

OUAT 2026 — Chapter-wise Important Topics

High-weightage chapters, expected question count & last-minute tips · Physics · Chemistry · Biology · Maths · Agriculture GK

Total Questions: 200 **Total Marks:** 400 (2 per Q) **Negative Marking:** -1 per wrong **Duration:** 2 Hours

Subject-wise Question Distribution

Subject	Questions	Marks	Difficulty	Priority
Biology	70	140	Moderate–High	■■■■■
Chemistry	50	100	Moderate	■■■■
Physics	40	80	Moderate	■■■■
Mathematics	20	40	Moderate	■■■
Agriculture GK	20	40	Easy–Moderate	■■■

■ BIOLOGY — 70 Questions (35% of paper)

Chapter / Topic	Expected Qs	Must-Study Subtopics	Weight
Cell Biology & Cell Division	8–10	Mitosis, Meiosis, Cell organelles, Cell cycle	■ Very High
Genetics & Heredity	8–10	Mendel's laws, Linkage, Mutation, Blood groups	■ Very High
Plant Physiology	8–10	Photosynthesis (light/dark rxn), Transpiration, Respiration	■ Very High
Human Physiology	7–9	Digestion, Circulation, Excretion, Nervous system	■ High
Ecology & Environment	6–8	Food chain/web, Biomes, Pollution, Biodiversity	■ High
Reproduction (Plants & Animals)	5–7	Sexual/asexual repro, Fertilisation, Embryogenesis	■ High
Biotechnology & Application	5–6	PCR, rDNA, GM crops, Bioreactors	■ Moderate
Diversity of Living Organisms	4–5	Classification systems, Kingdom, Taxonomic ranks	■ Moderate
Biomolecules	4–5	Proteins, Enzymes, Nucleic acids, Lipids	■ Moderate
Evolution	3–4	Darwin, Natural selection, Hardy-Weinberg	■ Low–Mod

■■ CHEMISTRY — 50 Questions (25% of paper)

Chapter / Topic	Expected Qs	Must-Study Subtopics	Weight
Organic Chemistry — Reactions	8–10	Aldol condensation, Esterification, Nucleophilic sub	■ Very High
Chemical Bonding	5–7	VSEPR, Hybridisation, MO theory, Polarity	■ Very High
Equilibrium	5–6	Le Chatelier, Kp/Kc, Ionic equilibrium, pH	■ High

Electrochemistry	4–5	Electrolysis, Nernst equation, Galvanic cells	■ High
p-Block Elements	4–5	Group 15-18 properties, Oxides, Hydrides	■ High
Thermodynamics	4–5	Enthalpy, Entropy, Gibbs energy, Hess law	■ High
Coordination Compounds	4–5	Nomenclature, Isomerism, Crystal field theory	■ Moderate
Solid State & Solutions	4–5	Crystal structures, Colligative properties, Raoult's law	■ Moderate
Biomolecules & Polymers	3–4	Carbohydrates, Proteins, Natural/synthetic polymers	■ Low–Mod
d & f Block Elements	3–4	Transition metals, Lanthanides, Actinides	■ Low–Mod

■ PHYSICS — 40 Questions (20% of paper)

Chapter / Topic	Expected Qs	Must-Study Subtopics	Weight
Electrostatics & Current	7–9	Coulomb's law, Capacitors, Ohm's law, Kirchhoff's	■ Very High
Modern Physics	5–7	Photoelectric effect, Bohr model, Radioactivity	■ Very High
Optics	5–6	Reflection, Refraction, Lenses, Wave optics, Young's	■ High
Mechanics (Laws of Motion)	4–5	Newton's laws, Friction, Momentum, Circular motion	■ High
Thermodynamics	4–5	Laws of thermodynamics, Heat engines, Gas laws	■ High
Magnetism & EMI	4–5	Biot-Savart, Faraday's law, Lenz's law, AC circuits	■ Moderate
Waves & Oscillations	3–4	SHM, Wave speed, Doppler effect, Resonance	■ Moderate
Work, Energy & Power	3–4	Conservation of energy, Collisions, Potential energy	■ Low–Mod

■ MATHEMATICS (20 Qs) & ■ Agriculture GK (20 Qs)

Topic	Exp. Qs
Coordinate Geometry	4–5
Integral Calculus	3–4
Differential Calculus	3–4
Probability & Statistics	3–4
Matrices & Determinants	2–3
Trigonometry	2–3
Complex Numbers	1–2

Topic	Exp. Qs
Major Crops of India / Odisha	4–5
Soil Science & Fertility	3–4
Irrigation & Water Mgmt.	3–4
Agri. Schemes & Policies 2024–26	3–4
Plant Diseases & Pests	2–3
Horticulture Basics	2–3
Animal Husbandry Basics	1–2

■ Last-Minute Preparation Tips

#	Tip
1	Focus on Biology — it carries 35% marks. Master Cell Division, Genetics & Photosynthesis first.
2	For Chemistry, practice reaction mechanisms daily. Organic Chemistry is consistently high-scorer.

3	In Physics, practice numerical from Electrostatics & Modern Physics — they're formula-heavy but predictable.
4	Agriculture GK: revise government schemes (PM-KISAN, PMFBY, e-NAM) and Odisha-specific crop data.
5	Practice negative marking discipline — attempt only confident answers. Skip guesses.
6	Revise NCERT Biology (Class 11 & 12) thoroughly — ~60% of OUAT Bio questions are NCERT-based.
7	Attempt previous 3 years' OUAT papers under timed conditions in the final week.