

**A Detailed Question Paper Analysis of
STSE (State Talent Search Examination) 2022
Paper 3 Scholastic Aptitude Test (SAT)
Dec 18, 2022 (11:30am - 1:00 pm)**

On 18th December 2022, STSE (State Talent Search Examination) - 2022 exam was conducted by RBSE (Rajasthan Board of Secondary Education). STSE is organized to find academically meritorious students in Rajasthan and to support them by helping to develop better and needful skills in the science domain/stream. The STSE exam is conducted every year annually within the Rajasthan state.

Through this exam, the students of RBSE affiliated Schools & other Govt Schools who get successfully selected in the exam become eligible to be awarded with different scholarships as per the latest criteria.

- Eligibility:
 - Students who are studying in Class 10th are eligible to apply for STSE.
 - The candidates must belong to an RBSE affiliated school or state-recognized board in Rajasthan.
 - For academic eligibility criteria, applying candidates must have completed class 9th with a minimum score of 50%.
- Question Paper Pattern:

The examination was conducted in Offline (pen paper based) mode. The time duration was different for each paper. The questions were Objective type and the exam conducted was English and Hindi languages. The test was divided into 03 sections. The detailed exam pattern was as follows:-

Paper	Exam	No. of Ques	Marks	Timing
Paper1	Mental Ability Test (MAT)	50	50	9 am - 9:45 am
Paper2	Language Comprehension Test (LCT)	40	40	10:15 am - 11:00 am
Paper3	Scholastic Aptitude Test (SAT)	90	90	11:30am - 1:00 pm

Note: Plus 01 marks will be awarded for each correct answer and there is no provision of Negative Marking.

- The maximum marks for the paper was 90 marks.

Paper3 - Scholastic Aptitude Test (SAT)

QUESTION WISE ANALYSIS

Physics

Following is the question distribution table as per Class,Chapter, Topic & Difficulty -

Q No.	Class	Subject	Chapter Name	Topic Name	Type Of Question	Difficulty Level	Marks Allotted
1	9	Physics	Motion	Unit	MCQ	Easy	1
2	9	Physics	Force and Laws of Motion	Inertia	MCQ	Easy	1
3	9	Physics	Force and Laws of Motion	Resultant Force	MCQ	Easy	1
4	9	Physics	Force and Laws of Motion	Linear Momentum	MCQ	Easy	1
5	9	Physics	Gravitation	Buoyant Force	MCQ	Easy	1
6	9	Physics	Gravitation	Acceleration Due to Gravity	MCQ	Easy	1
7	9	Physics	Gravitation	Relative Density	MCQ	Easy	1
8	9	Physics	Gravitation	Unit of G	MCQ	Easy	1
9	9	Physics	Work and Energy	Work	MCQ	Easy	1
10	9	Physics	Work and Energy	Nature of Work	MCQ	Easy	1
11	9	Physics	Work and Energy	Unit	MCQ	Easy	1
12	9	Physics	Work and Energy	Work Done by Conservative Force	MCQ	Easy	1
13	10	Physics	Light-Reflection and Refraction	Refractive Index	MCQ	Easy	1
14	10	Physics	Light-Reflection and Refraction	Mirror Formula	MCQ	Easy	1
15	10	Physics	Light-Reflection and Refraction	Power of Lens	MCQ	Easy	1
16	10	Physics	Light-Reflection and Refraction	Image Formation by Concave Mirror	MCQ	Easy	1

17	10	Physics	Human eye and Colourful world	Atmospheric Refraction	MCQ	Easy	1
18	10	Physics	Human eye and Colourful world	Power of Accommodation	MCQ	Easy	1
19	10	Physics	Electricity	Potential Difference	MCQ	Easy	1
20	10	Physics	Electricity	Commercial Unit of Energy	MCQ	Easy	1
21	10	Physics	Electricity	Electric Power	MCQ	Easy	1
22	10	Physics	Electricity	Resistances in Series and Parallel	MCQ	Easy	1
23	10	Physics	Magnetic Effect of Electric Current	Electric Motor	MCQ	Easy	1
24	10	Physics	Magnetic Effect of Electric Current	Magnetic Field Due to Current Carrying Solenoid	MCQ	Easy	1
25	10	Physics	Magnetic Effect of Electric Current	Household Electric Circuit	MCQ	Medium	1

Chemistry

Following is the question distribution table as per Class,Chapter, Topic & Difficulty -

