

Structural Organisation in Animals — CBSE Pattern Test 1

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

Test 1 — 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 four basic types of animal tissues are
 - epithelial, connective, muscular and neural
 - xylem, phloem, parenchyma and sclerenchyma
 - meristem, dermal, ground and vascular
 - none of these
- Simple squamous epithelium is found in
 - the lining of the alveoli
 - the skin
 - the stomach lining
 - the kidney tubules
- The most abundant tissue in the body is
 - connective tissue
 - epithelial tissue
 - muscular tissue
 - neural tissue
- The matrix of bone is rich in
 - calcium salts
 - fat
 - collagen only
 - water
- Smooth muscle is
 - involuntary and unstriated
 - voluntary and striated
 - involuntary and striated
 - voluntary and unstriated
- The functional unit of the nervous system is the
 - neuron
 - nephron
 - axon
 - dendrite
- The frog belongs to the class
 - Amphibia

- (B) Reptilia
 - (C) Aves
 - (D) Mammalia
8. The frog's heart has
- (A) three chambers
 - (B) four chambers
 - (C) two chambers
 - (D) one chamber
9. Define a tissue.
10. Name the three types of muscle tissue.

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

11. Where is simple squamous epithelium found?
12. Distinguish between tendon and ligament.
13. Which muscle is voluntary?
14. What is an axon?

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

15. Distinguish between simple and compound epithelium.
16. Distinguish between bone and cartilage.
17. Distinguish between striated and non-striated muscle.
18. State two features of *Rana tigrina*.

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

19. (a) Describe the types of simple epithelium with their locations. (b) Describe the types of connective tissue with examples.
20. (a) Describe the three types of muscle tissue with their locations. (b) Describe the structure of a neuron.

Answer Key (Marking Scheme)

- Q1 — (A) epithelial, connective, muscular and neural. Q2 — (A) the lining of the alveoli. Q3 — (A) connective tissue. Q4 — (A) calcium salts. Q5 — (A) involuntary and unstriated. Q6 — (A) neuron. Q7 — (A) Amphibia. Q8 — (A) three chambers.
- Q9 — A tissue is a group of similar cells performing a specific function.
- Q10 — Skeletal, smooth and cardiac.
- Q11 — Lining of the alveoli and blood vessels.
- Q12 — Tendon joins muscle to bone; ligament joins bone to bone.
- Q13 — Skeletal (striated) muscle.
- Q14 — The axon is the long process of a neuron that carries impulses away from the cell body.
- Q15 — Simple: single layer, lining/absorption; compound: many layers, protection.
- Q16 — Bone has a hard calcified matrix; cartilage has a flexible matrix.
- Q17 — Striated muscle is voluntary with bands; non-striated muscle is involuntary without bands.

Q18 — Moist glandular skin and webbed feet (or a three-chambered heart).

Q19 — (a) Squamous (alveoli), cuboidal (gland ducts), columnar (stomach lining), ciliated columnar (respiratory tract).

(b) Loose (areolar, adipose), dense (tendon), supporting (bone, cartilage), fluid (blood).

Q20 — (a) Skeletal (limbs, striated, voluntary), smooth (gut, unstriated, involuntary), cardiac (heart, striated, involuntary).

(b) Cell body (cyton) with dendrites and a long axon ending in nerve terminals.