

Gujarat NTSE - 2019

A Detailed Analysis by Resonance

NTSE 2019: The National Talent Search Examination (NTSE) is a national level examination cum scholarship program. The scholarship program is conducted by NCERT and the students who are studying in class X are eligible for **NTSE 2019** examination and selection procedure.

Eligibility: As per the eligibility criteria of NTSE 2018, all the students who are studying in X standard are eligible to apply for this scholarship program. A student from any state of the country can register for this examination and scholarship scheme. Whether a student is from a government or a private school, he/she is eligible.

Pattern/ Syllabus: The National Talent Search Examination is conducted for the students studying in the

Class X. The examination consists of two tests:

- 1. Mental Ability Test (MAT)
- 2. Scholastic Aptitude Test (SAT)

NTSE Mental Ability Test (MAT) Syllabus

This test is given to judge the power of reasoning, to evaluate and discriminate the ability of thinking, judging and visualizing etc. A variety of questions, for example - analogies, classification, series, pattern perception, hidden figures, coding decoding, block assembly, problem solving, etc. are used for this purpose.

NTSE Language Test (LCT) Syllabus

Language Test is designed to judge the power of reading comprehension, logical sequencing, and interpretative, evaluative, predictive and creative components of language. The test is conducted in English and Regional languages.

NTSE Scholastic Aptitude Test (SAT) Syllabus (Maths, Science & Social Science)

This section is conducted to judge that how much of text-book knowledge you have gained. As India doesn't has any single unified board system, NCERT has not prescribed any particular syllabus for the State Level Examination or for National Level Examination.

You can expect questions that are asked at the National Level (Stage-I) according to the standard of Classes IX and X level.



Question Paper: The medium of test is English and regional languages and it comprised of 200 question. The students have to select and mark one right answer from the given options. Each right answer carries one point each, thus making the total score of the candidate in a test is equal to the number of questions answered correctly.

Merit Clause: All the students who achieve requisite scores at this level automatically qualify for scholarships that are handed over by NCERT.

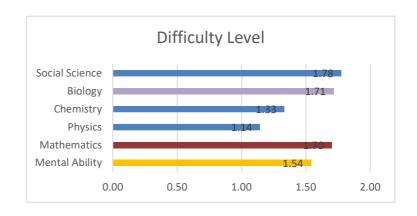
OVERALL MARKS DISTRIBUTION

The NTSE 2019 Exam Pattern was an objective type test based on paper-pen format.

| Test | No. Of Questions | Maximum Marks | Time Allotted |
|---------------------------------------|------------------|---------------|---------------|
| MAT | 100 Questions | 100 Marks | 120 minutes |
| SAT - Maths, Science, Social Sciences | 100 Questions | 100 Marks | 120 minutes |

| Subject | Class VIII | Class IX | Class X | Total |
|--------------------|------------|-----------|-----------|-----------|
| | No of | No of | No of | No of |
| | Questions | Questions | Questions | Questions |
| Mental Ability | | | 100 | 100 |
| Mathematics | 1 | 7 | 12 | 20 |
| Physics | | 5 | 9 | 14 |
| Chemistry | 1 | 5 | 6 | 12 |
| Biology | | 6 | 8 | 14 |
| Social Science | | 16 | 24 | 40 |
| Grand Total | 2 | 39 | 159 | 200 |

| | Difficulty |
|--------------------|------------|
| Subject | Level |
| Mental Ability | 1.54 |
| Mathematics | 1.70 |
| Physics | 1.14 |
| Chemistry | 1.33 |
| Biology | 1.71 |
| Social Science | 1.78 |
| Grand Total | 1.58 |





OVERALL DIFFICULTY LEVEL ANALYSIS

In this analysis, we have rated every question on a scale of 1 to 3. The ratings are done by expert faculty of Resonance. The individual ratings are averaged to calculate overall difficulty level.