Q No.	Class	Subject	Chapter Name	Topic Name	Type Of Question	Difficulty Level	Marks Allotted
26	9	Chemistry	Matter in our surrounding	Matter	MCQ	Easy	1
27	9	Chemistry	Matter in our surrounding	Interconversion of physical states of matter	MCQ	Easy	1
28	9	Chemistry	Is matter around us pure	Colloids	MCQ	Easy	1
29	9	Chemistry	Is matter around us pure	Separating the Components of a Mixture	MCQ	Easy	1
30	10	Chemistry	Metals and Non metals	Non metals	MCQ	Easy	1
31	9	Chemistry	Is matter around us pure	Compounds	MCQ	Easy	1
32	9	Chemistry	Is matter around us pure	Physical and chemical changes	MCQ	Easy	1

33	9	Chemistr y	Atoms and molecules	Formula making	MCQ	Easy	1
34	9	Chemistr y	Atoms and molecules	Mole concept	MCQ	Easy	1
35	10	Chemistr y	Chemical reactions and equations	Types of chemical reactions	MCQ	Easy	1
36	10	Chemistr y	Acids bases and salts	pH	MCQ	Easy	1
37	10	Chemistr y	Acids bases and salts	Some important salts	MCQ	Easy	1
38	9	Chemistr y	Structure of the atom	Electronic configuration	MCQ	Easy	1
39	10	Chemistr y	Metals and Non metals	Reactivity series of metals	MCQ	Easy	1
40	10	Chemistr y	Carbon and its compounds	IUPAC Nomenclature	MCQ	Easy	1
41	10	Chemistr y	Carbon and its compounds	Some important carbon compounds -Ethanol and Ethanoic acid	MCQ	Easy	1
42	10	Chemistr y	Chemical reactions and equations	Types of chemical reactions	MCQ	Easy	1
43	10	Chemistr y	Acids bases and salts	Chemical properties of acids	MCQ	Easy	1
44	10	Chemistr y	Periodic Classification of Elements	Metallic and Non-metallic Properties	MCQ	Easy	1
45	9	Chemistr y	Structure of the atom	Electronic configuration	MCQ	Easy	1
46	10	Chemistr y	Periodic Classification of Elements	Modern periodic table	MCQ	Easy	1
47	10	Chemistr y	Periodic Classification of Elements	Metallic and Non-metallic Properties	MCQ	Easy	1
48	9	Chemistr y	Structure of the atom	Electronic configuration	MCQ	Easy	1
49	10	Chemistr y	Acids bases and salts	Acids	MCQ	Easy	1
50	9	Chemistr y	Atoms and molecules	Formula making	MCQ	Medium	1

Biology

Following is the question distribution table as per Class, Chapter, Topic & Difficulty -

Q No.	Class	Subject	Chapter Name	Topic Name	Type Of Question	Difficulty Level	Marks Allotted
51	9	Biology	The fundamental unit of life	Mitochondria	MCQ	Easy	1
52	9	Biology	Why do we fall ill	Viral diseases	MCQ	Easy	1
53	9	Biology	Diversity in living organisms	Gymnosperms	MCQ	Easy	1
54	9	Biology	Natural resources	Gases composition	MCQ	Easy	1
55	10	Biology	Life processes	Respiration	MCQ	Easy	1
56	10	Biology	Life processes	Transportation in plants	MCQ	Easy	1
57	10	Biology	Control and coordination	Plant hormone	MCQ	Easy	1
58	10	Biology	How do organisms reproduce	Reproduction in plants	MCQ	Easy	1
59	10	Biology	Our environment	Trophic levels	MCQ	Easy	1
60	10	Biology	Sustainable management of natural resources	Water harvesting system	MCQ	Easy	1
61	10	Biology	Life processes	Double circulation	MCQ	Easy	1
62	10	Biology	Control and coordination	Neurons	MCQ	Easy	1
63	10	Biology	Heredity and evolution	Laws of inheritance	MCQ	Easy	1
64	10	Biology	How do organisms reproduce	Budding	MCQ	Easy	1
65	10	Biology	Control and coordination	Animal hormones	MCQ	Easy	1
66	10	Biology	Control and coordination	Brain	MCQ	Easy	1
67	9	Biology	Diversity in living organisms	Animal Kingdom (Arthropoda)	MCQ	Easy	1
68	9	Biology	Why do we fall ill	Viral diseases	MCQ	Easy	1
69	9	Biology	Diversity in living organisms	Animal Kingdom (Symmetry)	MCQ	Medium	1
70	9	Biology	Fundamental unit of life	Discoveries	MCQ	Easy	1

Mathematics

Following is the question distribution table as per Class, Chapter, Topic & Difficulty -

