<u>INJSO - 2018</u>

A Detailed Analysis by Resonance

On 27th January 2018, INJSO (Indian National Junior Science Olympiad) - 2018 exam was conducted by the Homi Bhabha Centre for Science Education (HBCSE) at many centers all over the country. INJSO is the second stage for selection of aspiring and talented students in the Junior Science Olympiad Program. The student can move forward to attend the Orientation Cum Selection Camp (OCSC) after clearing this stage.

Eligibility: Only Indian citizens born between January 1, 2003 and December 31, 2004, (both days inclusive) and are students studying in Class X or lower as of November 30, 2017, can apply and appear for NSEJS 2017. The student must not appear any of the senior science Olympiad. The student has to himself re-assure his eligibility. At any stage if the student is found to be not eligible for the exam, he/she may be disqualified from the program. Student satisfying these criterion can apply and appear for INJSO 2018 after clearing NSEJS, 2017.

Syllabus: No detailed syllabus is given for INJSO. There were questions from Physics, Biology and Chemistry.

Question Paper: The medium of test was English only and it comprised of 42 question (30 objective type questions with 1 marks each and -0.25 negative marking for incorrect answer and 12 subjective type of total 60 marks) correct.

Merit Clause: Approximately 35 students are to be selected for camp.

OVERALL MARKS DISTRIBUTION

The medium of test was English only and it comprised of 42 question (30 objective type questions with 1 marks each and -0.25 negative marking for incorrect answer and 12 subjective type of total 60 marks) correct. Subject wise breakup is given below.

	Class 9	Class 10	Class 11	Class 12	Total
Subject	Total Marks				
Biology			15.5	13	28.5
Chemistry	7.5	9	8	7	31.5
Physics	10	10	8	2	30
Grand Total	17.5	19	31.5	22	90

OVERALL DIFFICULTY LEVEL ANALYSIS

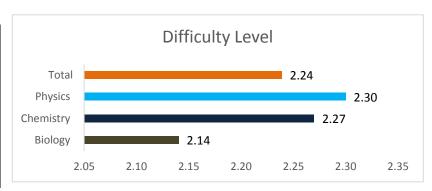
In this analysis we have rated every question on a scale of 1 to 3. The ratings are done by expert faculty members of Resonance. The individual ratings are then averaged to calculate overall difficulty level.

• 1: Easy

2: Moderate

• 3: Difficult

Subject	Difficulty Level
Biology	2.14
Chemistry	2.27
Physics	2.30
Total	2.24



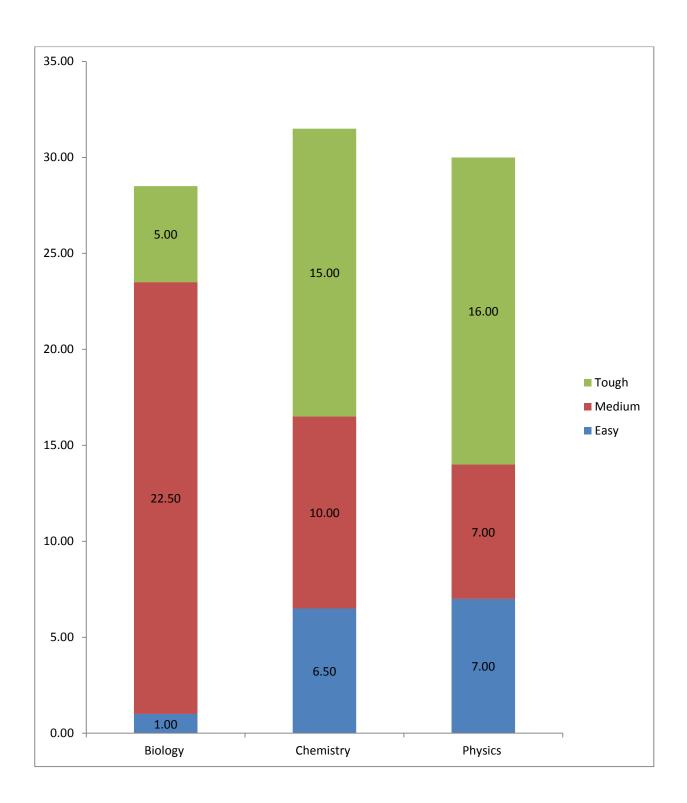
DIFFICULTY LEVEL ANALYSIS: NO OF QUESTIONS

Cultina	Easy Level	Medium Level	Difficult Level	Total
Subject	Total Marks	Total Marks	Total Marks	Total Marks
Biology	1	22.5	5	28.50
Chemistry	6.5	10	15	31.50
Physics	7	7	16	30.00
Grand Total	14.5	39.5	36	90

Resonance's Experts feel that all subjects were of similar difficulty level, while Biology was on easier side compared to Chemistry & Physics. While around 14.5 Marks can be considered easy overall, 39.5 marks are moderately difficulty and 36 marks are considered difficult by Resonance Team.

