KABI JAGADRAM ROY GOVERNMENT GENERAL DEGREE COLLEGE

Certificate Course

on

"Importance of Mathematics in Competitive Examinations"
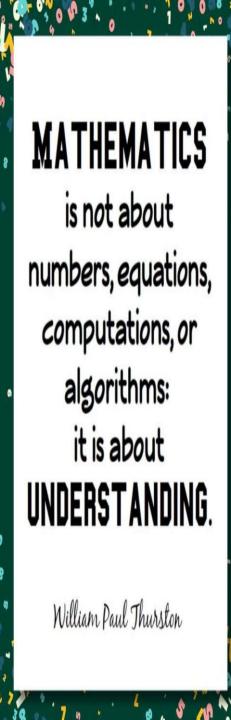
2022 (Summer Vacation)

Organized by
Department of Mathematics
(In collaboration with IQAC)

Course Duration: 13.06.2022 to 25.06.2022 (30 hours)
Number of Credits: 2
Course Fee: NIL

Course Organizing Committee

Prof. Aloke Kumar Das *(Officer-in-Charge, KJRGGDC, Mejia)*
Prof, Asesh Kumar Maji (IQAC Coordination, Associate Professor, Department of Geology)
Prof. Biswajit Bera *(Course Coordinator, Assistant Professor, Department of Mathematics)*
Prof. Avisek Sen *(Assistant Professor, Department of Commerce)*
Prof. Md Yasin khan *(Assistant Professor, Department of Mathematics)*

MATHEMATICS
is not about
numbers, equations,
computations, or
algorithms:
it is about
UNDERSTANDING.

William Paul Thurston

About the Course: Our "Importance of Mathematics in Competitive Examinations" course is designed to boost your understanding and skills in key mathematical concepts. Why is this important? Many competitive exams, including SSC, PSC, UPSC, Bank, PO, and RRBs, require strong math skills. This course will equip you with the foundational knowledge and problem-solving techniques you need to excel in the quantitative sections of these examinations.

Course objective: *The basic objective of the course are –*

- To provide easy technique of solving mathematical problems for competitive examinations.
- Providing a solid understanding of fundamental mathematical concepts
- To develop fundamental arithmetic concepts like the concept of number, order, units of measurement, size and shape etc.
- Developing the ability to apply these concepts and solve problems encountered in competitive exams efficiently and accurately.

Course Content:

Basic Algebra: *Number system, Ratio, Integer, H.C.F and L.C.M, Basic algebraic formula, Divisibility.*   [10hrs]

Arithmetic: *Averages, Percentages, Time and Distance, Simple and Compound Interest, Profit and loss, etc.*   [10hrs]

Geometry: *Point, Straight line, Triangle, Quadrilateral, Cube.*   [8hrs]

Statistic: *Mean, Median, Mode*   [2hrs]

Learning Outcomes:

- *Grasp concepts of fractions, decimals, and percentages.*
- *Solve problems involving ratios, proportions, and rate of interest.*
- *Recognize and understand basic algebraic expressions and formula.*
- *Work with geometric shapes and their properties (area, perimeter, volume).*
- *Analyse and break down complex mathematical problems into smaller, manageable steps.*
- *Apply relevant mathematical concepts and formulas to solve problems accurately*
- *Develop logical reasoning and critical thinking skills.*
- *Enhance your ability to approach and solve problems efficiently.*
- *Appreciate the relevance and importance of basic mathematics in various competitive exams and everyday life.*
- *Increase your confidence and test-taking ability in the quantitative sections of competitive exam.*

Assessment and Certification: There would be an evaluative test of 50 marks (MCQ Test) at the end of the course. The students would get certificates on successfully completion of the course.

Grading:

Marks obtained(%)	Grade	Marks obtained(%)	Grade
80 & above	A+	30-39	B
60-79	A	Less than 30	C
40-59	B+		