



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.	Relations and Functions
2.	Inverse Trigonometric Functions
3.	Matrices
4.	Determinants
5.	Continuity and Differentiability
6.	Application of Derivatives
7.	Integrals and Application of Integrals
8.	Differential Equations
9.	Vector Algebra
10.	Three Dimensional Geometry
11.	Linear Programming
12.	Probability

Sr. No	Physics: Daily life applications and understanding of the following :
1.	Electric Charges and Fields
2.	Electrostatic Potential & Capacitance
3.	Current Electricity
4.	Moving Charges and Magnetism
5.	Magnetism and Matter
6.	Electromagnetic Induction
7.	Alternating Current
8.	Electromagnetic waves
9.	Ray Optics and Optical Instruments
10.	Wave Optics
11.	Dual Nature of Radiation and Matter
12.	Atoms and Nuclei
13.	Semiconductor Electronics
14.	Communication System

Sr. No	Chemistry: Daily life applications and understanding of the following :
1.	Solid State
2.	Solutions
3.	Electrochemistry
4.	Chemical Kinetics
5.	Surface Chemistry
6.	General Principles and Processes of Isolation of Elements
7.	The p-Block elements
8.	The d-and f-Block Elements
9.	Coordination Compounds
10.	Haloalkanes and Haloarenes
11.	Alcohols, Phenols and Ethers
12.	Aldehydes, Ketones & Carboxylic Acids
13.	Amines
14.	Biomolecules
15.	Polymers
16.	Chemistry in Everyday Life

Sr. No	Biology: Daily life applications and understanding of the following :
1.	Reproduction in Organisms
2.	Sexual Reproduction in Flowering Plants
3.	Human Reproduction
4.	Reproductive Health
5.	Principle of Inheritance and Variation
6.	Molecular Basis of Inheritance
7.	Evolution
8.	Human Health and Diseases
9.	Strategies for Enhancement in Food Production
10.	Microbes in Human Welfare
11.	Biotechnology: Principles & Processes
12.	Biotechnology and its Applications
13.	Organisms and Populations
14.	Ecosystem
15.	Biodiversity and Conservation
16.	Environmental Issues



Sr. No	Economics: Daily life applications and understanding of the following :
	Microeconomics
1.	Introduction
2.	Theory of Consumer Behaviour
3.	Production and Costs
4.	Theory of the Firm Under Perfect Competition
5.	Market Equilibrium
6.	Non-Competitive Markets
	Macroeconomics
7.	Introduction
8.	National Income Accounting
9.	Money and Banking
10.	Income Determination
11.	The Govt: Budget & Economy
12.	Open Economy Macroeconomics

Sr. No	Business Studies: Daily life applications and understanding of the following :
1.	Nature and Significance of Management
2.	Principles of Management
3.	Business Environment
4.	Planning
5.	Organising
6.	Staffing
7.	Directing
8.	Controlling
9.	Financial Management
10.	Financial Markets
11.	Marketing
12.	Consumer Protection
13.	Entrepreneurship Development

Sr. No	Accountancy: Daily life applications and understanding of the following :
	Part - I
1.	Accounting for Not-for-Profit Organisation
2.	Accounting for Partnership: Basic Concepts
3.	Reconstitution of a Partnership Firm-Admission of a Partner
4.	Reconstitution of a Partnership Firm-Retirement/Death of a Partner
5.	Dissolution of Partnership Firm
	Part - II
6.	Accounting for Share Capital
7.	Issue & Redemption of Debentures
8.	Financial Statements of a Company
9.	Analysis of Financial Statements
10.	Accounting Ratios
11.	Cash Flow Statement

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