NSEB 11th 2026

DPP-17

Structural Organization in Animals

1. **Assertion (A):** Frog lungs are pink sac-like structures located in the upper trunk.
Reason (R): They are responsible for cutaneous respiration.
(A) Both A and R true; R explains A
(B) A true; R false
(C) A false; R true
(D) Both false

2. Choose the correct statements from the following and mark the correct option from the given below:
1. Lymph lacks RBCs and contains only WBCs and proteins.
2. Blood transports waste, nutrients and gases.
3. Lymph vessels are part of the excretory system.
4. The frog heart is enclosed by a pericardial membrane.

(A) 1, 2 and 4 are correct
(B) 1 and 3 only
(C) Only 4
(D) All are correct

3. Which of the following accurately describes frog heart structure?
(A) 2 atria, 1 ventricle, no pericardium
(B) 2 ventricles, 1 atrium, covered by cloaca
(C) 2 atria, 1 ventricle, enclosed by pericardium
(D) 2 atria, 2 ventricles, enclosed by ureter

4. Match the circulatory components with their descriptions:

Column A		Column B	
A.	Sinus venosus	1.	Between kidney and lower body
B.	Conus arteriosus	2.	Between liver and Intestine
C.	Hepatic portal	3.	Receives blood from vena cava
D.	Renal portal	4.	Arterial output of ventricle

(A) A-1, B-3, C-2, D-4
(B) A-2, B-3, C-1, D-4
(C) A-3, B-4, C-2, D-1
(D) A-4, B-1, C-3, D-2

5. **Assertion (A):** Frogs are ammonotelic
Reason (R): Their nitrogenous waste is excreted primarily as ammonia through the cloaca.
(A) A and R true, R explains
(B) A and R true, R doesn't explain
(C) A true, R false
(D) Both false

6. Match the following

Gland		Function	
A.	Pituitary	1.	Secretes sex hormones
B.	Thyroid	2.	Stress and emergency hormone
C.	Gonads	3.	Regulates metabolism
D.	Adrenals	4.	Master gland regulating other glands

(A) A-3, B-2, C-1, D-4 (B) A-2, B-1, C-4, D-3
(C) A-4, B-3, C-1, D-2 (D) A-1, B-4, C-2, D-3

7. Mark the correct option after reading all the statements.
1. The frog's brain consists of forebrain, midbrain, hindbrain.
2. Cranial nerves arise from the spinal cord.
3. Brain exits skull through foramen magnum.
4. Nerves of autonomic system include sympathetic and parasympathetic.

(A) 1, 3 and 4 only (B) 2 and 4 only
(C) All are correct (D) 1 and 4 only

8. The brain of frog gives rise to ____ pairs of cranial nerves.
(A) 8 (B) 10
(C) 12 (D) 14

9. Match the following

Sense Organ		Stimulus Detected	
A.	Sensory papillae	1.	Gustation
B.	Nasal epithelium	2.	Touch
C.	Tympanum	3.	Smell
D.	Taste buds	4.	Sound and equillibrium

(A) A-2, B-3, C-4, D-1 (B) A-4, B-1, C-2, D-3
(C) A-1, B-2, C-3, D-4 (D) A-1, B-3, C-2, D-4

10. Choose the correct option from the following:

1. Frog's testes are attached to kidneys.
2. Vasa efferentia emerge from testes and open into Bidder's canal.
3. Ovaries in females open into the cloaca via oviducts.
4. Ureters in males serve both reproductive and excretory functions.

Which are correct?

(A) 1, 2, 3 and 4 (B) 1 and 3 only
(C) 2, 3 and 4 only (D) 1, 3 and 4 only

11. Which of the following is a functional similarity in male and female frogs?

(A) Presence of ovary and testes
(B) Cloacal aperture as the common opening
(C) Bidder's canal in both sexes
(D) Ureter acting as reproductive duct in both

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13. Each testis is attached to the upper part of the kidney by a fold of peritoneum called the ____

(A) cloaca (B) ureter
(C) mesorchium (D) Bidder's duct

Answer Key

1. (B)
2. (A)
3. (C)
4. (C)
5. (D)
6. (C)
7. (A)
8. (B)
9. (A)
10. (A)
11. (B)
12. (C)
13. (C)