

STSE (SENIOR – 2015 (RAJASTHAN))

A Detailed Analysis by Resonance

ABOUT STSE (RAJASTHAN)

Every year, Rajasthan Board of Secondary Education conducts “Science Talent Search Examination (STSE)” for Science and Technology Department, Government of Rajasthan, Jaipur. This year too, this exam has been conducted on Sunday, November 01, 2015.

EXAM FORMAT

Based on the question paper analysis of STSE – 2015 held on November 01, 2015, there were 2 papers paper with details given in the table below:

S#	SUBJECT	TOTAL QUESTIONS ASKED	Max. MARKS
1.	Physics	30	30
2.	Chemistry	30	30
3.	Mathematics (Optional)	30	30
4.	Biology (Optional)	30	30
5.	Mental Aptitude/ Language (Paper 2)	90	90
GRAND TOTAL		180	180

* Students had to choose either one of the Biology and Mathematics from Paper 1 while Paper 2 was common for both.

ELIGIBILITY CRITERIA FOR STSE

All students of affiliated/ approved schools in state (Central, Public, Convent, Private, Government, Semi-government etc.) who are currently studying in class XII are eligible to give this examination. Students can attempt only one of the Biology and Mathematics according to their stream while Physics and Chemistry is compulsory for students.

SUBJECTS COVERED

Physics, Chemistry, Mathematics, Biology, General Science, Mental Aptitude.

STSE – 2015 (RAJASTHAN)

STSE – 2015 (Rajasthan) was conducted on Sunday, November 1st, 2015. A total number of 180 questions were asked. Question format was multiple choice with only one correct option out of four with no negative marking. Each question was worth 1 points, making total paper worth 180. 90 questions were to

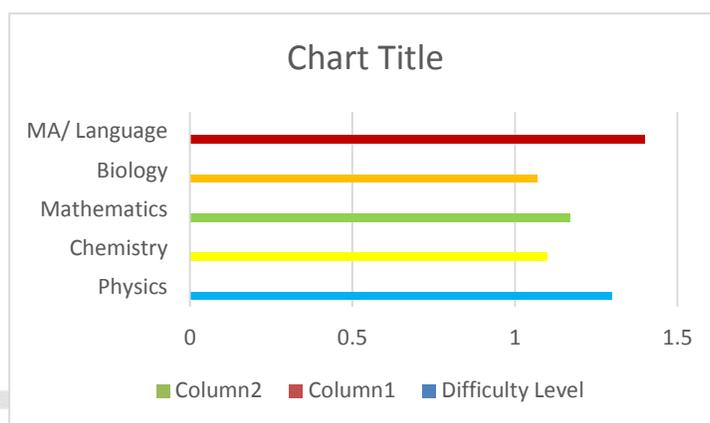
be answered from Subject knowledge (Physics, Chemistry and Mathematics/ Biology) while 90 questions were to be answered from mental aptitude and language aptitude.

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
Physics	1.3
Chemistry	1.1
Mathematics	1.17
Biology	1.07
MA/ Language	1.4
Overall Average (B/M)	1.28/1.30



SUBJECT WISE LEVEL OF DIFFICULTY ANALYSIS

STSE - 2015 (RAJASTHAN) DIFFICULTY ANALYSIS						
SUBJECT	EASY LEVEL		MEDIUM LEVEL		DIFFICULT LEVEL	
	No of Questions	Total Marks	No of Questions	Total Marks	No of Questions	Total Marks
Physics	23	23	5	5	2	2
Chemistry	28	28	1	1	1	1
Mathematics	26	26	3	3	1	1
Biology	28	28	2	2	0	0
MA/ Language	62	62	20	20	8	8
GRAND TOTAL (B/M)*	141/139	141/139	28/29	28/29	11/12	11/12

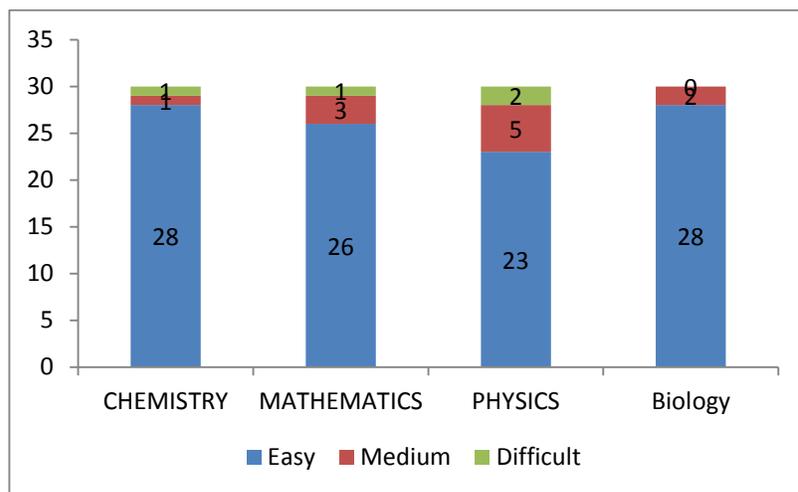
* Grand Total calculated for Biology and Mathematics Stream separately.

Resonance Experts feel that all subjects were of similar difficulty level, while Chemistry was on easier side compared with Physics & Mathematics. Mental Aptitude and Language was on a relatively difficult side.