Q No.	Class	Subject	Chapter Name	Topic Name	Type Of Question	Difficulty Level	Marks Allotted
71	9	Mathematics	Number System	Laws of Exponents and Powers	MCQ	Easy	1
72	9	Mathematics	Polynomials	Factor Theorem	MCQ	Easy	1
73	9	Mathematics	Coordinate Geometry	Equation of a line	MCQ	Easy	1
74	9	Mathematics	Lines and Angles	Some Properties of triangle	MCQ	Medium	1
75	9	Mathematics	Heron's Formula	Area of Triangle	MCQ	Medium	1
76	10	Mathematics	Surface Area and Volumes	Cone	MCQ	Medium	1
77	9	Mathematics	Statistics	Mode	MCQ	Easy	1
78	10	Mathematics	Probability	Dice	MCQ	Easy	1
79	9	Mathematics	Number System	Prime Factorization	MCQ	Easy	1
80	10	Mathematics	Polynomials	Relationship between zeroes and coefficients of Quadratic Equation	MCQ	Easy	1
81	9	Mathematics	Surface Area and Volume	Rectangle	MCQ	Medium	1
82	10	Mathematics	Quadratic Equation	Nature of Roots	MCQ	Easy	1
83	10	Mathematics	Arithmetic Progression	Sum of n terms of an AP	MCQ	Medium	1
84	10	Mathematics	Coordinate Geometry	Section Formula	MCQ	Easy	1
85	10	Mathematics	Trigonometry	Trigonometric functions of Complementary Angles	MCQ	Medium	1
86	10	Mathematics	Some Applications of Trigonometry	Angle of elevation	MCQ	Easy	1
87	10	Mathematics	Circle	Length of Tangent	MCQ	Medium	1

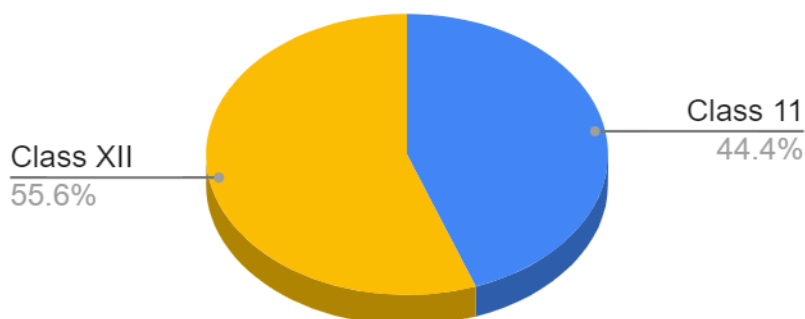
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88	10	Mathematics	Area related to circles	Area of shaded portion	MCQ	Medium	1
89	10	Mathematics	Surface areas and volumes	Volume of Sphere	MCQ	Medium	1
90	10	Mathematics	Statistics	Mean by Step deviation	MCQ	Easy	1

CLASS WISE DISTRIBUTION ANALYSIS

As per Aakash Byju's experts in SAT, 40 questions belonged to Class 9th syllabus & 50 questions belonged to Class 10th syllabus. The paper had more questions from Class 10th than Class 9th.

Subject	Class 9		Class 10		Grand Total	
	No. Of Questions	Total Marks	No. Of Questions	Total Marks	No. Of Questions	Total Marks
SAT	40	40	50	50	90	90

Class Wise Distribution

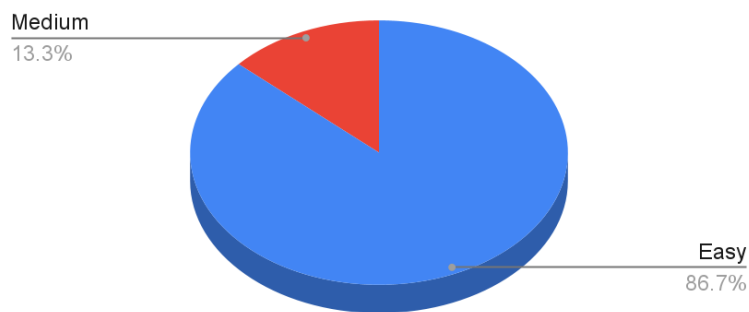


DIFFICULTY LEVEL ANALYSIS

As per Aakash Byju's experts in SAT, **78** questions were easy, **12** questions were of medium difficulty & no question was difficult.

Subject	Easy		Medium		Difficult		Grand Total	
	No.Of Questions	Total Marks	No.Of Questions	Total Marks	No.Of Questions	Total Marks	No.Of Questions	Total Marks
SAT	78	78	12	12	0	0	90	90

Difficulty Wise Question Distribution



CONCLUSION

Aakash Byju's Experts feel that **Paper 3 - SAT** was Moderately Easy.