

St. Joseph Vaz College, Cortalim-Goa.

Faculty: Science

Department: Mathematics

Programme Outcomes

PO1. Critical Thinking: Acquire knowledge of theoretical and practical aspects; enhance innovative ideas in science and technology, develop and investigate throughout their learning from different perspectives.

PO2. Effective Communication: Able to understand, converse, and direct the scientific knowledge gained.

PO3. Social Interaction: Able to analyze the different aspects and interpret the data by following the scientific methods and hence solve the different problems in the society at large.

PO4. Effective Citizenship: Helps in understanding different areas of science such as Chemistry, Botany, Physics and Mathematics as this course forms the basis of science and develops the method of understanding and selflessness.

PO5. Ethics: as a result of gaining scientific knowledge they recognize different value systems and moral dimensions of the decisions taken and accept the responsibilities.

PO6. Environment and Sustainability: Understand the issues of environmental perspective and discover ways for sustainable development.

PO7. Self directed and Life-long Learning: In the process, students acquire skills, design, apply and utilize the technology in day to day life.

Programme Specific Outcomes

PSO1: Acquire knowledge of basic Mathematical concepts.

PSO2: Understand and develop Mathematical arguments in a logical manner.

PSO3: Acquire problem solving, reasoning and critical thinking skills.

PSO4: Apply knowledge of Mathematics in solving real life problems.

Course Name: Mathematical Techniques in Competitive Exams

Course Code: MAT-131

Class: F.Y.B.Sc.

Course Outcomes

The student will be able to

CO1. Apply Mathematical techniques in solving problems.

CO2. Identify tricks in solving problems quickly.

CO3. Employ various strategies to solve problems arising in various competitive exams.

CO4. Manage time in answering several questions appearing in the exam.

Course Name: Numerical Analysis using Python/SageMath

Course Code: MAT-141

Class: F.Y.B.Sc.

Course Outcomes

The student will be able to

CO1. Find the roots of algebraic and transcendental equations.

CO2. Apply Interpolation to solve real life problems.

CO3. Make use of the techniques of numerical differentiation and integration.

CO4. Determine the best line/quadratic curve/exponential curve to fit the given data.

CO5. Utilize Python/SageMath software to aid mathematical pursuits.