

Plant Kingdom — 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 · Plant Kingdom · 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 plant kingdom is divided into
 - cryptogams and phanerogams
 - monera and protista
 - thallophytes only
 - angiosperms only
- Bryophytes are called amphibians of the plant kingdom because
 - they need water for fertilisation
 - they live only in water
 - they are vascular
 - they bear seeds
- The dominant phase in bryophytes is the
 - gametophyte
 - sporophyte
 - zygote
 - seed
- Pteridophytes are the first plants with
 - vascular tissue
 - seeds
 - flowers
 - fruits
- The dominant phase in pteridophytes is the
 - sporophyte
 - gametophyte
 - zygote
 - seed
- Gymnosperms bear
 - naked seeds
 - seeds in fruits
 - no seeds
 - only flowers
- Angiosperms bear seeds enclosed in
 - fruits

- (B) naked
 - (C) cones
 - (D) sporangia
8. Angiosperms are divided into
- (A) monocots and dicots
 - (B) only monocots
 - (C) only dicots
 - (D) vascular and non-vascular
9. What are cryptogams?
10. What is a prothallus?

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

11. What are phanerogams?
12. Which phase is dominant in bryophytes?
13. Name two pteridophytes.
14. Name the two classes of angiosperms.

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

15. Explain alternation of generations in plants.
16. State two characteristics of bryophytes.
17. State two features of gymnosperms.
18. Distinguish between monocots and dicots.

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

19. (a) Describe the classification of the plant kingdom. (b) Describe the life cycle of a moss.
20. (a) Describe the life cycle of Pinus. (b) Compare angiosperms with gymnosperms.

Answer Key (Marking Scheme)

- Q1 — (A) cryptogams and phanerogams. Q2 — (A) they need water for fertilisation. Q3 — (A) gametophyte. Q4 — (A) vascular tissue. Q5 — (A) sporophyte. Q6 — (A) naked seeds. Q7 — (A) fruits. Q8 — (A) monocots and dicots.
- Q9 — Cryptogams are plants with hidden reproductive organs and no seeds (bryophytes, pteridophytes).
- Q10 — The prothallus is the small gametophyte of a pteridophyte.
- Q11 — Phanerogams are seed-bearing plants with visible reproductive organs (gymnosperms, angiosperms).
- Q12 — The gametophyte.
- Q13 — Pteris, Selaginella (or Equisetum, Lycopodium).
- Q14 — Monocotyledons and dicotyledons.
- Q15 — Alternation of a haploid gametophyte (gametes) with a diploid sporophyte (spores); the sporophyte dominance increases from bryophytes to angiosperms.
- Q16 — They need water for fertilisation and the sporophyte depends on the gametophyte.
- Q17 — Naked seeds (ovules not enclosed in an ovary) and a dominant sporophyte with reduced gametophytes.

Q18 — Monocots: one cotyledon, parallel venation, floral parts in 3s; dicots: two cotyledons, reticulate venation, floral parts in 4s or 5s.

Q19 — (a) Cryptogams (bryophytes, pteridophytes) and phanerogams (gymnosperms, angiosperms). (b) Spore → protonema → gametophyte (antheridia/archegonia) → fertilisation → zygote → dependent sporophyte → capsule → spores.

Q20 — (a) Sporophyte with cones → microspores/megaspores → pollen and reduced female gametophyte → ovule → seed. (b) Angiosperms have flowers and seeds enclosed in fruits; gymnosperms have naked seeds and no true flowers.