

## Uttar Pradesh NTSE - 2016

### A Detailed Analysis by Resonance

**NTSE 2016:** The National Talent Search Examination (NTSE) is a national level examination cum scholarship program. The scholarship programme is conducted by NCERT and students studying in class X are eligible for **NTSE 2016** examination and selection procedure. NTSE stage-I was conducted on November 6, 2016 and November 13, 2016 in different regions of India.

**Eligibility:** As per the eligibility criteria of NTSE 2016 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. 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 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 given to judge 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 (Language Test)**

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

#### **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 have 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 200 questions. The students have to select and mark one right answer from the four given options. Each right answer carries 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 1/3 mark is deducted for every wrong answer.

**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 2016 Exam Pattern** was an objective type test based on paper-pen format.

Test	No. Of Questions	Maximum Marks	Time Allotted
MAT	50 Questions	50 Marks	45 minutes
SAT - Language Test	50 Questions	50 Marks	45 minutes
SAT - Maths, Science, Social Sciences	100 Questions	100 Marks	90 minutes

Subject	Class 9		Class 10		Total	
	No of Questions	Total Marks	No of Questions	Total Marks	No of Questions	Total Marks
Biology	3	3	10	10	13	13
Chemistry	4	4	9	9	13	13
English			50	50	50	50
Mathematics	10	10	10	10	20	20
Mental Ability			50	50	50	50
Physics	4	4	10	10	14	14
Social Science	2	2	38	38	40	40
<b>Grand Total</b>	<b>23</b>	<b>23</b>	<b>177</b>	<b>177</b>	<b>200</b>	<b>200</b>

### 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
English	1.16
Mathematics	1.75
Mental Ability	1.38
Science	1.53
Social Science	1.30
<b>Total</b>	<b>1.38</b>



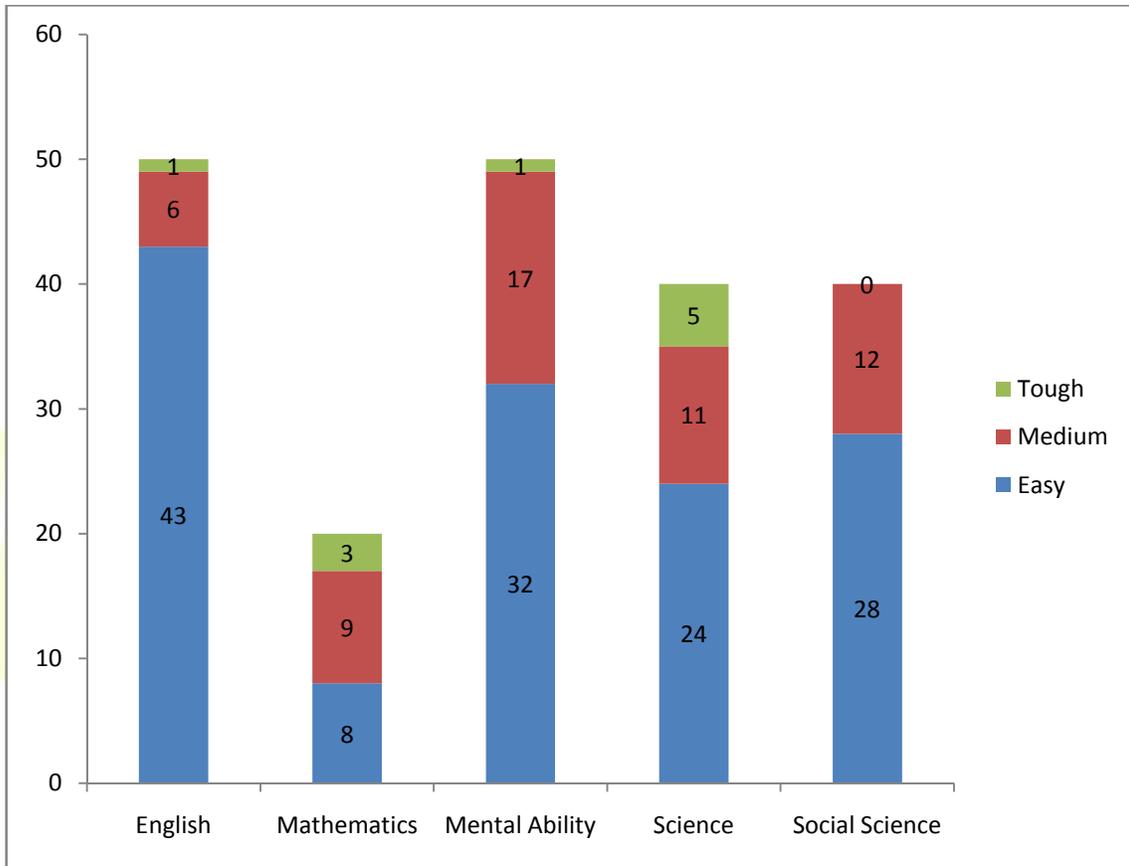
### Difficulty Level Analysis: No of Questions

