

Bachelor of Science (B.Sc.) – BZC (Botany, Zoology, Chemistry) — Common Syllabus

Duration: 3 years (6 semesters) | Evaluation: Theory exams, Practicals, Fieldwork, and Projects

Course Structure

- Duration: 3 years (6 semesters).
- Each semester includes core theory papers and practicals in Botany, Zoology, and Chemistry.
- Credits: Typically 3–4 per paper.
- Evaluation: Written exams, internal assessments, fieldwork, and project/lab work.

Semester I — Suggested Papers

- Botany – I (Plant Diversity – Algae, Fungi, Bryophytes)
- Zoology – I (Animal Diversity – Non-Chordates)
- Chemistry – I (Inorganic Chemistry and Atomic Structure)
- Practical – Botany, Zoology, and Chemistry Lab – I

Semester II — Suggested Papers

- Botany – II (Pteridophytes, Gymnosperms, and Paleobotany)
- Zoology – II (Chordates and Comparative Anatomy)
- Chemistry – II (Organic Chemistry – Basic Concepts and Hydrocarbons)
- Practical – Botany, Zoology, and Chemistry Lab – II

Semester III — Suggested Papers

- Botany – III (Plant Anatomy and Embryology)
- Zoology – III (Cell Biology and Genetics)
- Chemistry – III (Physical Chemistry – Thermodynamics and Chemical Kinetics)
- Practical – Botany, Zoology, and Chemistry Lab – III

Semester IV — Suggested Papers

- Botany – IV (Plant Physiology and Metabolism)
- Zoology – IV (Animal Physiology and Endocrinology)
- Chemistry – IV (Inorganic Chemistry – Coordination Compounds and Spectroscopy)
- Practical – Botany, Zoology, and Chemistry Lab – IV

Semester V — Suggested Papers

- Botany – V (Ecology and Environmental Botany)
- Zoology – V (Developmental Biology and Evolution)
- Chemistry – V (Organic Chemistry – Functional Groups and Biomolecules)

- Practical – Botany, Zoology, and Chemistry Lab – V
- Skill Enhancement Course / Field Study

Semester VI — Suggested Papers

- Botany – VI (Plant Biotechnology and Economic Botany)
- Zoology – VI (Applied Zoology, Ecology, and Conservation Biology)
- Chemistry – VI (Physical Chemistry – Electrochemistry and Analytical Techniques)
- Practical – Comprehensive Botany, Zoology, and Chemistry Lab – VI
- Major Project / Dissertation / Viva Voce

Electives (Indicative List)

- Environmental Biology and Conservation
- Biotechnology and Genetic Engineering
- Medicinal Plants and Pharmacognosy
- Analytical Chemistry and Spectroscopy
- Animal Behavior and Physiology
- Microbiology and Plant Pathology

Notes:

- This common syllabus is designed based on UGC model curriculum and leading Indian university structures for B.Sc. (BZC).
- Each paper generally carries 100 marks, with a 70:30 split between external and internal evaluation.
- Practical and fieldwork components are compulsory each semester.
- Final year includes a project or field-based study for environmental and biodiversity awareness.

Prepared by: ChatGPT — Common B.Sc. BZC Syllabus Template

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