

### **NTSE - 2018**

### A Detailed Analysis by Resonance

**NTSE 2018:** The National Talent Search Examination (NTSE) is a national level examination cum scholarship programme. The scholarship programme is conducted by NCERT and students studying in class X are eligible for **NTSE 2018**examination and selection procedure. NTSE stage-I was conducted in month of November/ December across the nation. Stage II was conducted on May 13, 2018.

**Eligibility:** As per the eligibility criteria of NTSE, all the students studying in X standard are eligible to apply for this scholarship programme. A student from any state of the country can register for this examination and scholarship scheme. A student can be from a government or a private school.

**Pattern/ Syllabus:** The National Talent Search Examination is conducted for students studying at the Class X level. 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 to judge the power of reasoning, ability to think, ability to judge, evaluate or discriminate, ability to visualize in the space, spatial orientation, 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 Scholastic Aptitude Test (SAT) Syllabus (Maths, Science & Social Science)

This section is conducted to judge 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-II) to be standard of Classes IX and X level.

**Question Paper:** The medium of test is English and regional languages and it comprised of 200question. The students have to select and mark one right answer from the four given options. Each right answer carry one point each, thus making the total score of the candidate in a test equal to the number of questions answered correctly. However, at the second stage No Negative marking.



**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 2018 Exam Pattern is an objective type test based on paper-pencil format.

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

#### **SUBJECT WISE MARKS DISTRIBUTION**

Subject	Class ix	Class x	Class Xi	Total
	No of Questions	No of Questions	No of Questions	No of Questions
Mathematics	5	14	1	20
Mental Ability	8	100		100
Biology	2	12		14
Social Science	24	16		40
Chemistry	2	7	4	13
Physics	Educat	1 5 0 6	attar ta	13
<b>Grand Total</b>	40	155	letter te	200

#### **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 then averaged to calculate overall difficulty level.

• 1: Easy

• 2: Moderate

• 3: Difficult



Subject	Difficulty Level
Mathematics	2.05
Mental Ability	1.64
Biology	2.29
Social Science	1.78
Physics	1.69
Chemistry	2.31
Total	1.80

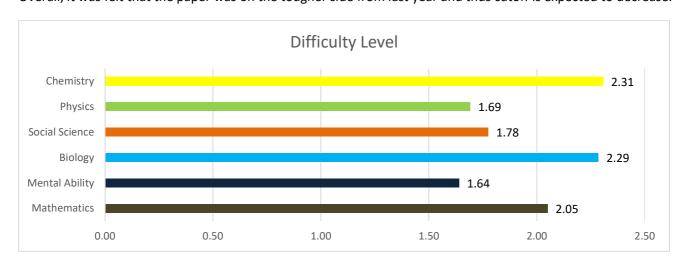
Subject	Easy	Medium	Tough	<b>Grand Total</b>
Mathematics	4	11	5	20
Mental Ability	49	38	13	100
Biology	2	6	6	14
Social Science	16	17	7	40
Physics	6	5	2	13
Chemistry	2	5	6	13
<b>Grand Total</b>	79	82	39	200

#### **DIFFICULTY LEVEL ANALYSIS: NO OF QUESTIONS**

Resonance Experts made the following observations:

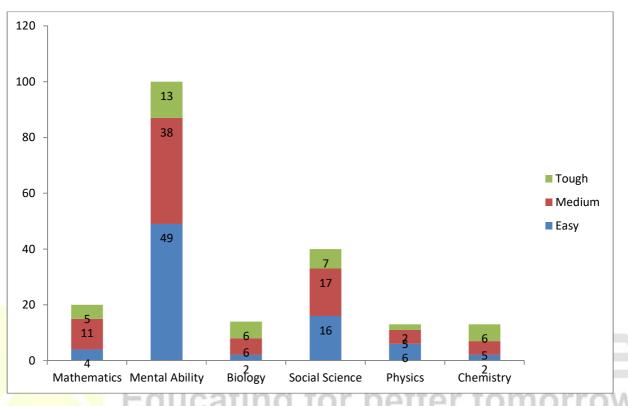
- **Mental Ability**: Paper was lengthier from last year and that is why it is considered more difficult than last year.
- Chemistry and Biology: Both these subjects had lengthier and confusing questions which made both of them relatively difficult from last year.
- Physics: The paper was relatively easy than last year as questions were fairly straight forward.
- Mathematics: The questions in mathematics were difficult than last year as focus was on complex topics this year. Two questions of common roots were particularly ambiguous.
- **Social Science**: Paper was extremely lengthy and 8 questions came out of syllabus which made it a difficult paper to solve.

Overall, it was felt that the paper was on the tougher side from last year and thus cutoff is expected to decrease.





### **QUESTION WISE DIFFICULTY BREAKUP**



### **SUBJECT WISE AND TOPIC WISE ANALYSIS**

#### **MENTAL ABILITY ANALYSIS**

	Mental Abili	ty	
UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%) WEIGHTAGE
Clock Test	1	1	1.00%
Alpha Numeric series	2	2	2.00%
Alphabet Series	2	2	2.00%
Analogy	1	1	1.00%
Arithmetical Reasoning	6	6	6.00%
Blood Relation	4	4	4.00%
Calendar	1	1	1.00%
Clock Test	2	2	2.00%
Coding-Decoding	8	8	8.00%
Data sufficiency	4	4	4.00%