Subject	Easy Level		Medium Level		Difficult Level	
	No of Questions	Total Marks	No of Questions	Total Marks	No of Questions	Total Marks
Biology	6	6	4	4	3	3
Chemistry	8	8	3	3	2	2
English	43	43	6	6	1	1
Mathematics	8	8	9	9	3	3
Mental Ability	32	32	17	17	1	1
Physics	10	10	4	4		
Social Science	28	28	12	12		
<b>Grand Total</b>	<b>135</b>	<b>135</b>	<b>55</b>	<b>55</b>	<b>10</b>	<b>10</b>

Resonance Experts feel that all subjects were of similar difficulty level. While around 135 Marks can be considered easy overall, 55 marks are moderately difficulty and 10marks are considered difficult by Resonance Team.

Overall, it is felt by Resonance Faculty Team that paper was on moderate side compared to last year and the cut-off is expected to be lower than that of last year.

**Question Wise Difficulty Breakup**



### SUBJECT WISE ANALYSIS

#### SCIENCE ANALYSIS

Science			
UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%) WEIGHTAGE
<b>Science</b>	<b>40</b>	<b>40</b>	<b>100.00%</b>
<b>Biology</b>	<b>13</b>	<b>13</b>	<b>32.50%</b>
Adaptation	1	1	2.50%
Control and Coordination	1	1	2.50%
Diversity	1	1	2.50%
Human Diseases	2	2	5.00%
Improvement in Food Resources	2	2	5.00%
Nutrition	2	2	5.00%
Origin and Evolution	1	1	2.50%
Respiration	1	1	2.50%
Transportation	2	2	5.00%
<b>Chemistry</b>	<b>13</b>	<b>13</b>	<b>32.50%</b>
Acid Bases and Salts	5	5	12.50%
Carbon and its compounds	2	2	5.00%
Coal Gas and Petroleum	1	1	2.50%
Matter	2	2	5.00%
Metal and Non Metals	2	2	5.00%
Structure of Atom	1	1	2.50%
<b>Physics</b>	<b>14</b>	<b>14</b>	<b>35.00%</b>
Electricity	3	3	7.50%
Light	4	4	10.00%
Magnetic effect of current and EMI	1	1	2.50%
Unit and Measurement	2	2	5.00%
Wave motion and sound	2	2	5.00%
Work, Power and Energy	2	2	5.00%
<b>Grand Total</b>	<b>40</b>	<b>40</b>	<b>100.00%</b>

## MATHEMATICS ANALYSIS

Mathematics			
UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%) WEIGHTAGE
<b>Mathematics</b>	<b>20</b>	<b>20</b>	<b>100.00%</b>
<b>Area of plane figures</b>	<b>1</b>	<b>1</b>	<b>5.00%</b>
Area related to circles	1	1	5.00%
<b>Arithmetic Progressions</b>	<b>1</b>	<b>1</b>	<b>5.00%</b>
Sum of nth term	1	1	5.00%
<b>Coordinate Geometry</b>	<b>1</b>	<b>1</b>	<b>5.00%</b>
Straight Lines	1	1	5.00%
<b>Linear equation in two variables</b>	<b>1</b>	<b>1</b>	<b>5.00%</b>
Word Problem	1	1	5.00%
<b>Number System</b>	<b>2</b>	<b>2</b>	<b>10.00%</b>
Logarithm	1	1	5.00%
Surds and Exponents	1	1	5.00%
<b>Polynomials</b>	<b>5</b>	<b>5</b>	<b>25.00%</b>
Expansion	2	2	10.00%
Factorisation	2	2	10.00%
Relationship between zeros and coefficient of quadratic polynomial and cubic polynomials	1	1	5.00%
<b>Ratio and Proportion</b>	<b>1</b>	<b>1</b>	<b>5.00%</b>
Ratio	1	1	5.00%
<b>Rectilinear Figures</b>	<b>1</b>	<b>1</b>	<b>5.00%</b>
Hexagon	1	1	5.00%
<b>Set Theory</b>	<b>1</b>	<b>1</b>	<b>5.00%</b>
-	1	1	5.00%
<b>Statistics</b>	<b>1</b>	<b>1</b>	<b>5.00%</b>
Median	1	1	5.00%
<b>Surface area and volume</b>	<b>2</b>	<b>2</b>	<b>10.00%</b>
Individual solids	2	2	10.00%
<b>Trigonometry</b>	<b>3</b>	<b>3</b>	<b>15.00%</b>
Heights and distances	1	1	5.00%
Trigonometric identities	1	1	5.00%
Trigonometric ratios of standard angles	1	1	5.00%
<b>Grand Total</b>	<b>20</b>	<b>20</b>	<b>100.00%</b>

