

CERTIFICATE COURSE
ON

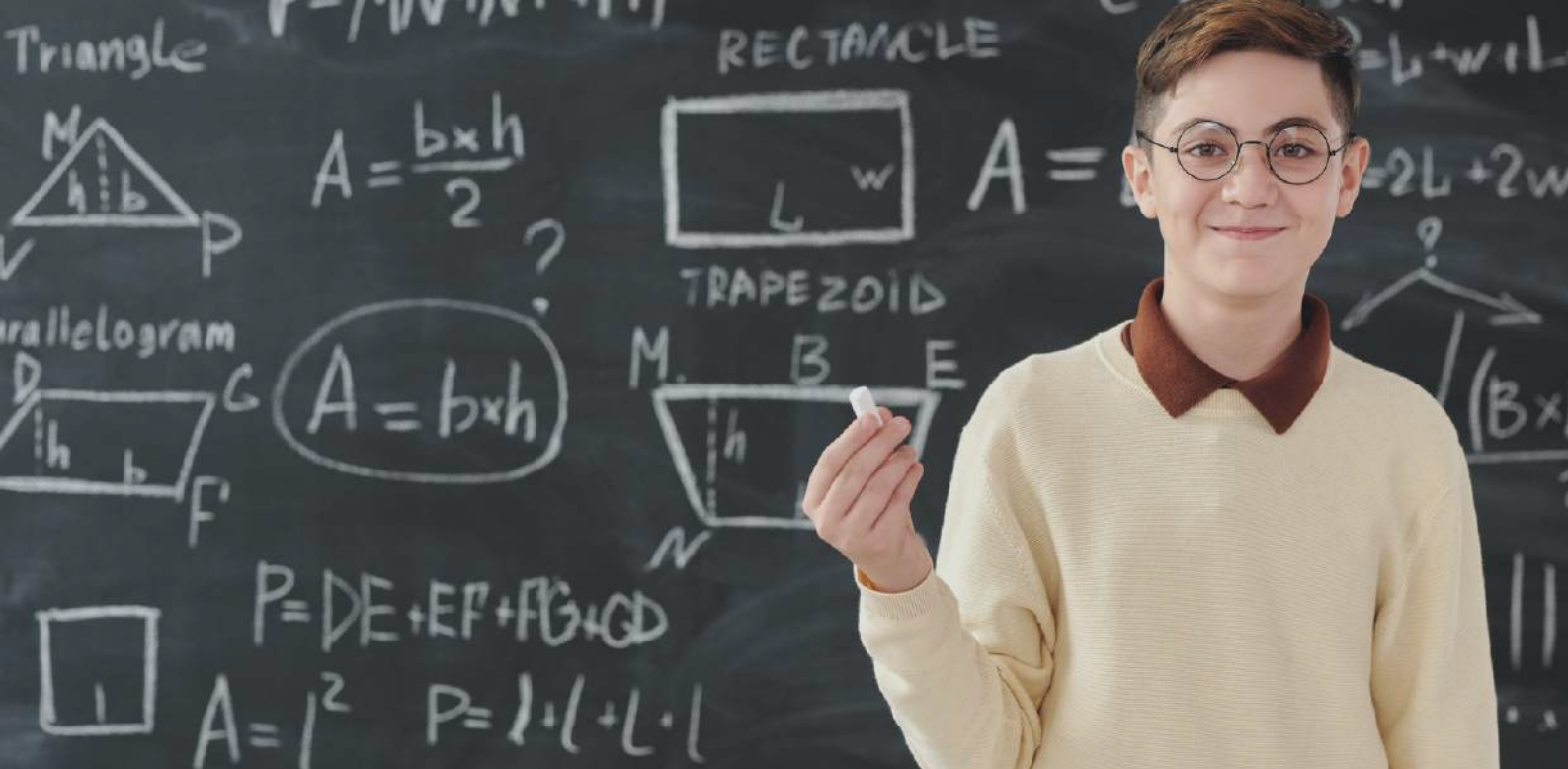
General Mathematics for Competitive Examination

(WCC/CL/MA01)

Organised by

DEPARTMENT OF MATHEMATICS
WOMEN'S CHRISTIAN COLLEGE, KOLKATA

Course Fees: No Registration Fee is required for this certificate course.



