogen and potassium in particular, resulting from the activity of earthworms is called

- A. humus
- B. vermicompost
- C. worm castings
- D. compost bedding

**Answer: B**



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51. Spermathecae of Earthworm take part in

A. fertilization

B. sperm maturation

C. collection of sperms from other animals

D. collection of sperms from same animals

**Answer: C**



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52. In the given diagram, what does "A" represent?



A. heart

B. lateral vessel

C. ventral vessel

D. dorsal vessel

**Answer: D**



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**53.** Gas exchange surface of Earthworm is

A. tracheae

B. gills

C. skin

D. ctenidia

**Answer: C**



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54. A pair of male genital pores in earthworm are present on the ventro-lateral sides of the

A. 14<sup>th</sup> segment

B. 18<sup>th</sup> segment

C. 10<sup>th</sup> segment

D. 15<sup>th</sup> segment

**Answer: B**



55. Which are the two common indian cockroaches ?

A. *Periplaneta americana* & *Blatta indica*

B. *Periplaneta indica* and *Blatta orientalis*

C. *Periplaneta orientalis* and *Blatta americana*

D. *Periplaneta americana* and *Blatta orientalis*.



**Answer: D**



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**56.** *Periplaneta americana* differs from *Blatta orientalis* in having

- A. well developed wings
- B. wings absent
- C. only first pair of wings developed
- D. second pair of wings developed

**Answer: A**



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**57.** The wings are used for flying in cockroach are

A. both pairs of wings

B. fore wings

C. hind wings

D. none of these

**Answer: C**



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

- A. coxa, femur, trachanter, tibia and claws
- B. coxa, trochanter, femur, tibia, tarsus
- C. coxa, tibia, femur, plantulae and claws
- D. none

**Answer: B**



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**59.** Plantulae, the adhesive pads, are found in

A. coxa

B. trochanter

C. femur

D. tarsus

**Answer: D**



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60. Most swollen segment in leg cockroach is :

A. tarsus

B. coxa

C. femur

D. trochanter

**Answer: B**



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61. Trichogen cell in the body wall secretes

A. epicuticle

B. exocuticle

C. endocuticle

D. cuticular seta

**Answer: D**



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**62.** The flagellum of antenna of cockroach is

A. 11 jointed

B. 13 jointed

C. unjointed

D. many jointed

**Answer: D**



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**63.** Arolium of Cockroach helps in

A. digestion

B. locomotion

C. respiration

D. reproduction

**Answer: B**



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**64.** The dorsal plate of skelton found on the abdomen of cockroach is called

A. Pleuron

B. sternum

C. tergum

D. vertex

**Answer: C**



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**65.** Secretion of stink glands helps in

A. attracting the preys

B. repelling enemies

C. killing the preys

D. none of the above

**Answer: B**



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**66.** Mouth part of cockroach are suited for :

A. piercing

B. absorbing

C. biting and chewing

D. drinking

**Answer: C**



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**67.** The labium in cockroach is formed by

A. first maxillae

B. second maxillae

C. mentum

D. submentum

**Answer: B**



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**68.** Mandibles of cockroach are :

A. short with grinding teeth

B. long and pointed

C. short without teeth

D. long and coiled

**Answer: A**



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**69.** Cells of cockroach that secrete wax are

A. trichogen

B. trophocytes

C. myocytes

D. oenocytes

**Answer: D**



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**70.** Peritrophic membrane is secreted by

A. crop

B. gizzard

C. mid gut

D. ileum

**Answer: C**



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**71. Function of rectal papillae of cockroach is**

- A. absorption of amino acids
- B. absorption of fats
- C. absorption of glucose
- D. absorption of water

**Answer: D**



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72. Salivary glands of cockroach open on :

A. maxilla

B. hypopharynx

C. labium

D. labrum

**Answer: B**



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73. The body cavity of cockroach is called :

A. pseudocoel

B. coelom

C. hydrocoel

D. haemocoel

**Answer: D**



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74. Haemoglobin is not found in

A. duck

B. lizard

C. earthworm

D. mosquito and cockroach

**Answer: D**



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75. Tergosternal muscles help in

A. circulation

B. respiration

C. flight

D. all of these

**Answer: D**



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**76.** Number of chambers in the heart of cockroach :

A. 5

B. 9

C. 13

D. 16

**Answer: C**



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77. Alary muscles in cockroach are connected with

A. trachea

B. dorsal diaphragm

C. legs

D. alimentary canal

**Answer: B**



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78. One common feature of the trachea of cockroach and the trachea of mammals is that

