SPC Government College
Beawer Road, Ajmer-305001

Program Outcomes of Mathematics

Programme Outcome

- ❖ Critical Thinking: Inculcate critical thinking to carry out scientific investigation objectively. Formulate coherent arguments; critically evaluate practices, policies and theories by following scientific approach to knowledge development. Critically evaluate ideas, evidence and experiences from an open-minded and reasoned perspective.

- ❖ Knowledge Skill: Equip the student with skills to analyse problems, formulate a hypothesis, evaluate and validate results. Apply their competencies to solve different kinds of mathematical problems, rather than replicate curriculum content knowledge.

- ❖ Scientific Communication Skills: Imbibe effective scientific and / or technical communication in both oral and writing. Ability to show the importance of the Mathematics as precursor to various scientific developments since the beginning of the civilization.

- ❖ Analytical Reasoning: Ability to evaluate the reliability and relevance of evidence; identify logical flaws and holes in the arguments of others; analyse and synthesize data from a variety of sources; draw valid conclusions and support them with evidence and examples.

- ❖ Lifelong Learning: Ability to think, acquire knowledge and skills through logical reasoning and to inculcate the habit of self-learning throughout life, through self-paced and self- directed learning aimed at personal

development, and adapting to changing academic demands of work place through knowledge/ skill development/ reskilling.

❖ Research Skills: Prepare students for pursuing research or careers in industry in concerned subject and allied fields. Capability to use appropriate software to solve various problems and to apply programming concepts of C and Mathematica/ MatLab to various scientific investigations, problem solving and interpretation.

Programme Specific Outcome of M.Sc. Mathematics

❖ Strong Foundation in Knowledge: Have strong foundation in core areas of Mathematics, and able to communicate Mathematics effectively.

❖ Abstract Skills: Evaluate hypotheses, theories, methods and evidence within their proper contexts Problem Solving: Solve complex problems by critical understanding, analysis and synthesis.

❖ Proficiency in Interdisciplinary Skills: Select, interpret and critically evaluate information from a range of sources that include books, scientific reports, journals, case studies and internet.

❖ Application and Research Efficiency: Provide a systematic understanding of the concepts of mathematics and their application in the real world- to an advanced level, and enhance career prospects in a huge array of fields, viz. in industry, commerce, education, finance and research.

Course Outcome (Sem.I, Sem. II, Sem. III, Sem.IV)

Abstract Algebra	Linear Algebra	Functional Analysis I	Functional Analysis II
Complex Analysis	Measure Theory	Ad. Diff. Eq. & CV	Integral Eq.
Tensors	Differential Geometry	Numerical Analysis	Numerical Analysis
Metric Space	Topology	Relativity	Cosmology
Special Functions	Integral Transform	Continuum Mechanics	Continuum Mechanics