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

QUESTION WISE DIFFICULTY BREAKUP





SUBJECT WISE ANALYSIS

PHYSICS ANALYSIS

Phyiscs			
UNIT & TOPIC NAME	TOTAL MARKS	(%) WEIGHTAGE	
Physics	30	100.00%	
Electricity	2	7.41%	
Combination of Resistance	2	7.41%	
Electromagnetic Induction (EMI)	1	3.70%	
Magnetic flux	1	3.70%	
Electrostatic Force	2	3.70%	
Electrostatic Potential	2	3.70%	
Electrostatics	1	3.70%	
Electric Charge	1	3.70%	
Fluid	6	18.52%	
Buoyant Force	1	3.70%	
Fluid in Motion	5	14.81%	
Light	6	7.41%	
Graph for Concave Mirror	5	3.70%	
Refractive Index (Real and Apparent depth)	1	3.70%	
Motion	1	3.70%	
Motion under Gravity	1	3.70%	
Motion	1	3.70%	
Instantaneous Velocity and Instantaneous Acceleration	1	3.70%	
Newton's laws of Motion (NLM)	1	3.70%	
Friction	1	3.70%	
Sound	4	22.22%	
Basic Maths	0.5	3.70%	
Echo	1	3.70%	
Fluid	1	3.70%	
Motion	1.5	11.11%	
Vector	5	22.22%	
Resultant Force	5	22.22%	
Grand Total	30	100.00%	



CHEMISTRY ANALYSIS

Chemistry			
UNIT & TOPIC NAME	TOTAL MARKS	(%) WEIGHTAGE	
Chemistry	31.5	100.00%	
Chemical Reaction and Equation	2	5.26%	
Types of Reaction	2	5.26%	
Equivalent Concept	7	21.05%	
Titration	7	21.05%	
Gaseous State	1	5.26%	
Ideal Gas	1	5.26%	
Metals and Non-metals	4	10.53%	
Chemical Properties	1	5.26%	
Metallurgy	3	5.26%	
Mole Concept	11.5	42.11%	
Calculation of Mole	1.5	5.26%	
Number of Molecules	1	5.26%	
Percentage Composition	2	10.53%	
Stoichiometry	7	21.05%	
Periodic Table	3	10.53%	
Periodicity	3	10.53%	
Structure of Atom	3	5.26%	
Fundamental Particle	3	5.26%	
Grand Total	31.5	100.00%	



BIOLOGY ANALYSIS

Biology			
UNIT & TOPIC NAME	TOTAL MARKS	(%) WEIGHTAGE	
Biology	28.5	100.00%	
Biodiversity	1	3.45%	
Non Chordates	1	3.45%	
Biomolecule	1	3.45%	
Structure of DNA	1	3.45%	
Cell	1	3.45%	
Chloroplast	1	3.45%	
Ecology	5	20.69%	
Food Chain	3	13.79%	
Food Web	2	6.90%	
Heredity & Evolution	2	6.90%	
Darwinism	1	3.45%	
Genetics	1	3.45%	
Heredity and Evolution	5	10.34%	
Pedigree	5	10.34%	
Immunology	1	3.45%	
Types of Immunity	1	3.45%	
Nutrition in Plants	5	20.69%	
Photosynthesis	4	17.24%	
Translocation	1	3.45%	
Respiration	3.5	13.79%	
Biochemistry	2	10.34%	
Cellular Respiration	1.5	3.45%	
Sensory Organs	2	6.90%	
Structure of Eye	2	6.90%	
Transportation	2	6.90%	
Plant and Water Relationship	1	3.45%	
Translocation	1	3.45%	
Grand Total	28.5	100.00%	



EXPECTED CUTOFF

Overall, it is felt by Resonance faculty team that paper was on easier side compared to last year's paper and the cut-off is expected to be higher than that of last year. The expected cutoff would be 45-48.