- A. both are paired
- B. both have ciliated inner lining
- C. both originate from the head
- D. both do not collapse

**Answer: D**



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79. Tracheoles of cockroach are

A. with cuticular rings

B. without cuticular rings

C. without cuticular rings and tissue fluid

D. without cuticular rings and with tissue  
fluid

**Answer: D**



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80. Similarly between septal nephridia and Malpighian tubule is that

- A. have ciliated funnels
- B. discharge into alimentary canal
- C. are segmental structures
- D. discharge directly outside body

**Answer: B**



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81. Maphighian tubules are found on the

A. distal region of mesenteron

B. proximal region of mesenteron

C. proximal region of proctodaeum

D. junction of mesenteron & proctodaeum

**Answer: D**



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**82.** Number of thoracic and abdominal ganglia in cockroach respectively is

A. six, three

B. six, six

C. three , six

D. three, three

**Answer: C**



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**83.** Structural and functional unit of compound eye of cockroach used in forming image are called

A. ocelli

B. rhabdomes

C. ommatidia

D. retinulae

**Answer: C**



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**84.** Which type of vision is found in cockroach ?

- A. Binocular
- B. Monocular
- C. Panaromic
- D. Mosaic

**Answer: D**



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**85.** Number of ommatidia in each eye of cockroach is

A. 1000

B. 2000

C. 3000

D. 4000

**Answer: B**



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**86.** An ommatidium consists of

A. dioptrical region

B. receptive region

C. both (1) and (2)

D. none of these

**Answer: C**



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87. Phallic gland (conglobate gland) of cockroach mainly helps in

A. formation of spermatophores

B. reproduction

C. growth

D. excretion

**Answer: A**



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**88.** Left phallomere consists of

A. accutolobus

B. titillator

C. pseudopenis and asperate lobe

D. all of the above

**Answer: D**



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**89.** How many ovarioles are found in each ovary of cockroach ?

A. 3

B. 2

C. 8

D. 16

**Answer: C**



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90. Collateral glands of cockroach help in :

A. fertilization

B. formation of ootheca

C. copulation

D. formation of oothecal chamber

**Answer: B**



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91. Ecdyson is secreted by

A. prothoracic glands

B. corpora allata

C. corpora cardiaca

D. cerebral-neuro-secretory cells.

**Answer: A**



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**92.** Utricular glands is found in

A. Female cockroach

B. Male cockroach

C. Scorpion

D. Spider

**Answer: B**



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**93.** Nymph, the young cockroach, differs from adult cockroach in

A. being smaller in size

B. devoid of wings

C. having gonads

D. all of these

**Answer: D**



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**94.** The interval between two ecdyses is called

A. stadium

B. instar

C. imago

D. none of these

**Answer: A**



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**95.** In cockroach fertilization occurs in the

A. oothecal chamber

B. genital chamber

C. oviducts

D. spermathecae

**Answer: B**



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**96.** Eggs which have yolk in the centre surrounded by cytoplasm are called :

A. centrolecithal

B. homolecithal

C. microlecithal

D. alecithal

**Answer: A**



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**97.** The wall of spermathophore consists of

A. one layer

B. two layers

C. three layers

D. four layers



**Answer: C**



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**98.** Ootheca of cockroach has fertilized eggs,  
their number is

A. 6

B. 8

C. 16

D. 24

**Answer: C**



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**99.** Metamorphosis in cockroach is regulated mainly by

- A. corpora cardiaca
- B. prothoracic glands
- C. corpora allata
- D. brain

**Answer: B**



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**100.** Life history of cockroach represents :

- A. ametaboly
- B. holometaboly
- C. paurometaboly
- D. none of these

**Answer: C**



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**101.** Which part of Cockroach has both exoskeleton and endoskeleton

A. Head

B. Thorax

C. Abdomen

D. all of these

**Answer: A**



**102.** In Cockroach the longest podomere is

A. coxa

B. trochanter or Femur

C. tibia

D. tarsus

**Answer: D**



**103.** Eggs of cockroach are

A. homoelecithal

B. telolecithal

C. centrolecithal

D. meiolecithal

**Answer: C**



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**104.** Which of the following is absent in the segment of cockroach's leg

A. Coxa

B. Tibia

C. Femur

D. fibula

**Answer: D**



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**105.** The largest part of the alimentary canal of cockroach is

A. crop

B. ileum

C. rectum

D. mesenteron

**Answer: A**



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**106.** Hepatic caecae in cockroach are derived from :

A. crop

B. ileum

C. mid gut

D. oesophagus

**Answer: C**



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107. In cockroach, the cuticular lining of trachea is called