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Grand Total	100	100	100.00%
Water Mirror Image	2	2	2.00%
Venn Diagram	11	11	11.00%
Sylloligsm	1	1	1.00%
Sitting arrangement	4	4	4.00%
Puzzle Test	1	1	1.00%
Paper cutting and folding	2	2	2.00%
Number Series	3	3	3.00%
Non-Verbal Series	2	2	2.00%
Non-Verbal Analogy	1	1	1.00%
Missing term in figure	11	11	11.00%
Miscellaneous	2	2	2.00%
Mathematical operations	7	7	7.00%
Logical Sequence	1	1	1.00%
Logical Deduction	5	5	5.00%
Logical Reasoning	1	1	1.00%
Letter Repeating Series	1	1	1.00%
Figure Partition & counting	2	2	2.00%
Figure Completion	2	2	2.00%
Direction Sense	6	6	6.00%
Dice Test	4	4	4.00%

#### **BIOLOGY ANALYSIS**

	Biology		
UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%) WEIGHTAGE
Coordination in Plants	1	1	7.14%
Evolution	1	1	7.14%
General Information From Food	1	1	7.14%
Level of Organization	1	1	7.14%
Mendelism	1	1	7.14%
Nervous System	2	2	14.29%
Nutrition in Plant	1	1	7.14%
Plant Reproduction	1	1	7.14%
Plant Transportation	1	1	7.14%
Pollution	1	1	7.14%



Grand Total	14	14	100.00%
Vaccination	1	1	7.14%
Types Of Respiration	1	1	7.14%
Types Of Eco System	1	1	7.14%

#### **CHEMISTRY ANALYSIS**

Che	mistry		
UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%) WEIGHTAGE
UNIT & TUPIC NAIVIE	QUESTIONS	IVIARKS	(%) WEIGHTAGE
Alpha Particle Experiment	1	1	7.69%
Balancing Of Chemical Equation	1	1	7.69%
Chemical properties of carbon			
compounds	2	2	15.38%
Kinetic Theory Of Gases	2	2	15.38%
Metallurgy	1	1	7.69%
Periodicity in properties	2	2	15.38%
рН	1	1	7.69%
Separation Technique	1	1	7.69%
Stoichiometry	2	2	15.38%
Grand Total	13	13	100.00%

#### **PHYSICS ANALYSIS**

Pł	nysics		
UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%) WEIGHTAGE
Bouyant force	1	1	7.69%
Combination of lens	1	1	7.69%
Combination of resistor	1	1	7.69%
Conservation of momentum	1	1	7.69%
Force on current carring wire in external magnetic field	1	1	7.69%
Heating effect of current	1	1	7.69%
Motion under gravity	2	2	15.38%
Newton's second law	1	1	7.69%
Ohm's law	1	1	7.69%
Refraction through prism	1	1	7.69%
Spead of sound in different medium	1	1	7.69%



V-t graph	1	1	7.69%
Grand Total	13	13	100.00%

### **MATHEMATICS ANALYSIS**

Mathematics				
		TOTAL	(%)	
UNIT & TOPIC NAME	NO OF QUESTIONS	MARKS	WEIGHTAGE	
Area of triangle	1	1	5.00%	
Common roots	1	1	5.00%	
Cyclicity	1	1	5.00%	
Decimal Representation	1	1	5.00%	
Distance Formula	1	1	5.00%	
Division Algorithm	1	1	5.00%	
Graph	1	1	5.00%	
Height and distance	1	1	5.00%	
Isosceles Triangle	1	1	5.00%	
Mean	1	1	5.00%	
mixed problem	4	4	20.00%	
Probability Probability Probability	1	1	5.00%	
Rel <mark>ation between</mark> Zeros and coefficient of cubic polynomial	ng for k	ette	5.00%	
Similar triangle and theorems related to	5			
circle	1	1	5.00%	
Sum of terms of AP	1	1	5.00%	
Tangent properties	1	1	5.00%	
Triangle	1	1	5.00%	
Grand Total	20	20	100.00%	

### **SOCIAL SCIENCE ANALYSIS**

Social Science						
UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%) WEIGHTAGE			
Climate	2	2	5.00%			
Clothing	1	1	2.50%			
Constitutional design	1	1	2.50%			
Consumer rights	1	1	2.50%			
Democracy in the contemporary world	1	1	2.50%			



Democratic Rights	2	2	5.00%	I
Electoral Politics	1	1	2.50%	1
Federalism	1	1	2.50%	1
Food security	1	1	2.50%	1
Forest societies and Colonialism	1	1	2.50%	1
French revolution	1	1	2.50%	1
Globalization and the Indian economy	1	1	2.50%	1
India size and Location	2	2	5.00%	-
Making of a Global World	2	2	5.00%	-
Mineral and energy resources	1	1	2.50%	-
Mis	3	3	7.50%	-
Money and Credit	1	1	2.50%	1
Nationalism in India	3	3	7.50%	1
Nationalist Movement in Indo-China	1	1	2.50%	1
Natural Vegetation and Wildlife	3	3	7.50%	1
Poverty as a challenge	3	3	7.50%	-
print culture and the Modern world	1	1	2.50%	-
Resources and Devlopment	1	1	2.50%	0
Russian revolution	1	1	2.50%	
The story of village Palampur	1	1	2.50%	
Work Life and Leisure	na for	hette	2.50%	orr
Working of the Institutions	119 1012	2	5.00%	011
Grand Total	40	40	100.00%	

### **EXPECTED CUTOFF**

As the paper was relatively difficult than last year, cut off is expected to be lower than the last year. The cut off for General category student is expected to be 150 marks while for SC/ST it is expected to be 94 marks.