About the Course

The students are intended to acquire knowledge about some basic concepts, principles, and processes for solving problems of mathematics at the secondary stage which will help them to succeed in different Competitive examinations. To improve the problem-solving skill of students we have designed the course in such a manner that they can learn the techniques to solve simple school mathematical problems. The course will provide problems and their solutions to the students.

Eligibility

Students of Semester II and Semester IV are eligible to apply for this course.

Course Objectives

Upon completion of the course, the students will be able to:

Develop conception:

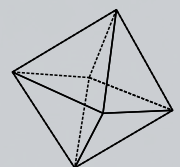
- (i) Develop a good understanding of numbers and the number system.
- (ii) Maximizing their counting ability.
- (iii) Properties of numbers and number sequences including negative numbers.
- (iv) Good understanding of place value and order, including reading and writing numbers.
- (v) Understanding the principle of rounding off method and practice.

Improving Speed:

- (i) Good understanding of number operations and relationships.
- (ii) Rapid mental recall of numbers and facts.
- (iii) Calculation using pencil and paper methods.
- (iv) Good ability to solve problems.

Developing the ability to make decisions

- (i) Improving the ability to make decisions.
- (ii) Improving the ability to solve problems.



$f(x)$

$\frac{x}{y}$



x_n



COURSE CONTENT

Module 1

- Arithmetic deals with numbers and basic operations like addition, subtraction, multiplication, and division.
- The teaching of practical mathematics (arithmetic, elementary algebra, plane, solid geometry, trigonometry) to most pupils. Applications of school mathematics in our daily life.

Module 2

- The teaching of abstract mathematical concepts (such as set and function) at an early age.

Module 3

- Solve some abstract problems in Mathematics.
- The teaching of selected areas of mathematics (such as Euclidean geometry). Both simple discussions of 2D and 3D.

Mode: Blended

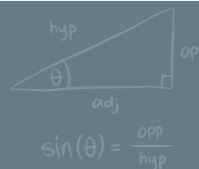
Methodology

- Theoretical and Practical Approaches.
- Lectures.
- Experience sharing/Students' Seminars.
- Project Work.

Duration

- 32 hours in 12 weeks
- Orientation of the Course 1 hour
- Teaching learning 26 hours
- Evaluation 5 hours

Evaluation Scheme: Formative Evaluation-40%
Summative Evaluation-60%



Items

Marks

Class Test	10
Assignment	10
Seminar Presentation	10
Field Visit report/Project	5
Course end examination	60
Attendance	5

Evaluation Report

90-100-A++
80-89-A+
70-79- A
60-69- A
Below 51-60-B
Below 50- Reappear
in the next time

$$ax^2 + bx + c = 0$$

General Guidelines

- Classes will be conducted beyond the regular class hours.
- 75% attendance is mandatory for completion of the course.

Organising Committee

Patron

Dr. Ajanta Paul

Principal & Secretary
Women's Christian College, Kolkata

Course Coordinator

Dr. Bishwambhar Roy

Treasurer

Dr. Somnath Hazra

Members

Dr. Arnab Majumder

Dr. Nabanita Mitra

Ms. Raka Bnaerjee

Faculty Members

Dr. Bishwambhar Roy

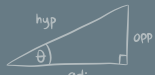
Dr. Arnab Majumdar

Dr. Sudeshna Biswas

Ms. Raka Bnaerjee

$$ax^2 + bx + c = 0$$

$$y = mx + b$$


$$\tan(\theta) = \frac{\text{opp}}{\text{adj}}$$



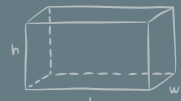
$$V = \pi r^2 h$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$\frac{x}{a} + \frac{y}{b} = 1$$



$$V = \frac{4}{3} \pi r^3$$



$$V = Lwh$$