A. intima

B. serosa

C. articular membrane

D. peritoneum

**Answer: A**



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**108.** Atrium of Periplaneta is a

- A. tracheal ring
- B. tube of trachea
- C. cavity below spiracle
- D. fluid filled in trachea

**Answer: C**



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**109.** Peritreme in cockroach is

A. tracheal network

B. stigmal opening

C. one of the abdominal segments

D. annular sclerite surrounding spiracle

**Answer: D**



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**110.** Phallomeres are

A. structures present in the head of house fly

B. external genitalia in cockroach

C. vestigial wings in female cockroach

D. parts of mouth parts of house fly

**Answer: B**



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**111.** Heart of Cockroach is

A. myogenic

B. photogenic

C. neurogenic

D. morphogenic

**Answer: C**



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**112.** Pericardial space in Cockroach is regularly altered by muscles

A. Allary

B. Circular

C. Ciliary

D. Longitudinal

**Answer: A**



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**113.** The taste receptors of cockroach are

A. tactile hairs

B. compound eyes

C. campaniform sensillae

D. palps of maxillary and labium

**Answer: D**



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**114.** Blood of cockroach does not contain haemoglobin because :

A. it does not respire

B. it respire through book lungs

C. it respire through atmosphere

D. it has some other means to carry oxygen

direct into the tissue

**Answer: D**



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**115.** Abdominal ganglion in cockroach is not found in this segment (s).

A. 2 and 3

B. 4

C. 5

D. 6

**Answer: C**



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**116.** Phallomeres in male *Periplaneta* rise from

A. 7th sternum

B. 8th sternum

C. 9th sternum

D. 8 and 9th sterna

**Answer: C**



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**117.** Antennae of cockroach function as

- A. auditory receptor
- B. gustatory receptor
- C. olfactory receptor
- D. tactile sensory receptor

**Answer: D**



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**118.** Fat body of cockroach has

A. Trophocytes

B. Mycetocytes

C. Oenocytes

D. all of these

**Answer: D**



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**119.** In cockroach the corpora allata secrete

A. brain hormone

B. growth hormone

C. juvenile hormone

D. ecdyson

**Answer: C**



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**120.** In Cockroach, the anterior wings are called

A. Elytra

B. Pedipalps

C. Antenna

D. Chelicera

**Answer: A**



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**121.** Ingluvial ganglion in cockroach is present on the surface of

