



NGSE syllabus

SCIENCE & COMMERCE

NATIONAL GENIUS SEARCH EXAMINATION®

Go beyond the Olympiads!

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Important Note: NGSE Mains will have questions related to the following concepts / topics. NGSE Advanced will include all the topics you have studied in the earlier classes, apart from the following. Students can opt for any two subjects for NGSE from Physics, Chemistry, Mathematics, Biology, Economics, Business Studies and Accountancy. (i.e., Students can even choose interdisciplinary subjects). The NGSE question booklet consists of questions from all the subjects and students need to opt for their choice of subjects at the time of examination only.

Sr. No	Mathematics: Daily life applications and understanding of the following :
1.	Sets
2.	Relations and Functions
3.	Trigonometric Functions
4.	Principle of Mathematical Induction
5.	Complex Numbers & Quadratic Equations
6.	Linear Inequalities
7.	Permutations and Combinations
8.	Binomial Theorem
9.	Sequence and Series
10.	Straight Lines
11.	Conic Sections
12.	Three Dimensional Geometry
13.	Limits and Derivatives
14.	Mathematical Reasoning
15.	Statistics
16.	Probability

Sr. No	Physics: Daily life applications and understanding of the following :
1.	Physical World
2.	Units and Measurements
3.	Motion in a Straight Line
4.	Motion in a Plane
5.	Laws of Motion
6.	Work, Energy and Power
7.	System of Particles and Rotational Motion
8.	Gravitation
9.	Mechanical Properties of Solids
10.	Mechanical Properties of Fluids
11.	Thermal Properties of Matter
12.	Thermodynamics
13.	Kinetic Theory
14.	Oscillations
15.	Waves

Sr. No	Chemistry: Daily life applications and understanding of the following :
1.	Basic Concepts of Chemistry
2.	Structure of Atoms
3.	Classification of Elements and Periodicity in Properties
4.	Chemical Bonding & Molecular Structure
5.	States of Matter
6.	Thermodynamics
7.	Equilibrium
8.	Redox Reactions
9.	Hydrogen
10.	The s-Block Elements
11.	The p-Block Elements
12.	Organic Chemistry - Basic Principles and Techniques
13.	Hydrocarbons
14.	Environmental Chemistry

Sr. No	Biology: Daily life applications and understanding of the following :
1.	The Living World
2.	Biological Classification
3.	Plant Kingdom
4.	Animal Kingdom
5.	Morphology of Flowering Plants
6.	Anatomy of Flowering Plants
7.	Structural Organisation in Animals
8.	Cell: The Unit of Life
9.	Biomolecules
10.	Cell Cycle and Cell Division
11.	Transport in Plants
12.	Mineral Nutrition
13.	Photosynthesis in Higher Plants
14.	Respiration in Plants
15.	Plant Growth and Development
16.	Digestion and Absorption
17.	Breathing and Exchange of Gases
18.	Body Fluids and Circulation
19.	Excretory Products & their Elimination
20.	Locomotion and Movement
21.	Neural Control and Coordination
22.	Chemical Coordination & Integration



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Sr. No	Economics: Daily life applications and understanding of the following :
	Microeconomics
1.	Introduction
2.	Consumer's Equilibrium and Demand
3.	Producer Behavior and Supply
4.	Forms of Market - Price Determination under perfect competition with simple applications
	Statistics for Economics
5.	Introduction
6.	Collection, Organization & Presentation of Data
7.	Measures of Central Tendency
8.	Measures of Dispersion
9.	Correlation
10.	Index Numbers
11.	Statistical Tools

Sr. No	Accountancy: Daily life applications and understanding of the following :
1.	Introduction to Accounting
2.	Theory Base of Accounting
3.	Recording of Transactions
4.	Bank Reconciliation Statement
5.	Trial Balance and Rectification of Errors
6.	Depreciation, Provisions and Reserves
7.	Bill of Exchange
8.	Financial Statements
9.	Accounts from Incomplete Records
10.	Computerized Accounting - Applications, structure and Database Management

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Sr. No	Business Studies: Daily life applications and understanding of the following :
1.	Nature and purpose of Business
2.	Forms of Business Organisation
3.	Private, Public & Global Enterprises
4.	Business Services
5.	Emerging Modes of Business
6.	Social Responsibilities of Business and Business Ethics
7.	Formation of a Company
8.	Sources of Business Finance
9.	Small Business
10.	Internal Trade
11.	International Business

