KEAM MATHEMATICS Syllabus:

1.Trigonometric functions and Inverse Trigonometric functions
2. Sets, Relations and Functions
3. Algebra:

- Complex Numbers
- Sequences and Series
- Permutations, Combinations, Binomial Theorem and Mathematical Induction
- Quadratic Equations
- Matrices and Determinants
- Linear Inequations
- Mathematical Logic and Boolean Algebra

4. Geometry

- Cartesian System of Rectangular Co ordinates
- Lines and Family of lines
- Circles and Family of circles
- Conic sections
- Vectors
- Three Dimensional Geometry

5. Calculus

- Functions, Limits and continuity
- Application of Derivatives
- Indefinite Integrals
- Definite Integrals
- Differential Equations

6. Statistics

- Statistics and probability

KEAM PHYSICS Syllabus:

1. Measurement
2. Work, Energy and Power
3. Description of Motion in One Dimension
4. Description of Motion in Two & Three Dimension
5. Laws of Motion
6. Motion of System of Particles And Rigid Body Rotation
7. Heat and Thermodynamics
8. Mechanics Of Solids And Fluids
9. Oscillations
10. Gravitation
11. Heat and Thermodynamics
12. Waves

13. Electrostatics
14. Current Electricity
15. Magnetic Effect of Current and Magnetism
16. Electromagnetic Induction and Alternating Current
17. Electromagnetic Waves
18. Dual Nature of Matter and Radiations
19. Optics
20. Atomic Nucleus
21. Solids and Semiconductor Devices
22. Principles of Communications

KEAM CHEMISTRY Syllabus:

1. Basic Concepts and Atomic Structure

- Atomic structure

2. Bonding and Molecular Structure

3. States of Matter

- Gaseous state
- Liquid state
- Solid state

4. Periodic Properties Of Elements And Hydrogen

- Classification of elements
- Hydrogen

5. S-Block Elements and Principles Of Metallurgy

- Alkali metals
- Alkaline earth metals
- Compounds of s-block elements
- Principles of metallurgy

6. P-Block Elements

- p-block elements General Charactersitics
- Boron
- Silica
- Group 18 elements

7. D-Block and F-Block Elements

- d-Block elements
- f-Block elements

8. Chemical Equilibrium

- Physical and chemical equilibria

9. Thermodynamics

10. Solutions

11. Redox Reactions and Electrochemistry

- Oxidation and reduction
- Faraday’s laws of electrolysis

12. Surface Chemistry
13. Chemical Kinetics
14. Coordination Compounds and Organometallics
15. Basic Principles, Purification and Characterization Of Organic Compounds
16. Hydrocarbons

- Classification of hydrocarbons
- Aromatic hydrocarbons

17. Organic Reaction Mechanism

- Electronic displacement in a covalent bond
- Common types of organic reactions

18. Stereochemistry
19. Organic Compounds with Functional Groups Containing Halogens

- Haloalkanes and haloarenes

20. Organic Compounds With Functional Groups Containing Oxygen

- Alcohols
- Phenols
- Ethers
- Aldehydes and ketones
- Carboxylic acid

21. Organic Compounds with Functional Groups Containing Nitrogen
22. Polymers and Biomolecules
23. Environmental Chemistry and Chemistry In Every Day Life