A. crop

B. gizzard

C. brain

D. none of these

**Answer: A**

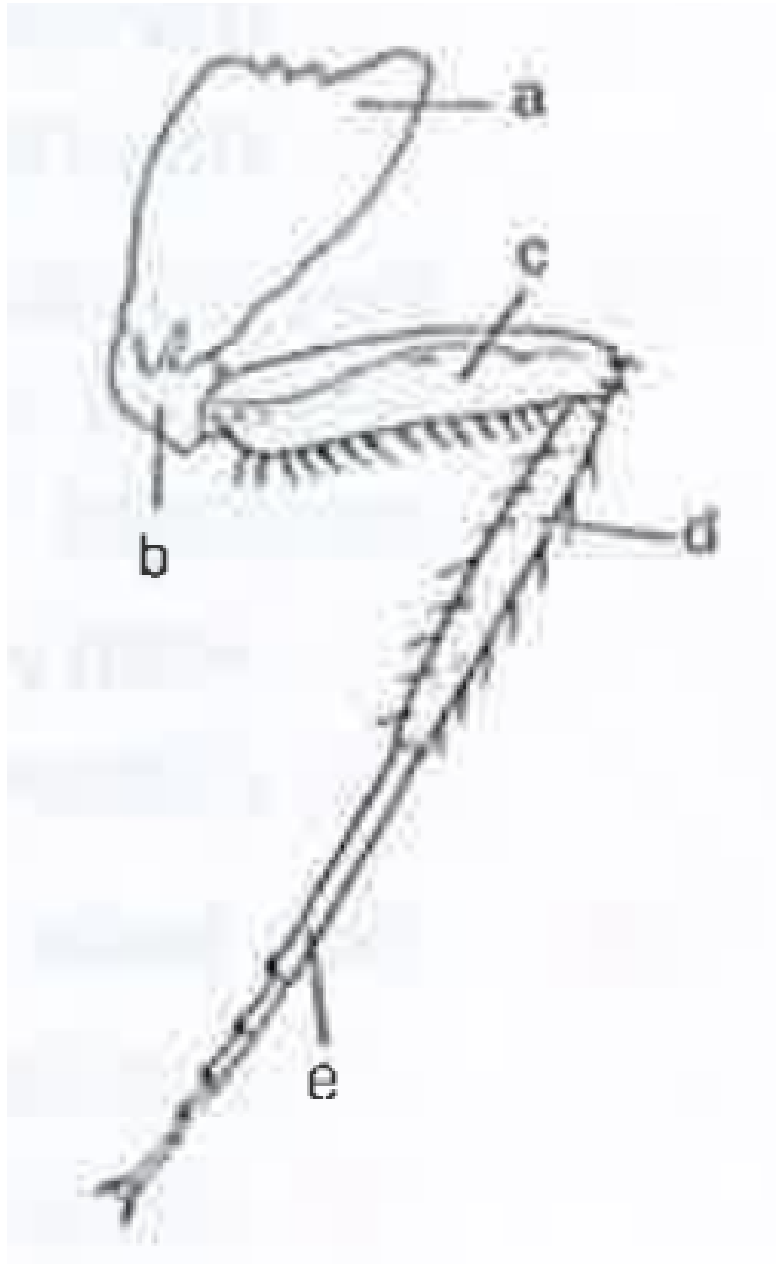


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**122.** In the following diagram of a leg of cockroach parts have been indicated by alphabets. Choose the answer in which these alphabets have been correctly with the parts

they indicate.



A. a = coxa, b = tibia,

c = tarsus, d = femur,

e = trochanter

B. a = coxa, b = femur,

c = trochanter, d = tarsus,

e = tibia

C. a = coxa, b = tarsus,

c = femur, d = tibia,

e = trochanter

D. a = coxa, b = trochanter,

c = femur, d = tibia, e = tarsus

**Answer: D**



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**123.** Periplaneta americana has  
thermoreceptor sensillae on

A. 1st, 2nd 3rd segments of tarsus of legs

B. 3rd, 4th and 5th segments of tarsus of legs

C. 15th segment of anal cerci

D. Pedicel of antenna

**Answer: A**



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**124.** Cockroach has a stomadaeal valve between

A. ileum and colon

B. crop and gizzard

C. mesenteron and ileum

D. gizzard and mesenteron

**Answer: D**



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**125.** What is the main difference between male and female cockroach ?

A. jointed appendages

B. paired antennae

C. anal cerci

D. conglobate gland

**Answer: D**



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**126.** Stink gland is found in

A. 4th and 5th terga of cockroach

B. 5th and 6th terga of cockroach

C. 5th and 6th sterna of cockroach

D. 4th and 5th sterna of cockroach

**Answer: B**



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**127.** Which of the following hormones regulates growth and metamorphosis in insects



A. Juvenile hormone

B. Brain hormone

C. Ecdyson

D. Prothoracicotropic hormone

**Answer: C**



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**128.** Malpighian tubules are analogous to

A. trachea of cockroach

B. gills

C. flame cells

D. none of these

**Answer: C**



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**129.** In the larva of frog the respiration is carried out by

A. gills

B. lungs

C. skin

D. skin and gills.

**Answer: D**



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**130.** In frog which are the typical vertebrae, numbering .....

A. 1st

B. 2nd to 7th

C. 8th and 9th

D. All of these

**Answer: B**



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**131.** In frog the type of teeth are

A. acrodont

B. heterodont

C. pleurodont

D. thecodont

**Answer: A**



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**132.** If the mouth of frog is kept open for some time, it dies because it is unable to

A. breathe

B. drink water

C. feed

D. utilize excess of air

**Answer: A**



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**133.** In frog the typical vertebrae are

A. procoelous

B. acoelous

C. amphicoelous

D. amphiplatyan.

**Answer: A**



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**134.** In frog the skin colour is due to

A. upper layer of yellow lipophores

B. middle layer of guanophores

C. lowest layer of melanophores

D. all of these

**Answer: D**



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**135.** The kidney of frog are

A. holonephros

B. mesonephros

C. metanephros

D. pronephros

**Answer: B**





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**136.** Metamorphosis in frog can be accelerated by

A.  $I_2$

B. P

C. K

D. Ca

**Answer: A**



**137.** Frog is dissected from posterior side because

- A. it is convenient
- B. that side possess ventral cord
- C. due to abdominal vein
- D. posterior side is soft to cut

**Answer: C**



**138.** The integument of the frog is always kept moist because

- A. it cannot move with dry skin
- B. it performs cutaneous respiration
- C. it cannot catch food with dry skin
- D. it cannot jump better with moist skin.