• 1: Easy

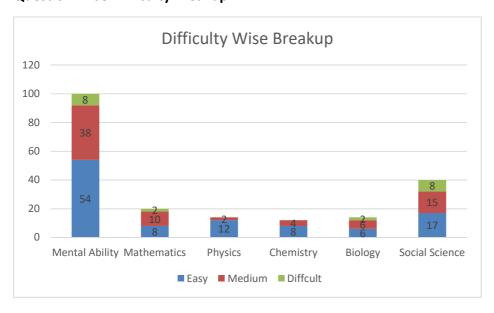
• 2: Moderate

3: Difficult

Difficulty Level Analysis: No of Questions

| Subject | Eas | S y | Mediu | ım | Difficult | | Total | |
|--------------------|-----------|------------|-----------|-------|-----------|-------|-----------|-------|
| | No of | Total | No of | Total | No of | Total | No of | Total |
| | Questions | Marks | Questions | Marks | Questions | Marks | Questions | Marks |
| Mental Ability | 54 | 54 | 38 | 38 | 8 | 8 | 100 | 100 |
| Mathematics | 8 | 8 | 10 | 10 | 2 | 2 | 20 | 20 |
| Physics | 12 | 12 | 2 | 2 | | | 14 | 14 |
| Chemistry | 8 | 8 | 4 | 4 | | | 12 | 12 |
| Biology | 6 | 6 | 6 | 6 | 2 | 2 | 14 | 14 |
| Social Science | 17 | 17 | 15 | 15 | 8 | 8 | 40 | 40 |
| Grand Total | 105 | 105 | 75 | 75 | 20 | 20 | 200 | 200 |

Question Wise Difficulty Breakup





SUBJECT WISE ANALYSIS

SCIENCE ANALYSIS

| | Science | | |
|--|-----------------|-------------|---------------|
| UNIT & TOPIC NAME | NO OF QUESTIONS | TOTAL MARKS | (%) WEIGHTAGE |
| Science | 40 | 40 | 100.00% |
| Biology | 14 | 14 | 35.00% |
| Classification of Animals | 1 | 1 | 2.50% |
| Echinodermata | 1 | 1 | 2.50% |
| Classification of plants | 1 | 1 | 2.50% |
| Bryophyte | 1 | 1 | 2.50% |
| Control and Coordination in Organism | 2 | 2 | 5.00% |
| Endocrine glands | 2 | 2 | 5.00% |
| Diversity in Living organism classification of | | | |
| Animals | 1 | 1 | 2.50% |
| Vertebrata | 1 | 1 | 2.50% |
| Fundamental unit of life: The cell | 1 | 1 | 2.50% |
| Cell Organelles | 1 | 1 | 2.50% |
| Nutrition | 1 | 1 | 2.50% |
| Nutrition in humans | 1 | 1 | 2.50% |
| Our Environment | 1 | 1 | 2.50% |
| Ozone layer and its depletion | 1 | 1 | 2.50% |
| Plant Tissue | 1 | 1 | 2.50% |
| Complex Permanent Tissue | 1 | 1 | 2.50% |
| Respiration | 2 | 2 | 5.00% |
| Respiration in Animals | 1 | 1 | 2.50% |
| Types of Respiration | 1 | 1 | 2.50% |
| Transportation | 2 | 2 | 5.00% |
| Lymphatic System | 1 | 1 | 2.50% |
| Transportation in Human beings | 1 | 1 | 2.50% |
| Why do we fall ill | 1 | 1 | 2.50% |
| Acute and Chronic disease | 1 | 1 | 2.50% |
| Chemistry | 12 | 12 | 30.00% |
| Acids, bases and salts | 3 | 3 | 7.50% |
| Chemical Properties | 1 | 1 | 2.50% |
| Importance of pH | 1 | 1 | 2.50% |
| Weak Acids | 1 | 1 | 2.50% |
| Atomic Structure | 1 | 1 | 2.50% |
| Bohr Model | 1 | 1 | 2.50% |
| Chemical Reactions | 1 | 1 | 2.50% |
| Formulae of Compounds | 1 | 1 | 2.50% |
| Metals | 3 | 3 | 7.50% |
| Alloys | 1 | 1 | 2.50% |
| Metallurgy | 1 | 1 | 2.50% |
| Physical Properties | 1 | 1 | 2.50% |



