CG PPT Syllabi

Science Syllabus

Matter: Structure and Behavior

- Matter: Nature & its Behavior
- Structure of Atom

General Properties of Matter and Sound:

- Sound & Wave
- Motion, Measurement and Force
- Energy & Work

Classification of Elements, Chemical Bonding, Reaction and Some Important Compound

- Rate of Chemical Reaction & Chemical Equilibrium
- Periodic Classification of Elements
- Chemical Bonding
- Some Important Chemical Compounds
- Chemical Reactions

Electricity, Light and Magnetism:

- Magnetism
- Light
- Magnetic Effect of Current
- Electricity & Its Effects

Our Environment

- Biosphere
- Pollution

Natural Resources

- Hydrocarbon
- Metals
- Coal & Petroleum
- Nonmetals
- Source of Energy

Mathematics Syllabus

Trigonometry:

- Trigonometric Ratios of 0º, 30º, 45º, 60º & 90º.
- Trigonometric Ratios: Sin A, Cos A, Tan A, Cot A, Sec A, Cosec A.
- Trigonometric equations: (0º<θ<90º).
- To find trigonometric ratios of 0º, 30º, 45º, 60º & 90º by the Geometrical method.
- The relation between Arc, Radius & Central Angle.
- Measurement of angle in different system Degree, Grade & Radian.
- Height & Distance.
- Trigonometric Identities.

Algebra:

- Arithmetic Series
- Quadratic Equations
- Polynomials
- Ratio & Proportion
- Rational Number and Expressions
- Linear Equation
- Indices
- Surds

Co-Ordinate Geometry:

- Distance formula, section & Mid-Point formula.
- Area of Triangle, conditions for 3-points to be collinear, Centroid & Incentre of the triangle.

Geometry:

- Different theorems and/or Axioms & their Converse
- Fundamental Concepts of Geometry

Statistics:

- Polygon, Cumulative Frequency Curve, histogram.
- Statistics & its Definition
- Probability (based on the single event only).
- Mean, Median, Mode & Pie Chart.
- Arranging data in ascending & descending order, cumulative frequency of a class, class-limit.

- Collection & Presentation of Data
- Graphical representation of Statistical Data, Frequency

Mensuration:

- Ar of 4-walls of Cube & Cuboids.
- Ar of Sector of Circle & length of Arc of Circle.
- Surface Ar & Volume of Prism, Cylinder, Cone & Sphere
- Ar of Triangle & Rectangle.
- Surface Ar & Volume of Cube & Cuboids.
- Ar & Circumference of Circle.