**Answer: B**



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**139.** Bone of the shank in frog is called

A. femur

B. tibio-fibula

C. humerus

D. radio-ulna

**Answer: B**



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**140.** Oval and nucleated RBC is found in

A. man

B. rat

C. rabbit

D. frog

**Answer: D**



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**141.** Male frogs can croak louder than females because of

- A. larger in size
- B. larger sound box
- C. stronger
- D. vocal sacs

**Answer: D**



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**142.** In frog the phalangeal formula for hand is

A. 0, 2, 2, 3, 3

B. 2, 2, 3, 3, 4

C. 2, 2, 3, 4, 3

D. 2, 3, 3, 3, 3.

**Answer: A**



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**143.** The phalangeal formula for frog's foot is

A. 0, 2, 3, 3, 3

B. 2, 2, 3, 3, 4

C. 2, 2, 3, 4, 3

D. 2, 3, 3, 3, 3.

**Answer: C**



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**144.** In frog, the biggest bone of vertebral column is



A. pygostyle

B. uropyge

C. urostyle

D. none of these

**Answer: C**



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**145. Lower jaw is toothless in**

A. Cockroach

B. Frog

C. rabbit

D. None of these

**Answer: B**



**Watch Video Solution**

**146.** The functional kidney of frog tadpole is

A. archinephros

B. pronephros

C. mesonephros

D. metanephros

**Answer: B**



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**147. Croaking of Frog is**

A. hunger call

B. sex call for female

C. danger call

D. musical note

**Answer: B**



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**148.** Absence of thumbs is characteristic of

A. rabbit

B. man

C. frog

D. monkey

**Answer: C**



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**149.** How many vertebrae a frog has including urostyle ?

A. 10

B. 9

C. 8

D. 33

**Answer: A**



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**150.** Astragalus and calcaneum are found in

- A. fore limb of frog
- B. hind limb of frog
- C. wing of bird
- D. skull of rabbit.

**Answer: B**



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**151.** Longest bone of frog is

- A. humerus
- B. femur
- C. radio-ulna
- D. tibio-fibula

**Answer: D**



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**152.** In frog, the jaw suspensorium is

A. craniostylic

B. autostylic

C. hyostylic

D. amphistylic

**Answer: B**



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**153.** Humerus differs from femur in having a

A. sigmoid notch

B. glenoid cavity

C. deltoid ridge

D. spine

**Answer: C**



**Watch Video Solution**

**154.** Which embryonic structure is replaced by vertebral column in frog ?

A. Neural canal

B. Archenteron

C. Notochord

D. Blastocoel

**Answer: C**



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**155.** When a frog is in hibernation or completely submerged in water it can respire only through

A. lungs

B. skin

C. branchial chamber

D. buccopharyngeal cavity

**Answer: B**



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**156.** In the heart of frog, which of the following is considered as pacemaker ?

A. Pylangium

B. Synangium

C. Sinuauricular node

D. Truncus arteriosus

**Answer: C**



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**157.** Frog differs from man in

A. having both renal and hepatic portal systems

B. not having renal portal system

C. having hepatic portal system.

D. not having hepatic portal system.

**Answer: A**



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**158.** In frog each cardiac cycle begin with the contraction of

- A. right auricle
- B. left auricle
- C. interauricular septum
- D. sinus venosus

**Answer: D**



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**159.** Bidder's canal occurs in

A. kidney of male frog

B. testis of frog

C. liver of frog

D. ovaries of frog

**Answer: A**



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**160.** Funnel-shaped ciliated pits on the ventral side of kidney of Frog

A. nephridiopores

B. nephrostomes

C. neurotomes

D. coelomostomes

**Answer: B**



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**161.** Glands of Swammerdam are related with

- A. cranial nerves
- B. spinal nerves
- C. sympathetic nerves
- D. parasympathetic nerves

**Answer: B**



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**162.** Total number of cranial nerves in frog is

A. 10

B. 20

C. 24

D. 12

**Answer: B**



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**163.** Harderian glands are found in

A. Rabbit

B. Frog

C. Man

D. Pheretima

**Answer: B**



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**164.** In frog, sclerotic is

A. fibrous

B. cartilaginous

C. bony

D. membranous

**Answer: B**



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**165.** Frog has

A. tear glands

B. oil glands

C. columella auris

D. sweat glands

**Answer: C**



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**166.** Which gland initiates, regulates and play a key role in metamorphosis of frog's tadpole ?