| Polymers | 1 | 1 | 2.50% |
|---|----|----|---------|
| Non Biodegradable | 1 | 1 | 2.50% |
| Properties of Matter | 3 | 3 | 7.50% |
| Colloidal Solution | 1 | 1 | 2.50% |
| Elements | 1 | 1 | 2.50% |
| States of Matter | 1 | 1 | 2.50% |
| Physics | 14 | 14 | 35.00% |
| An introduction to Nano technology | 2 | 2 | 5.00% |
| An introduction to Nano technology | 1 | 1 | 2.50% |
| fundamental carbon - based Nano-structure | 1 | 1 | 2.50% |
| Dispersion of Light natural optical phenomena | 2 | 2 | 5.00% |
| Eye Defect | 1 | 1 | 2.50% |
| information Only | 1 | 1 | 2.50% |
| Electricity | 3 | 3 | 7.50% |
| combination of resistance | 1 | 1 | 2.50% |
| electric potential | 1 | 1 | 2.50% |
| electric power | 1 | 1 | 2.50% |
| Force and Newton's law of Motion | 1 | 1 | 2.50% |
| Momentum | 1 | 1 | 2.50% |
| Gravitation | 1 | 1 | 2.50% |
| Acceleration due to gravity | 1 | 1 | 2.50% |
| light :- Reflection and Refraction | 2 | 2 | 5.00% |
| Refraction | 1 | 1 | 2.50% |
| Refraction of Light and it's law | 1 | 1 | 2.50% |
| Motion | 1 | 1 | 2.50% |
| Acceleration | 1 | 1 | 2.50% |
| Sound | 1 | 1 | 2.50% |
| Speed of sound | 1 | 1 | 2.50% |
| work, power, energy | 1 | 1 | 2.50% |
| Power | 1 | 1 | 2.50% |
| Grand Total | 40 | 40 | 100.00% |

MATHEMATICS ANALYSIS

| Mathematics | | | | | |
|---------------------------------|-----------------|-------------|---------------|--|--|
| UNIT & TOPIC NAME | NO OF QUESTIONS | TOTAL MARKS | (%) WEIGHTAGE | | |
| Mathematics | 20 | 20 | 100.00% | | |
| Area of Triangle | 1 | 1 | 5.00% | | |
| Formula | 1 | 1 | 5.00% | | |
| Circle | 1 | 1 | 5.00% | | |
| Chord | 1 | 1 | 5.00% | | |
| Coordinate | 1 | 1 | 5.00% | | |
| Coordinate | 1 | 1 | 5.00% | | |
| Linear Equation in Two Variable | 1 | 1 | 5.00% | | |
| Linear Equation in Two Variable | 1 | 1 | 5.00% | | |



| Lines & Angles | 1 | 1 | 5.00% |
|----------------------|----|----|---------|
| Supp. & comp. angles | 1 | 1 | 5.00% |
| Number System | 2 | 2 | 10.00% |
| Decimal Expansion | 1 | 1 | 5.00% |
| General Form | 1 | 1 | 5.00% |
| Polynomial | 3 | 3 | 15.00% |
| Factor | 1 | 1 | 5.00% |
| Factor Theorem | 2 | 2 | 10.00% |
| Probability | 2 | 2 | 10.00% |
| Probability | 2 | 2 | 10.00% |
| Quadrilateral | 1 | 1 | 5.00% |
| Square | 1 | 1 | 5.00% |
| Real Numbers | 1 | 1 | 5.00% |
| HCF, LCM | 1 | 1 | 5.00% |
| Sets | 1 | 1 | 5.00% |
| adjoin | 1 | 1 | 5.00% |
| statics | 1 | 1 | 5.00% |
| Width & Height | 1 | 1 | 5.00% |
| Triangles | 2 | 2 | 10.00% |
| Sides & Angles | 1 | 1 | 5.00% |
| similarity | 1 | 1 | 5.00% |
| Trigonometry | 2 | 2 | 10.00% |
| Comp, Angle | 1 | 1 | 5.00% |
| Properties | 1 | 1 | 5.00% |
| Grand Total | 20 | 20 | 100.00% |

