

# Bachelor of Science (B.Sc.) – PBZ

**Duration:** 3 Years (6 Semesters)

**Eligibility:** 10+2 with Science (PCB)

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## Semester – I

Subject
Physics – I (Mechanics & Properties of Matter)
Botany – I (Plant Diversity & Microbiology)
Zoology – I (Animal Diversity – Invertebrates)
Physics Practical – I
Botany Practical – I
Zoology Practical – I

### Course Details:

This semester provides a foundation in mechanics, basic plant diversity, and animal classification. Practical sessions introduce laboratory tools and biological specimen study.

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## Semester – II

Subject
Physics – II (Electricity & Magnetism)
Botany – II (Plant Anatomy)
Zoology – II (Animal Diversity – Vertebrates)
Physics Practical – II
Botany Practical – II
Zoology Practical – II

### Course Details:

Students learn electrical and magnetic concepts along with plant tissue systems and vertebrate zoology, supported by experimental and microscopic practical work.

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## Semester – III

Subject
Physics – III (Thermodynamics & Waves)
Botany – III (Plant Physiology)
Zoology – III (Cell Biology)
Physics Practical – III
Botany Practical – III
Zoology Practical – III

### Course Details:

Focuses on energy, heat, wave motion, plant physiological processes, and cellular structure, enhancing analytical and experimental skills.

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## Semester – IV

Subject
Physics – IV (Optics & Modern Physics)
Botany – IV (Genetics & Plant Breeding)
Zoology – IV (Genetics & Molecular Biology)
Physics Practical – IV
Botany Practical – IV
Zoology Practical – IV

### Course Details:

This semester introduces optics, atomic physics, and genetic principles essential for modern biological and physical sciences.

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## Semester – V

Subject
Physics – V (Quantum Mechanics)
Botany – V (Ecology & Environmental Botany)

<b>Subject</b>
Zoology – V (Evolution & Developmental Biology)
Physics Practical – V
Botany Practical – V
Zoology Practical – V

### **Course Details:**

Advanced topics such as quantum concepts, ecological systems, and evolutionary biology prepare students for research and higher education.

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## **Semester – VI**

<b>Subject</b>
Physics – VI (Solid State / Nuclear Physics)
Botany – VI (Plant Biotechnology & Economic Botany)
Zoology – VI (Biotechnology, Immunology & Environmental Biology)
Physics Practical – VI
Botany Practical – VI
Zoology Practical – VI

### **Course Details:**

Final semester emphasizes applied sciences, biotechnology, and interdisciplinary knowledge with extensive practical training for professional careers.

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## **Scheme of Examination**

- **Theory:** 70 Marks
- **Practical:** 30 Marks