A. Adrenal

B. Pancreas

C. Thyroid

D. Thymus

**Answer: C**



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**167.** Epiphysis cerebri is another name for

A. pituitary

B. pineal gland

C. optic lobes

D. diencephalon

**Answer: B**



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**168.** In Frog, jelly around the eggs is deposited

- A. in water after fertilization
- B. in water during fertilization
- C. in the oviduct
- D. in the ovary

**Answer: C**



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**169.** Opening of rectum in Frog is called

A. coccyx

B. cloaca

C. anus

D. none of these

**Answer: C**



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**170.** Fenestra ovalis in frog is the

A. the opening in the auditory capsule which separates the middle ear from the inner ear

B. the air filled cavity of the middle ear

C. the communication between the pharynx and the tympanic cavity

D. the external opening of the tympanic cavity which is covered by the tympanic

membrane

**Answer: A**



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**171.** which artery is absent in frog ?

A. Right system arch

B. phrenic artery

C. carotid artery

D. renal artery

**Answer: B**



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**172.** The structure present in man but absent in frog is

A. salivary gland

B. pancreas

C. adrenal glands thyroid gland

D.

**Answer: A**



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**173.** Adrenaline and non-adrenaline are hormones and also act as

- A. energy-producing agents
- B. neurotransmitters
- C. food-storage materials
- D. energy-storing substances

**Answer: B**



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**174.** in frog oviduct is formed

- A. Wolffian duct
- B. Bidder's canal
- C. Matenepheric
- D. Mullerian duct

**Answer: D**



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**175.** In frog, the surface of attachment of tongue is

A. palatine

B. sphenoid

C. pterygoid

D. hyoid apparatus

**Answer: D**



**176.** Which of the following structures are absent in forelimb of frog ?

(a) Brachium (b) Web

( c) Antebrachium (d) Tarsal

A. (a) and (b) are correct

B. (b) and (d) are correct

C. (a) and ( c) are correct

D. (a), (b) and ( c) are correct

**Answer: B**



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**177.** Nitrogenous waste products are eliminated mainly as

A. urea in tadpole and uric acid in adult frog

B. urea in adult frog and ammonia in tadpole



C. urea in tadpole as well as in adult frog

D. urea in tadpole and ammonia in adult  
frog

**Answer: B**



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**178.** The epithelial lining of the alveoli of frog's lungs facing lung cavity is

A. columnae, non-ciliated

B. columnar, ciliated

C. squamous, ciliated

D. squamous, non-ciliated

**Answer: B**



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**179.** Caudal vertebrae of Frog fuse to form

A. coccyx

B. urostyle

C. pygostyle

D. prehensile tail

**Answer: B**



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**180.** What is not found in skin of frog ?

A. scales

B. epidermis

C. poison glands

D. mucus glands

**Answer: A**



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**181.** Which of the following part is not a part of the small intestine of frog

A. Ileum

B. Jejunum

C. Duodenum

D. none of these

**Answer: B**



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**182.** In frog , smallest bone in the skull is

A. septomaxillary

B. vomer

C. parasphenoid

D. exoccipital

**Answer: A**



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**183.** Which of these is an ear ossicle in frog

A. Incus

B. Auricle

C. Malleus

D. Columella auris

**Answer: D**



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**184.** Select the correct order of classification of *Rana tigrina* upto genus

A. Gnathostomata, Craniata, Chordata,

Rana, Tigrina

B. Chordata, Craniata, Amphibia,

Gnathostomata, Rana

C. Chordata, Craniata, Gnathostomata,

Amphibia, Rana,

D. Chordata, Amphibia, Gnathostomata,  
Craniata, Tigrina

**Answer: C**



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

A. alimentary canal

B. notochord



C. portal system

D. lymphatic system

**Answer: A**



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**186.** In frog, two phalanges occur in

A. pollex

B. hallex

C. third finger

D. third toe

**Answer: B**



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**187.** Part of the stomach which opens into the duodenum

A. cardiac

B. pyloric

C. fundus

D. body

**Answer: B**



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**188.** Which one of the following is not a characteristic feature of frog

A. The skin is moist and slimy

B. Each of the fore limbs and hind limbs end in five digits

C. Hepatic portal and renal portal systems

are present

D. Skin, buccal cavity and lungs are

respiratory organs

**Answer: B**



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**189.** Innominate is

A. a nerve

B. an artery

C. a vein

D. a part of skeleton and an artery

**Answer: D**



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**190.** In Frog anterior abdominal vein is formed by union of

A. femoral vein

B. sciatic vein

C. renal vein

D. pelvic vein

**Answer: D**



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**191.** Skin is an accessory organ of respiration  
in

A. human

B. frogs

C. rabbit

D. lizard

**Answer: B**



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**192.** The respiratory rhythm centre is present in the

A. cerebrum

B. cerebellum

C. hypothalamus

D. medulla oblongata

**Answer: D**



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**193.** Vth cranial nerve of frog is

A. facial

B. olfactory



C. trigeminal

D. vagus

**Answer: C**



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**194.** How many ova are laid at a time by a mature female frogs ?

