

Plant Kingdom — 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 · 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 haploid phase in alternation of generations is the
 - gametophyte
 - sporophyte
 - zygote
 - seed
- The sporophyte of bryophytes is attached to and dependent on the
 - gametophyte
 - root
 - leaf
 - flower
- The gametophyte of pteridophytes is called a
 - prothallus
 - thallus
 - sporophyll
 - strobilus
- Ovules in gymnosperms are
 - not enclosed in an ovary
 - enclosed in an ovary
 - absent
 - inside fruits
- The most advanced group of plants is the
 - angiosperms
 - gymnosperms
 - pteridophytes
 - bryophytes
- Which group provides the majority of food and medicines?
 - Angiosperms
 - Bryophytes
 - Pteridophytes
 - Gymnosperms
- An example of a liverwort is
 - Marchantia

- (B) Funaria
 - (C) Selaginella
 - (D) Pinus
8. An example of a gymnosperm is
- (A) Pinus
 - (B) Pteris
 - (C) Funaria
 - (D) Riccia
9. Which plants are called the first vascular plants?
10. Why are gymnosperms so called?

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

11. What are sporophylls?
12. Which phase is dominant in gymnosperms?
13. What are angiosperms?
14. Name one economically important bryophyte.

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

15. What is meant by the dominant phase in the life cycle?
16. How does the bryophyte sporophyte obtain nutrition?
17. How are male and female gametophytes in gymnosperms reduced?
18. State two characteristic features of angiosperms.

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

19. (a) Describe the life cycle of a pteridophyte. (b) Explain the economic importance of bryophytes.
20. (a) Describe the life cycle of an angiosperm. (b) Summarise the increasing dominance of the sporophyte across the plant groups.

Answer Key (Marking Scheme)

- Q1 — (A) gametophyte. Q2 — (A) gametophyte. Q3 — (A) prothallus. Q4 — (A) not enclosed in an ovary. Q5 — (A) angiosperms. Q6 — (A) Angiosperms. Q7 — (A) Marchantia. Q8 — (A) Pinus.
- Q9 — Pteridophytes.
- Q10 — Because their seeds are not enclosed in an ovary (they are naked).
- Q11 — Sporophylls are the spore-bearing leaves of pteridophytes (often forming a strobilus).
- Q12 — The sporophyte.
- Q13 — Angiosperms are flowering plants whose seeds are enclosed in fruits.
- Q14 — Sphagnum (used as peat/packing material).
- Q15 — The dominant phase is the conspicuous, long-lived main stage of the life cycle.
- Q16 — The sporophyte remains attached to the gametophyte and draws nutrition from it.
- Q17 — The male gametophyte is reduced to a pollen grain and the female gametophyte to a few cells within the ovule.
- Q18 — Seeds enclosed in fruits and the presence of flowers (double fertilisation).

Q19 — (a) Sporophyte → sporangia → spores → prothallus → antheridia/archegonia → fertilisation → zygote → sporophyte. (b) Sphagnum provides peat; bryophytes prevent soil erosion and some are medicinal.

Q20 — (a) Sporophyte → flower → microspores/megaspores → gametophytes → double fertilisation → seed in fruit. (b) bryophytes (gametophyte dominant) → pteridophytes → gymnosperms → angiosperms (sporophyte most dominant, gametophyte most reduced).