

Structural Organisation in Animals — CBSE Pattern Test 2

Class 11 Biology · 90 minutes · 40 marks · Sections A–D with answer key · Narayan Gurukul Academy

Test 2 — CBSE Pattern (90 minutes, 40 marks)

Class 11 Biology · Structural Organisation in Animals · Narayan Gurukul Academy (ClassApna)

General Instructions: (1) This paper has four sections — Section A (1×10), Section B (2×4), Section C (3×4) and Section D (5×2) — total 40 marks. Time allowed: 90 minutes.
(2) All questions are compulsory. No overall choice is given; internal choice, where allowed, is clearly marked.
(3) For MCQ questions choose the single correct option; for VSA answers write a single line.
(4) Take $g = 10 \text{ m/s}^2$. All symbols carry their usual meaning. Use of a calculator is not permitted.

Section A — MCQ & VSA ($10 \times 1 = 10$ marks)

- The study of tissues is called
 - histology
 - cytology
 - anatomy
 - physiology
- Cuboidal epithelium occurs in
 - ducts of glands
 - the oesophagus
 - the trachea
 - the epidermis
- Blood is a type of
 - fluid connective tissue
 - epithelial tissue
 - muscular tissue
 - neural tissue
- Tendon and ligament are made of
 - dense regular connective tissue
 - loose connective tissue
 - adipose tissue
 - areolar tissue
- Cardiac muscle is found in the
 - heart wall
 - stomach
 - skeleton
 - lungs
- Skeletal muscle is
 - voluntary and striated
 - involuntary
 - unstriated
 - non-contractile
- Neural tissue is made of
 - neurons and neuroglia

- (B) only neurons
 - (C) only muscles
 - (D) epithelial cells
8. The kidney of the frog is
- (A) mesonephric
 - (B) pronephric
 - (C) metanephric
 - (D) absent
9. Where is cardiac muscle found?
10. What are neuroglia?

Section B — Short Answer I ($4 \times 2 = 8$ marks)

11. What is histology?
12. Why is blood called a fluid connective tissue?
13. Where is simple squamous epithelium found?
14. How many chambers does the frog's heart have?

Section C — Short Answer II ($4 \times 3 = 12$ marks)

15. What is the function of cilia in the respiratory tract?
16. Why is cardiac muscle said to be involuntary and striated?
17. Distinguish between a neuron and neuroglia.
18. State two functions of neural tissue.

Section D — Long Answers ($2 \times 5 = 10$ marks)

19. (a) Describe the structure of a skeletal muscle. (b) Describe the morphology of a frog.
20. (a) Describe the excretory organs of the frog. (b) Describe the digestive system of a frog.

Answer Key (Marking Scheme)

- Q1 — (A) histology. Q2 — (A) ducts of glands. Q3 — (A) fluid connective tissue. Q4 — (A) dense regular connective tissue. Q5 — (A) heart wall. Q6 — (A) voluntary and striated. Q7 — (A) neurons and neuroglia. Q8 — (A) mesonephric. Q9 — In the wall of the heart.
- Q10 — Neuroglia are the supporting, non-conducting cells of neural tissue.
- Q11 — Histology is the study of tissues.
- Q12 — Because it has a fluid matrix (plasma) with cells (blood cells) and transports substances, like other connective tissues.
- Q13 — Alveoli and blood-vessel lining.
- Q14 — Three chambers.
- Q15 — Cilia move mucus and trapped particles out of the respiratory tract.
- Q16 — It is not under conscious control (involuntary) yet shows striations.
- Q17 — A neuron conducts impulses; neuroglia support and protect neurons.
- Q18 — Conduction of impulses and control and coordination of body activities.

Q19 — (a) A bundle of muscle fibres (fascicles) held by connective tissue, each fibre being striated and multinucleate.
(b) Moist glandular skin, webbed feet, greenish colour, three-chambered heart.

Q20 — (a) A pair of mesonephric kidneys, ureters, cloaca and urinary bladder. (b) Mouth → buccal cavity → oesophagus
→ stomach → small intestine → large intestine → cloaca, with the liver and pancreas.