A. 500 to 1000

B. 1000 to 1500

C. 2500 to 3000

D. 3500 to 4500

**Answer: C**



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**195.** Male and female cockroaches can be distinguished externally by

A. Anal styles in male

B. Anal cerci in female

C. Anal style and antennae in female

D. Both 2 and 3

**Answer: A**



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**196.** Which one of the following species of earthworm is not recommended for vermicomposting

A. *Eudrilus eugeniae*

B. Eisenia fetidae

C. Pyronyx excavatus

D. Pheretima posthuma

**Answer: B**



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**197.** Cockroaches can climb smooth or steep surfaces due to the adhesive pads found on the torses of their legs. They are called .....

A. plantulae

B. tibia

C. pretarsus

D. arolium

**Answer: A**



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**198.** The abdomen of adult cockroaches has ..... segments.

A. 4

B. 6

C. 8

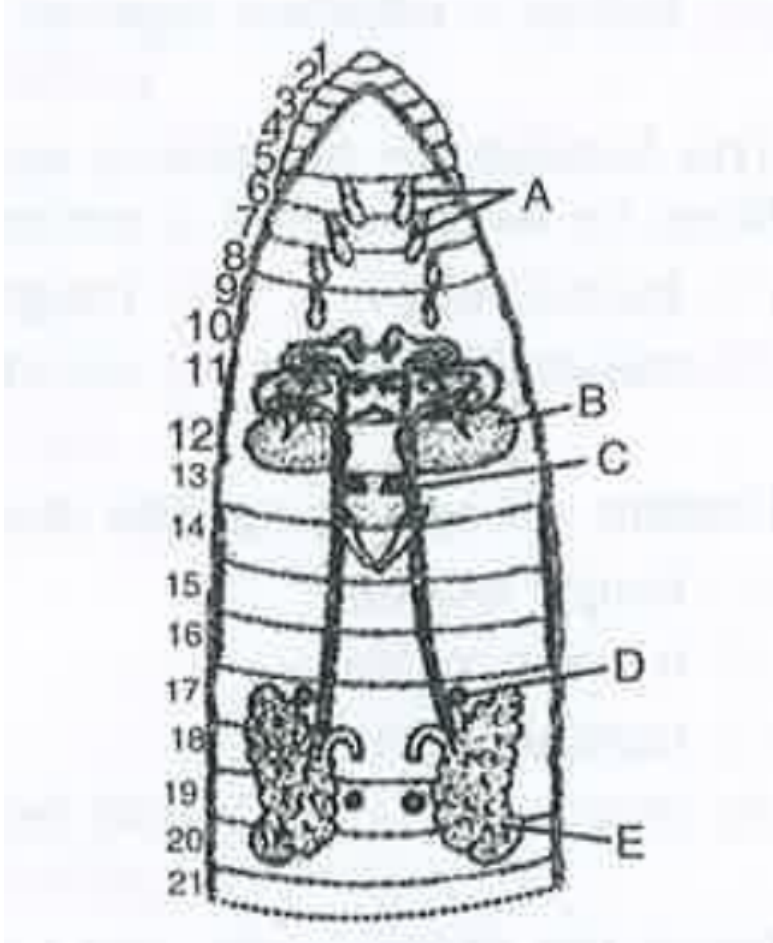
D. 10

**Answer: D**



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**199.** In the diagram of the reproductive system of earthworm A, B, C, D and E represent



A. A. spermathecae, B. seminal vesicle, C. ovary, D. accessory gland, E. prostate gland

B. A. seminal vesicle, B. ovary, C. accessory gland, D. spermathecae, E. prostate gland

C.

D.

**Answer: D**



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**200.** In earthworm setae are present in all segments except

- A. first and the last segments
- B. first and the clitellum
- C. first segment
- D. first clitellum and last segments

**Answer:**



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

A. 4

B. 2

C. 17

D. 13

**Answer:**



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**202.** Which one of the following structures in Pheretima is correctly matched with its function

- A. Typhlosle - storage of extra nutrients
- B. Clitellum - secretes cocoon
- C. Gizzard - absorbs digested food
- D. Setae - defence against predators

**Answer: B**



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**203.** The breakdown of detritus into smaller particles by earthworm is a process called

- A. humification
- B. fragmentation
- C. mineralisation
- D. catabolism

**Answer: B**



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204. Ureters act as urinogenital ducts in

- A. frog's males
- B. human males
- C. human females
- D. frog's both males and females

**Answer: A**



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**205.** Read the statements with regard to frog.