MENTAL ABILITY ANALYSIS

| Mental Ability | | | | |
|----------------------|-----------------|-------------|---------------|--|
| UNIT & TOPIC NAME | NO OF QUESTIONS | TOTAL MARKS | (%) WEIGHTAGE | |
| Mental Ability | 100 | 100 | 100.00% | |
| Alphabet Series | 2 | 2 | 2.00% | |
| Alphabet Series | 2 | 2 | 2.00% | |
| Analogy | 3 | 3 | 3.00% | |
| Analogy | 3 | 3 | 3.00% | |
| Alphabet Series | 7 | 7 | 7.00% | |
| Alphabet Series | 7 | 7 | 7.00% | |
| Arithmetic Reasoning | 5 | 5 | 5.00% | |
| Arithmetic Reasoning | 5 | 5 | 5.00% | |
| Blood Relation Test | 5 | 5 | 5.00% | |
| Blood Relation Test | 5 | 5 | 5.00% | |
| Calendar Test | 4 | 4 | 4.00% | |
| Calendar Test | 4 | 4 | 4.00% | |
| Classification | 10 | 10 | 10.00% | |
| Classification | 10 | 10 | 10.00% | |



| Coding - Decoding | 10 | 10 | 10.00% |
|---------------------------|-----|-----|---------|
| Coding - Decoding | 10 | 10 | 10.00% |
| Direction Test | 6 | 6 | 6.00% |
| Direction Test | 6 | 6 | 6.00% |
| Figure Portion & Counting | 10 | 10 | 10.00% |
| Figure Portion & Counting | 10 | 10 | 10.00% |
| Letter Repeating | 1 | 1 | 1.00% |
| Letter Repeating | 1 | 1 | 1.00% |
| Logical Sequence of words | 6 | 6 | 6.00% |
| Logical Sequence of words | 6 | 6 | 6.00% |
| Mathematical Operation | 5 | 5 | 5.00% |
| Mathematical Operation | 5 | 5 | 5.00% |
| Mirror & Water Image | 5 | 5 | 5.00% |
| Mirror & Water Image | 5 | 5 | 5.00% |
| Non Verbal Analogy | 1 | 1 | 1.00% |
| Non Verbal Analogy | 1 | 1 | 1.00% |
| Non Verbal Classification | 10 | 10 | 10.00% |
| Non Verbal Classification | 10 | 10 | 10.00% |
| Number Series | 10 | 10 | 10.00% |
| Number Series | 10 | 10 | 10.00% |
| Grand Total | 100 | 100 | 100.00% |

SOCIAL SCIENCE ANALYSIS

| Social Science | | | | |
|--|-----------------|-------------|---------------|--|
| UNIT & TOPIC NAME | NO OF QUESTIONS | TOTAL MARKS | (%) WEIGHTAGE | |
| Social Science | 40 | 40 | 100.00% | |
| 1st world war and Russian Revolution | 1 | 1 | 2.50% | |
| Treaty of Versailles | 1 | 1 | 2.50% | |
| Agriculture | 1 | 1 | 2.50% | |
| Table of crop | 1 | 1 | 2.50% | |
| Cultural Heritage of India; Sculpture and | | | | |
| Architecture | 2 | 2 | 5.00% | |
| Ancient Indian Town Planning | 1 | 1 | 2.50% | |
| Ancient Indian Town Planning(Lothal) | 1 | 1 | 2.50% | |
| Cultural Heritage of India; Traditional Handicraft | | | | |
| and Fine Arts | 2 | 2 | 5.00% | |
| Garba | 1 | 1 | 2.50% | |
| Music | 1 | 1 | 2.50% | |
| Drainage System | 2 | 2 | 5.00% | |
| Brahmaputra River system(Like to know) | 1 | 1 | 2.50% | |
| Source of Water | 1 | 1 | 2.50% | |
| Economic Development | 1 | 1 | 2.50% | |
| Features of developing economy | 1 | 1 | 2.50% | |
| Economic Liberalization and Globalization | 3 | 3 | 7.50% | |



