

PRACTICE WORKBOOK

CLASS 11

Biology

Six selected units on cells, enzymes, cell division, photosynthesis, respiration and circulation, with original answered practice. Practice marks are editorial allocations, not an official paper pattern.



6 practice units
36 tasks with answer guidance

Name / नाम: _____

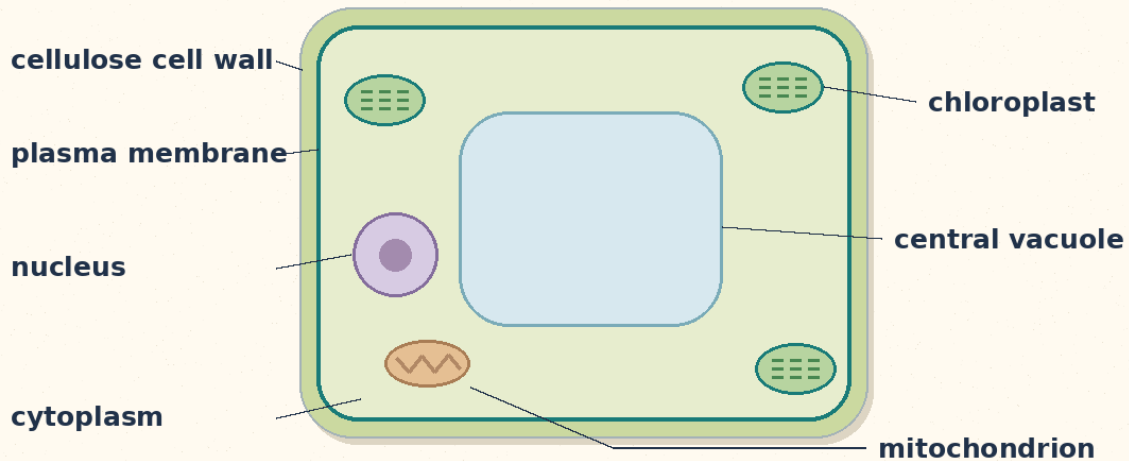
Original selected-topic practice. Use alongside school lessons and the prescribed textbook. The contents define this book's scope.

UNIT 01 · LOOK & EXPLAIN

Cell atlas: structure supports function

Plant cell: structures and their locations

Schematic — shapes and relative sizes are not to scale



The cell wall lies outside the membrane. Organelles remain in the cytoplasm.

Use the labels and worked example to explain the idea. The diagram is schematic unless a scale is given.

Look, annotate and explain

Identify the parts or values that matter. Add a label or annotation to show a connection. Explain how the diagram supports the worked example, then use it with the practice on the next page.

UNIT 01 · APPLY & EXPLAIN

Cell atlas: structure supports function

4. A toxin disrupts Golgi sorting. Predict one effect on secretion and explain. [2 marks]

5. Explain how a plant cell wall and central vacuole together help a herbaceous stem remain firm. [3 marks]

6. Compare smooth and rough endoplasmic reticulum and explain one function of each. [3 marks]

Show your thinking with a drawing, diagram or explanation.

Pause & reflect

What can I explain now? What will I try again?

☐ I tried ☐ I explained ☐ I checked



UNIT 01 · ANSWER GUIDANCE

Cell atlas: structure supports function

1. The plasma membrane.
2. Most root cells are not exposed to light and do not perform photosynthesis; they may contain other plastids instead.
3. Both have a plasma membrane and ribosomes. Both also contain cytoplasm and genetic material.
4. Proteins may fail to reach the correct secretory vesicles, reducing or misdirecting secretion because the Golgi sorts cargo for its destination.
5. Water entering the vacuole increases turgor pressure. The rigid wall resists expansion, and the resulting pressure supports the cells and stem.
6. Rough ER bears ribosomes and participates in synthesis and processing of secreted or membrane proteins. Smooth ER lacks attached ribosomes and contributes to lipid synthesis; specialised smooth ER can also store calcium.

Teaching note

For every label, ask what the structure makes possible and whether all cells of that group have it.

Curriculum reference: https://cbseacademic.nic.in/web_material/CurriculumMain27/SecPart2/Biology_SecP2_2026-27.pdf

Selected units; outcomes are publisher-defined. Practical, project and prescribed literature requirements must also be studied through school.