Which of the statement(s) is/are correct and incorrect

1. The medulla oblongata passes out through foramen of Monro and continues into spinal cord

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

3. Ovaries have no functional connection with kidneys

4. Frogs are uricotellic

A. A, B and C are correct but D is incorrect

B. A and B are correct while C and D are  
incorrect

C. B and C are correct while A and D are  
incorrect

D. B, C and D are correct while A is incorrect  
C and D are correct while A and B are  
incorrect

**Answer: C**



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206. The tympanic cavity, in frog communicates with pharynx ventrally through

- A. bidder's canal
- B. horizontal canal
- C. semicircular canal
- D. eustachian tube

**Answer: D**



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207. Fertilization in frog is

A. external

B. internal

C. both

D. none of these

**Answer: A**



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**208.** Compound eyes are found in

A. frog

B. earthworm

C. cockroach

D. roundworm

**Answer: C**



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**209.** How do you differentiate a frog from a toad

A. frog has no exoskeleton but toad has scales

B. frog respire through lungs but toad respire through skin

C. frog has a tail but toad has no tail

D. frog has no parotid glands but toad has a pair of parotid glands

**Answer: D**



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**210.** The open circulatory system is found in

- A. earthworm
- B. cockroach
- C. snail
- D. both (2) and (3)

**Answer: D**



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**211.** Which of the following is correct for the common cockroach ?

- A. Malpighian tubules are excretory organs projecting out from the colon
- B. Oxygen is transported by haemoglobin in blood
- C. Nitrogenous excretory product is urea

D. The food is ground by mandibles and gizzard

**Answer: D**



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**212.** In Cockroach, gizzard contains

A. fourth teeth

B. Six teeth

C. Five teeth

D. Eight teeth

**Answer: B**



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**213.** What is common between humans and adult Frog

A. Four chambered heart

B. Internal fertilization

C. Nucleated RBCs

D. Ureotelic mode of excretion

**Answer: D**



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**214.** In mouthparts of Cockroach, galea and lacinia from part of

A. mandibules

B. maxillae

C. labium



D. labrum

**Answer: B**



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**215.** The ovaries in frog open into cloaca through

A. Bidder's canal

B. Urinogenital duct

C. Single oviduct

D. A pair of oviducts

**Answer: D**



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**216.** Special venous connection between the heart and the liver in frogs is the

A. Renal portal system

B. Lymphatic system

C. Hepatic portal system

D. Pulmonary system

**Answer: C**



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**217.** Seminal vesicles in *Pheretima* are located in the segments

A. 4 & 5

B. 3 & 4

C. 14 & 15

D. 11 & 12

**Answer: D**



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**218.** Blood glands in Pheretima are present in the segments

A. 3<sup>rd</sup> & 4<sup>th</sup> only

B. 14<sup>th</sup> & 15<sup>th</sup>

C. 4<sup>th</sup>, 5<sup>th</sup> & 6<sup>th</sup>

D. 12<sup>th</sup> & 13<sup>th</sup>

**Answer: C**



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**219.** Mushroom gland in cockroach is located  
in

A. 2<sup>nd</sup> – 5<sup>th</sup> segments

B. 3<sup>rd</sup> – 5<sup>th</sup> segments

C. 6<sup>th</sup> – 7<sup>th</sup> segments

D. 7<sup>th</sup> – 8<sup>th</sup> segments

**Answer: C**



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**220. Cockroaches are**

A. Ureotellic

B. Ammonotelic

C. Uricotelic

D. proteinotelic

**Answer: C**



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

- A. Ammonia
- B. Potassium urate
- C. Urea
- D. Calcium carbonate

**Answer: B**



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

- A. Both fore wings & hind wings develop
- B. Labium develops
- C. Mandibles become harder
- D. Anal cerci develops



**Answer: A**



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

- A. muscular tissue
- B. arthrodial membrane
- C. cartilage
- D. cementing glue

**Answer: B**



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

- A. Seminal vesicles
- B. Mushroom glands
- C. Testes
- D. Vas deferens

**Answer: A**



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**225.** Which of the following features is used to identify a male cockroach from a female cockroach

- A. Presence of anal cerci
- B. Forewings with darker tegmina
- C. Presence of caudal styles

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

**Answer: C**



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