| Steps taken to protect environment | 1 | 1 | 2.50% |
|---|---|---|--------|
| Steps to Protect environment | 1 | 1 | 2.50% |
| WTO | 1 | 1 | 2.50% |
| Economic Problems and Challenges | 3 | 3 | 7.50% |
| Employment | 1 | 1 | 2.50% |
| People living BPL | 1 | 1 | 2.50% |
| Proportion of Unemployment | 1 | 1 | 2.50% |
| Forest and Wildlife | 1 | 1 | 2.50% |
| Leopard - Things to know | 1 | 1 | 2.50% |
| Framing of Constitution and its Features | 1 | 1 | 2.50% |
| Pillar of Preamble | 1 | 1 | 2.50% |
| Fundamental Rights , Fundamental Duties & | | | 2.3070 |
| Directive Principles of state, Policy | 1 | 1 | 2.50% |
| Directive Principles of state, Policy | 1 | 1 | 2.50% |
| Heritage of India | 1 | 1 | 2.50% |
| Fairs of Gujarat | 1 | 1 | 2.50% |
| India, Location, Geological Structure and | _ | _ | 2.3070 |
| Physiography- I | 1 | 1 | 2.50% |
| Neighbours of India | 1 | 1 | 2.50% |
| India, Location, Geological Structure and | _ | _ | 2.00% |
| Physiography- II | 1 | 1 | 2.50% |
| Classification of Minerals | 1 | 1 | 2.50% |
| Indian Judiciary | 1 | 1 | 2.50% |
| District Judge | 1 | 1 | 2.50% |
| India's Heritage of science & Technology | 1 | 1 | 2.50% |
| Mathematics | 1 | 1 | 2.50% |
| Literary Heritage Of India | 2 | 2 | 5.00% |
| Ancient Literature | 1 | 1 | 2.50% |
| Vallabhi | 1 | 1 | 2.50% |
| Mineral and Energy Resources | 1 | 1 | 2.50% |
| Bauxite | 1 | 1 | 2.50% |
| Movement Towards Independence | 1 | 1 | 2.50% |
| Strikes during Quit India Movement | 1 | 1 | 2.50% |
| National Movements in India | 1 | 1 | 2.50% |
| Fierce Revolutionary Movement in Gujarat | 1 | 1 | 2.50% |
| Natural Resources | 1 | 1 | 2.50% |
| Red soil | 1 | 1 | 2.50% |
| Organs of Government | 1 | 1 | 2.50% |
| The Speaker of Lok Sabha | 1 | 1 | 2.50% |
| Places of Cultural Indian Heritage | 1 | 1 | 2.50% |
| Ellora Caves | 1 | 1 | 2.50% |
| Post Independence India | 1 | 1 | 2.50% |
| Formation and Reorganisation of Indian states | 1 | 1 | 2.50% |
| Rise of British Rule in India | 2 | 2 | 5.00% |
| Discovery of sea route to India | 1 | 1 | 2.50% |



| Expansion of Company rule | 1 | 1 | 2.50% |
|--|----|----|---------|
| Social Change | 4 | 4 | 10.00% |
| Chartism | 1 | 1 | 2.50% |
| Provisions only for SC | 1 | 1 | 2.50% |
| SC and ST | 1 | 1 | 2.50% |
| Terrorism in Kashmir | 1 | 1 | 2.50% |
| Word After 1945 | 2 | 2 | 5.00% |
| India's relation with its Neighbouring Countries | 1 | 1 | 2.50% |
| Non Aligned movement | 1 | 1 | 2.50% |
| Grand Total | 40 | 40 | 100.00% |

EXPECTED CUTOFF

Resonance Experts feel that as the Pattern Has Been Changed From previous year, the cutoff is expected Between 181 to 186