## **Yakeen NEET 2.0 2026**

## **Zoology By Samapti Sinha Ma'am Structural Organization in Animals**

**DPP: 12** 

Q1 Cockroaches contain dorsal\_(X)\_,ventral\_(Y)\_ and **(Z)** .

Choose the options which fill the blanks correctly.

- (A) (X): anus, (Y): male genital pore, (Z): gonapophysis.
- (B) (X): mouth, (Y): male genital pore, (Z): labrum.
- (C) (X): anus, (Y): labrum, (Z): gonapophysis.
- (D) (X): mouth, (Y): labrum, (Z): gonapophysis.
- **Q2** Identify the **correctly** matched pair w.r.t. Periplaneta.
  - (A) Metathoracic wings Hindwings that are opaque, dark and leathery.
  - (B) Circulatory system Haemolymph composed of colourless plasma and haemocytes.
  - (C) Excretory system Malpighian tubules drain urea into hindgut when availability of water is
  - (D) Respiratory system Trachea opens through ten pairs of tracheoles.
- **Q3** Wings extend beyond the tip of the abdomen in:
  - (A) male cockroaches.
  - (B) female cockroaches.
  - (C) queen bee.
  - (D) nymphal stages
- **Q4** Which of the following is characteristic feature of cockroach regarding sexual dimorphism?
  - (A) Presence of anal cerci
  - (B) Dark brown body colour and anal cerci
  - (C) Presence of anal styles

- (D) Presence of sclerites
- Q5 Which of the following features is used to identify a male cockroach from a female cockroach?
  - (A) Presence of a boat shaped sternum on the 9<sup>th</sup> abdominal segment
  - (B) Presence of caudal styles
  - (C) Forewings with darker tegmina
  - (D) Presence of anal cerci
- **Q6** Which of the following characteristics is **incorrect** with respect to cockroach?
  - (A) Hypopharynx lies within the cavity enclosed by the mouth parts.
  - (B) In females,  $7^{\mathrm{th}}$ – $9^{\mathrm{th}}$  sterna together form a genital pouch.
  - (C)  $10^{
    m th}$  abdominal segment in both sexes, bears a pair of anal cerci.
  - (D) A ring of gastric caeca is present at the junction of midgut and hind gut.

Q7

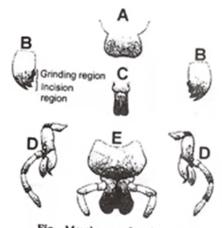


Fig. Mouthparts of cockroach.

The above figure is related with mouth parts of cockroach. Identify A to E -

	А	В	С	D	E
(a)	Maxilla	Hypopharynx	Labium	Mandible	Labrum
(b)	Mandible	Labium	Maxilla	Labrum	Hypopharynx
(c)	Labrum	Mandible	Hypopharynx	Maxilla	Labium
(d)	Labium	Hypopharynx	Labrum	Maxilla	Mandible

(A) (a)

(B) (b)

(C) (c)

- (D) (d)
- **Q8** In female cockroach, 7 th sternum together with 8 th and 9 th sterna forms -
  - (A) A brood / genital pouch
  - (B) Anal cercus
  - (C) Anal style
  - (D) None
- **Q9** Statement I: In Cockroach, gizzard has hard chitinous teeth.

Statement II: Mouth of cockroach can not cut down the food into small pieces.

- (A) Statement I and Statement II both are correct.
- (B) Statement I is correct, but Statement II is incorrect.
- (C) Statement I is incorrect, but Statement II is
- (D) Statement I and Statement II both are incorrect.
- **Q10** Which of the following is **correct** w.r.t. gastric caecae of cockroach?
  - (A) 6-8 blind tubules at the junction of crop and gizzard which eliminate wastes from haemolymph.
  - (B)

- 100-150 thin yellow tubules at the junction of foregut and midgut to eliminate wastes from haemolymph.
- (C) 6-8 blind tubules at the junction of gizzard and midgut to secrete digestive enzymes.
- (D) 6-8 blind tubules at junction of midgut and ileum to secrete digestive enzymes.
- Q11 Which part of alimentary canal of cockroach is used for storing food?
  - (A) Crop
- (B) Gizzard
- (C) Stomach
- (D) Gastric caecae
- Q12 Find the correct sequence of the parts of alimentary canal in cockroach.
  - (A) Mouth  $\rightarrow$  Pharynx  $\rightarrow$  Oesophagus  $\rightarrow$  Crop  $\rightarrow$ Gizzard  $\rightarrow$  Midgut  $\rightarrow$  Caecum  $\rightarrow$  Colon  $\rightarrow$ Rectum → Anus
  - (B) Mouth  $\rightarrow$  Pharynx  $\rightarrow$  Oesophagus  $\rightarrow$  Gizzard → Crop → Midgut → Ileum → Colon → Rectum → Anus
  - (C) Mouth  $\rightarrow$  Pharynx  $\rightarrow$  Oesophagus  $\rightarrow$  Crop  $\rightarrow$ Proventriculus → Midgut → Ileum → Colon → Rectum → Anus
  - (D) Mouth  $\rightarrow$  Pharynx  $\rightarrow$  Oesophagus  $\rightarrow$  Stomach → Crop → Midgut → Hindgut → Anus
- Q13 A ring of 6–8 blind tubules present at the junction of foregut and midgut and are called:
  - (A) gastric caecae which secrete digestive juice.
  - (B) hepatic caecae which secrete digestive juice.
  - (C) intestinal caecae which help in grinding the food.
  - (D) both (A) and (B).

Q14

## Match List-I with List-II.

List-I			List-II		
A.	Grinding of the food particles	P.	Hepatic caecae		
B.	Secrete gastric juice	Q.	10th segment		
C.	10 pairs	R.	Proventriculus		
D.	Anal cerci	S.	Spiracles		

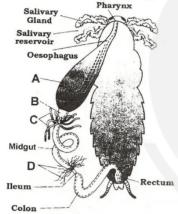
Choose the **correct** answer from the options given below:

- (A) A-S, B-R, C-P, D-Q
- (B) A-P, B-S, C-R, D-Q
- (C) A-Q, B-R, C-P, D-S
- (D) A-R, B-P, C-S, D-Q

Q15 In cockroach, crop and gizzards are the parts of:

- (A) hindgut.
- (B) foregut.
- (C) midgut.
- (D) none of these.

## **Q16** Identify structures A to D:



	Α	В	С	D
(a)	Gizzard	Crop	Hepatic	Malpighian
	Gizzaiu		caecae	tubules
(b)	Crop	Gizzard	Hepatic	Malpighian
			caecae	tubules
(c)	Crop		Malpighian	Hepatic
			tubules	caecae
(d)	Gizzard	Crop	Malpighian	Hepatic
			tubules	caecae

(A) (a)

(B) (b)

(C) (c)

(D)(d)



<b>Answer Ke</b>	y
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Q1	(A)	Q9	
Q2	(B)	Q10	
Q3	(A)	Q11	(A)
Q4	(C)	Q12	(C)
Q5	(B)	Q13	(D)
Q6	(D)	Q14	(D)
Q7	(C)	Q15	(B)
Q8	(A)	Q16	(B)

