

## The Living World — 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 · The Living World · Narayan Gurukul Academy (ClassApna)

General Instructions: (1) This paper has four sections — Section A ( $1 \times 10$ ), Section B ( $2 \times 4$ ), Section C ( $3 \times 4$ ) and Section D ( $5 \times 2$ ) — 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)

1. Which of the following is a defining characteristic of living organisms?

- (A) Metabolism
- (B) Growth
- (C) Reproduction
- (D) Movement

2. Growth in living organisms usually occurs

- (A) from inside
- (B) from outside
- (C) by surface accumulation
- (D) without cell division

3. The number of species described so far is about

- (A) 1.7–1.8 million
- (B) 10 million
- (C) 100 million
- (D) one million

4. The system of binomial nomenclature was given by

- (A) Carolus Linnaeus
- (B) Charles Darwin
- (C) Mendel
- (D) Aristotle

5. In a scientific name the first word denotes the

- (A) genus
- (B) species
- (C) family
- (D) order

6. The basic unit of classification is the

- (A) species
- (B) genus
- (C) family
- (D) order

7. The correct ascending sequence of taxonomic categories is

- (A) Species → Genus → Family → Order

- (B) Genus → Species → Family → Order  
(C) Species → Family → Genus → Order  
(D) Order → Family → Genus → Species
8. Herbarium sheets carry a label with  
(A) date, place, collector and name  
(B) only the name  
(C) only the date  
(D) only the collector
9. Define biology.
10. What is biodiversity?

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

11. Name the defining property of living organisms.
12. What is systematics?
13. Who proposed binomial nomenclature and what does the second word denote?
14. What is a taxonomic key?

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

15. Why is growth not a defining property of living organisms?
16. State any three rules of binomial nomenclature.
17. Arrange the taxonomic categories in ascending order.
18. Describe the role of botanical gardens as a taxonomical aid.

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

19. (a) Explain the need for classification of living organisms. (b) Describe the three processes included in taxonomy.
20. (a) Explain the hierarchy of taxonomic categories with the example of mango. (b) Distinguish between genus and species with examples.

### Answer Key (Marking Scheme)

- Q1 — (A) Metabolism. Q2 — (A) from inside. Q3 — (A) 1.7–1.8 million. Q4 — (A) Carolus Linnaeus. Q5 — (A) genus. Q6 — (A) species. Q7 — (A) Species → Genus → Family → Order. Q8 — (A) date, place, collector and name.
- Q9 — Biology is the science of life forms and living processes.
- Q10 — Biodiversity is the variety and variability of living organisms present on the earth.
- Q11 — Consciousness (the ability to sense the environment and respond to it).
- Q12 — Systematics is the study of the diversity of organisms and all their comparative and evolutionary relationships.
- Q13 — Carolus Linnaeus; the second word denotes the specific epithet (species).
- Q14 — A taxonomic key is a simple tool of paired contrasting statements (a dichotomous key) used to identify an organism.
- Q15 — Non-living objects also 'grow' by surface accumulation, and sterile living organisms do not reproduce; hence growth and reproduction are not defining properties.

Q16 — Names are in Latin and italicised; two words per name; genus capitalised, species in lowercase (underlined when handwritten).

Q17 — Species → Genus → Family → Order → Class → Phylum/Division → Kingdom.

Q18 — Botanical gardens keep living, labelled plants in protected conditions for reference, study and conservation, serving as a taxonomical aid.

Q19 — (a) Classification is needed to organise the enormous diversity of organisms and to study their relationships.  
(b) Characterisation, identification, classification and nomenclature.

Q20 — (a) *Mangifera* (genus) → *Anacardiaceae* (family) → *Sapindales* (order) → *Dicotyledonae* (class) → *Angiospermae* (division) → *Plantae* (kingdom). (b) Genus is a group of closely related species; species is a group of individuals with fundamental similarities that can interbreed.