Bachelor of Science (B.Sc.) – PCM

Duration: 3 Years (6 Semesters)
Eligibility: 10+2 with Science (PCM)

Semester – I

S. No.	Subject
1	Physics – I (Mechanics & Properties of Matter)
2	Chemistry – I (Inorganic Chemistry)
3	Mathematics – I (Calculus)
4	Physics Practical – I
5	Chemistry Practical – I

Course Details:

This semester builds the foundation of physical sciences. Students study basic mechanics, atomic structure, chemical bonding, and differential calculus along with laboratory practices.

Semester – II

S. No.	Subject
1	Physics – II (Electricity & Magnetism)
2	Chemistry – II (Organic Chemistry – I)
3	Mathematics – II (Integral Calculus & Differential Equations)
4	Physics Practical – II
5	Chemistry Practical – II

Course Details:

Focus on electricity, magnetism, organic reactions, and advanced calculus concepts. Practical training enhances experimental and analytical skills.

Semester – III

S. No.	Subject
1	Physics – III (Thermodynamics & Waves)
2	Chemistry – III (Physical Chemistry – I)
3	Mathematics – III (Linear Algebra)
4	Physics Practical – III
5	Chemistry Practical – III

Course Details:

Students gain understanding of heat, thermodynamics, wave motion, chemical kinetics, and matrix theory with intensive lab work.

Semester – IV

S. No.	Subject
1	Physics – IV (Optics & Modern Physics)
2	Chemistry – IV (Organic Chemistry – II)
3	Mathematics – IV (Vector Analysis & Complex Analysis)
4	Physics Practical – IV
5	Chemistry Practical – IV

Course Details:

This semester introduces optics, atomic physics, advanced organic chemistry, and mathematical tools used in physics and engineering fields.

Semester – V

S. No.	Subject
1	Physics – V (Quantum Mechanics)
2	Chemistry – V (Inorganic Chemistry – II)
3	Mathematics – V (Numerical Methods)
4	Physics Practical – V
5	Chemistry Practical – V

Course Details:

Advanced concepts like quantum theory, coordination chemistry, and numerical techniques are covered to prepare students for higher studies and research.

Semester – VI

S. No.	Subject
1	Physics – VI (Solid State Physics / Nuclear Physics)
2	Chemistry – VI (Physical Chemistry – II)
3	Mathematics – VI (Operations Research / Advanced Algebra)
4	Physics Practical – VI
5	Chemistry Practical – VI

Course Details:

Final semester focuses on specialized and applied topics, strengthening theoretical understanding and practical expertise for professional and academic careers.

Scheme of Examination

- **Theory:** 70 Marks
- **Practical:** 30 Marks
- **Total:** 100 Marks per paper