

Biodiversity and Conservation — CBSE Pattern Test 1

Class 12 Biology · 90 minutes · 40 marks · Sections A–D with answer key · Narayan Gurukul Academy

Test 1 — CBSE Pattern (90 minutes, 40 marks)

Class 12 Biology · Biodiversity and Conservation · 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 number of global biodiversity hotspots is
 - 36
 - 25
 - 10
 - 50
- The 'Rivet Popper Hypothesis' was proposed by
 - Paul Ehrlich
 - Darwin
 - Odum
 - Tansley
- In situ conservation means conservation
 - in the natural habitat
 - in a zoo
 - in a seed bank
 - in a laboratory
- The Western Ghats is a
 - biodiversity hotspot
 - national park
 - seed bank
 - zoo
- Species richness generally
 - decreases towards the poles
 - increases towards the poles
 - is uniform
 - is random
- The 'Evil Quartet' refers to
 - four causes of biodiversity loss
 - four hotspots
 - four species
 - four ecosystems
- A national park allows
 - no human activity

- (B) all human activity
 - (C) only grazing
 - (D) only logging
8. The Ramsar Convention deals with
- (A) conservation of wetlands
 - (B) forests
 - (C) deserts
 - (D) mountains
9. What is biodiversity?
10. What is a biosphere reserve?

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

11. Name the levels of biodiversity.
12. What is the species–area relationship?
13. What is co-extinction?
14. Name two hotspots in India.

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

15. Describe the patterns of biodiversity.
16. Describe the causes of biodiversity loss.
17. Describe the strategies of in situ conservation.
18. Describe the strategies of ex situ conservation.

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

19. (a) Describe the levels and patterns of biodiversity. (b) Explain the importance of biodiversity.
20. (a) Describe the causes of biodiversity loss. (b) Describe the conservation strategies with examples.

Answer Key (Marking Scheme)

- Q1 — (A) 36. Q2 — (A) Paul Ehrlich. Q3 — (A) in the natural habitat. Q4 — (A) biodiversity hotspot. Q5 — (A) decreases towards the poles. Q6 — (A) four causes of biodiversity loss. Q7 — (A) no human activity. Q8 — (A) conservation of wetlands.
- Q9 — Biodiversity is the variety and variability of life.
- Q10 — A biosphere reserve protects biodiversity and supports sustainable use and research.
- Q11 — Genetic, species and ecological diversity.
- Q12 — Species richness increases with area (within a limit).
- Q13 — Co-extinction is the extinction of a species due to the loss of another.
- Q14 — Western Ghats and Eastern Himalayas.
- Q15 — Latitudinal gradient and species–area relationship.
- Q16 — Habitat loss, over-exploitation, alien species invasion and co-extinction.
- Q17 — Biosphere reserves, national parks and sanctuaries.
- Q18 — Zoos, seed banks and botanical gardens.

Q19 — (a) Genetic, species, ecological; latitudinal gradient and species–area. (b) Ecological stability, economic and ethical value.

Q20 — (a) The 'Evil Quartet'. (b) In situ (parks, sanctuaries) and ex situ (zoos, seed banks).