## MENTAL ABILITY ANALYSIS

Mental Ability			
UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%) WEIGHTAGE
<b>Mental Ability</b>	<b>50</b>	<b>50</b>	<b>100.00%</b>
<b>Non Verbal Reasoning</b>	<b>2</b>	<b>2</b>	<b>4.00%</b>
Non-verbal series	2	2	4.00%
<b>Verbal Reasoning</b>	<b>48</b>	<b>48</b>	<b>96.00%</b>
Analogy	5	5	10.00%
Blood Relation	5	5	10.00%
Classification	6	6	12.00%
Coding-Decoding	6	6	12.00%
Direction Sense	2	2	4.00%
Letter Repeating Series	5	5	10.00%
Mathematical Operations	4	4	8.00%
Missing term in figure	5	5	10.00%
number series	4	4	8.00%
Puzzle Test	6	6	12.00%
<b>Grand Total</b>	<b>50</b>	<b>50</b>	<b>100.00%</b>

## ENGLISH ANALYSIS

English			
UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%) WEIGHTAGE
<b>English</b>	<b>50</b>	<b>50</b>	<b>100.00%</b>
<b>Comprehension</b>	<b>6</b>	<b>6</b>	<b>12.00%</b>
Reading Comprehension	6	6	12.00%
<b>Grammar</b>	<b>32</b>	<b>32</b>	<b>64.00%</b>
Determiners	1	1	2.00%
Noun	1	1	2.00%
One word substitution	2	2	4.00%
Phrasal Verbs	6	6	12.00%
Phrase	2	2	4.00%
Preposition	10	10	20.00%
Synonyms ,antonyms	4	4	8.00%
Verbs	6	6	12.00%
<b>Grammar and Collocation</b>	<b>7</b>	<b>7</b>	<b>14.00%</b>
Paragraph completion/cloze	7	7	14.00%

test			
<b>Grammar and Vocabulary</b>	<b>2</b>	<b>2</b>	<b>4.00%</b>
Sentence Completion	2	2	4.00%
<b>Verbal Reasoning</b>	<b>2</b>	<b>2</b>	<b>4.00%</b>
Rearrangement of sentences	2	2	4.00%
<b>Vocabulary</b>	<b>1</b>	<b>1</b>	<b>2.00%</b>
idioms and phrases	1	1	2.00%
<b>Grand Total</b>	<b>50</b>	<b>50</b>	<b>100.00%</b>

### SOCIAL SCIENCE ANALYSIS

Social Science			
UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%) WEIGHTAGE
<b>Social Science</b>	<b>40</b>	<b>40</b>	<b>100.00%</b>
<b>Civics</b>	<b>7</b>	<b>7</b>	<b>17.50%</b>
Indian Constitution	1	1	2.50%
Indian Parliament	1	1	2.50%
Local Self Government	1	1	2.50%
Non-aligned Movements	1	1	2.50%
UN Agencies	1	1	2.50%
Union executive	2	2	5.00%
<b>Economics</b>	<b>2</b>	<b>2</b>	<b>5.00%</b>
Agriculture	2	2	5.00%
<b>Geography</b>	<b>10</b>	<b>10</b>	<b>25.00%</b>
Days and Dates	1	1	2.50%
Minerals in India	3	3	7.50%
Physical Features of India (Physical Divisions of India)	2	2	5.00%
State and Capital	1	1	2.50%
Water Resources	2	2	5.00%
Wildlife of India	1	1	2.50%
<b>History</b>	<b>21</b>	<b>21</b>	<b>52.50%</b>
Age of Mughals	3	3	7.50%
Buddhism	2	2	5.00%
Delhi Sultanate	2	2	5.00%
First War of Independence	1	1	2.50%
GK Facts	5	5	12.50%
Indian Nationalism	3	3	7.50%
Moryan Empire	1	1	2.50%

Sangam age	1	1	2.50%
Social Reforms	2	2	5.00%
Vedic Age	1	1	2.50%
<b>Grand Total</b>	<b>40</b>	<b>40</b>	<b>100.00%</b>

### EXPECTED CUTOFF

Resonance Experts feel that while the overall paper was difficult from previous year, due to relative ease in solving mental ability questions, the cutoff is expected to decrease from last year. As per Resonance Experts, cutoff should be in range of **120 to 125** .

