

17TH- FOUR DAYS - STUDENTS' WORKSHOP

DATES

PRIMARY (Std. V & VI) & SUB-JUNIOR (Std. VII & VIII)

May - 08,09,10,11 - 2024

JUNIOR & INTER {RMO GROUP (Std. IX TO XI)}

May - 15,16,17,18 - 2024

Opening date for registration is **12th March 2024**.

Last Date for Registration 20-04-2024

Special Note : In case the demand is more than anticipated dates of workshop may be postponed under intimation to the concerned

The classes will be organised only if **at least 30 Students per group register**.

In case of **Teachers minimum 20 candidates**.

The classes will be held 5 hours per day for all.

The actual time will be **9-30am to 3-45 pm**.

The venue will be

The AMTI,

A Centre for Study and Research in Mathematics Education,

(Opp. GKM College of Engineering & Technology)

Moppedu Road, Alappakkam, New Perungalathur post,

Chennai - 600 063. Tamilnadu, India.

Time	Session
0930hrs. to 1045hrs.	1 st Session
1045hrs. to 1100hrs.	Tea

1100hrs. to 1215hrs.	2 nd Session
1215hrs. to 1300hrs.	Lunch
1300hrs. to 1415hrs.	3 rd Session
1415hrs. to 1530hrs.	4 th Session
1530hrs. to 1545hrs.	Tea

SYLLABUS:

Recommended topics for WORKSHOP

PRIMARY: (Gauss Contest - V and VI Standards)

ARITHMETIC: Fractions, percentages, profit and loss, tests of divisibility, LCM, HCF, Ratio and proportion, Calendar

MENSURATION: Triangles, Quadrilaterals, Circles.

ALGEBRA: Algebra as literal Arithmetic, Addition, subtraction, multiplication and division of simple Arithmetic expressions.

GEOMETRY: Straight lines, parallel lines, Angle properties of triangles, quadrilaterals and polygons.

SUB JUNIOR: (Kaprekar Contest - VII and VIII Standards)

All the topics for primary and,

ARITHMETIC: Square roots and cube roots, Allegation, average, time and work, time and distance, Races, Games of skill, Travelling around a circle.

MENSURATION: Three Dimensional: cubes, cuboids, sphere, cone, cylinder, pyramids.

ALGEBRA: Algebraic equations of degree 1 and degree 2. Algebraic identities, factorization of algebraic expressions, laws of indices, basics of surds.

GEOMETRY: Triangle inequalities, parallelograms, trapezoids, Pythagoras theorem.

NUMBER THEORY: Prime and composite numbers, divisibility.

[Note: Apart from these, the children shall practise to solve logical questions in basic mathematics].

JUNIOR: (Bhaskara Contest - IX and X Standards)

All the topics for Primary, Sub junior and the following:

ALGEBRA: Quadratic and Higher degree Algebraic equations, Remainder theorem, Logarithms, Sequences and series, Scales of notations, Mathematical Induction, Basic inequalities.

GEOMETRY: Circle theorems, Chords, Arcs, Angles in segments, Cyclic Quadrilaterals, Tangents, Alternate Segment theorem, intersecting chord theorem, Apollonius theorem, and Stewart's theorem.

NUMBER THEORY: Modular arithmetic, Greatest Integer function, least integer functions.

COMBINATORICS: Fundamental principle of counting, Basics of permutations and combinations, Principle of inclusion and exclusion, Pigeon hole principle.

INTER: (Ramanujan Contest - XI and XII Standards)

All the topics for Primary, Sub Junior, Junior and the following:

ALGEBRA: Polynomials, inequalities, (C-S inequality), Functional equations.

GEOMETRY: Trigonometry, vector, Coordinate Geometric and Complex number methods may be used.

NUMBER THEORY: Fermat and Wilson theorem, Diophantine equations.

COMBINATORICS: Counting techniques, Recurrence relations.

The content of the sessions will be solving of routine and non-routine problems based on the syllabus of the respective classes introducing them to the nuances of problem solving with the data and for critical and creative thinking.

Charges:

Workshop fee once paid will not be repaid.

❶ Participant - Rs. 2000/- (We provide the Tea and Lunch (vegetarian food))

❷ Participant with accommodation - Rs. 4000/-

(We provide the Tea and BF, Lunch and Dinner (vegetarian food))

❸ [Escorts who desire to stay to pay Rs. 3000/- each.]

(We provide the Tea and BF, Lunch and Dinner (vegetarian food))

Concessions may be considered in deserving cases.

The benefit of this exercise will be to face the talents exams with confidence and be an introduction to IIT type of problem solving. They will be given test in solving of problems as in Indian and International Olympiads. A certificate of participation to each besides prizes for the three best in each group will also be given.

This will enable the child to perform better with greater self-confidence at the school level in all subjects besides scoring well in the conventional examinations.

For interested participants (limited number only) dormitory accommodation inclusive of **breakfast and dinner** for the four days will be charged.

Prior registration of at least one week earlier is necessary to attend the classes as administrative arrangements have to be done.

SRI P. RAMESH

Secretary for Project & Workshop

DR. M. PALANIVASAN

General Secretary