For Mathematics Stream Students, around 139 Marks can be considered easy overall, 29 marks are relatively difficulty and 12 marks are considered difficult by Resonance Team. For Biology Stream Students, around 141 Marks can be considered easy overall, 28 marks are relatively difficulty and 11 marks are considered difficult by Resonance Team.

Overall, it is felt that while paper is relatively easy like last year, the cut-off may remain same as last year.

MARK WISE DIFFICULTY BREAKUP



SUBJECT WISE ANALYSIS (PAPER 1)

PHYSICS ANALYSIS

Topic wise Allocation of Marks

Unit & Topic Name	Total Marks	% Weightage
OVERALL BREAKUP	30	33.33%
Current Electricity	3	3.33%
Electro Magnetic Induction And AC	2	2.22%
Electrostatics	1	1.11%
EM Waves & Communications	2	2.22%
Fluids Mechanics	2	2.22%
Geometrical Optics	2	2.22%
Gravitation	1	1.11%
KTG & Thermodynamics	2	2.22%
Magnetism	1	1.11%
Modern Physics	5	5.56%
Projectile Motion & Kinematic	2	2.22%
Semi-Conductors	2	2.22%
Shm	1	1.11%
Sound Waves And String Waves	1	1.11%
Work Energy And Power	3	3.33%

CHEMISTRY ANALYSIS

Topic wise Allocation of Marks

Unit & Topic Name	Total Marks	% Weightage
OVERALL BREAKUP	30	33.33%
Aldehyde And Ketone	1	1.11%
Aldehyde And Ketone	1	1.11%
Bimolecule	1	1.11%
Chemical Bonding	6	6.67%
Chemical Kinetics	1	1.11%
Chemistry In Everyday Life	1	1.11%
D & F Block	1	1.11%
Electro Chemistry	1	1.11%
Goc	2	2.22%
Hydrocarbon	1	1.11%
Ionic Equilibrium	2	2.22%
Metallurgy	2	2.22%
Mole Concept	2	2.22%
P- Block	4	4.44%
Polymer	1	1.11%
S- Block	2	2.22%
Surface Chemistry	1	1.11%

MATHEMATICS ANALYSIS (OPTIONAL PAPER)

Topic wise Allocation of Marks

Unit & Topic Name	Total Marks	% Weightage
OVERALL BREAKUP	30	33.33%
3d Geometry	1	1.11%
Appication Of Derivatives	2	2.22%
Area	1	1.11%
Binomial Therorem	1	1.11%
Circle	1	1.11%
Complex Number	1	1.11%
Coordinate Geometry	1	1.11%
Definite Integration	1	1.11%
Determinant	1	1.11%
Differentiability	1	1.11%
Differentiation	2	2.22%
Function	2	2.22%
Indefinite Integration	2	2.22%
Inverse Trigonometry	1	1.11%
Matrix	2	2.22%
Parabola	1	1.11%
Permutation And Combination	2	2.22%
Probability	1	1.11%
Progression	1	1.11%
Set Theory	1	1.11%
Statistics	1	1.11%
Trigonometry	2	2.22%
Vectors	1	1.11%

BIOLOGY ANALYSIS (OPTIONAL PAPER)

Topic wise Allocation of Marks

Unit & Topic Name	Total Marks	% Weightage
OVERALL BREAKUP	30	33.33%
Biology In Human Welfare	6	6.67%
Cytology	1	1.11%
Diversity In Living World	6	6.67%
Ecology	1	1.11%
Genetics	1	1.11%
Physiology	9	10.00%
Plant Morphology	2	2.22%
Reproduction	2	2.22%
Structural Organisation In Animals	2	2.22%



MENTAL APTITUDE AND LANGUAGE (PAPER 2)

Topic wise Allocation of Marks

Unit & Topic Name	Total Marks	% Weightage
LCT	40	44.44%
Autonyms	2	5.00%
Clause Analysis	2	5.00%
Determiner	2	5.00%
Fill up/ Connection	4	10.00%
Fill up/ Phrasal Verb	4	10.00%
Framing Question	1	2.50%
Modal	3	7.50%
Naration	2	5.00%
Passive	2	5.00%
Phrase	1	2.50%
Punctuation error	2	5.00%
Sentence Ordering	2	5.00%
Spelling Correction	2	5.00%
Subject verb Agreement	2	5.00%
Synonyms	4	10.00%
Tag Question	1	2.50%
Tense	2	5.00%
Transformation	2	5.00%
MAT	50	55.56%
alphabet series	1	2.00%
Alphabet test	3	6.00%
Analogy	2	4.00%
Arithmetic Reasoning	2	4.00%

Blood Relation	4	8.00%
classification	2	4.00%
coding decoding	2	4.00%
Counting the figure	2	4.00%
Cube Test	1	2.00%
Decision Making	2	4.00%
Dice Test	1	2.00%
Direction sense test	2	4.00%
Figure completion	2	4.00%
Figure formation	4	8.00%
Logical Sequence of Words	2	4.00%
Mathematical Operation	2	4.00%
Mirror Image	2	4.00%
Missing Terms In Figure	2	4.00%
non verbal analogy	2	4.00%
Non verbal classification	1	2.00%
non verbal series	2	4.00%
number series	1	2.00%
Ranking And Ordering	1	2.00%
Symmetry with Origin	1	2.00%
Venn Diagram	2	4.00%
Water Image	2	4.00%
Grand Total	90	100.00%

EXPECTED CUTOFF

Overall, it is felt that while paper is relatively easy like last year, the cut-off may remain same as last year.

