

INJSO -2023 Analysis

<u>INJSO - 2023</u>

A Detailed Analysis by Resonance

On 28th January 2023, INJSO (Indian National Junior Science Olympiad) - 2023 exam was conducted by the Homi Bhabha Centre for Science Education (HBCSE-TIFR) 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, 2008 and December 31, 2009, (both days inclusive) and are students studying in Class X or lower as of November 30, 2022, can apply and appear for NSEJS 2022. 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 2022 after clearing NSEJS, 2022.

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 35 question (15 objective type questions with 3 marks each and - 01 negative marking for incorrect answer, 09 objective type question with 05 marks each one or more options correct and 11 subjective type questions of total 90 marks.

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 35 question (15 objective type questions with 3 marks each and - 01 negative marking for incorrect answer and 09 subjective type question with 05 marks each one or more options correct and 11 subjective type questions of total 90 marks. Subject wise breakup is given below.

| | Class 9 Class 10 | | Class 11 | Class 12 | Total |
|-------------|------------------|----------------|----------------|----------------|----------------|
| Subject | Total Question | Total Question | Total Question | Total Question | Total Question |
| Biology | 0 | 0 | 2 | 10 | 12 |
| Chemistry | 5 | 5 | 0 | 1 | 11 |
| Physics | 0 | 0 | 9 | 3 | 12 |
| Grand Total | | | | | 35 |



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 2.16 Chemistry 1.45 Physics 2.16 Total(Avarge) 1.92 **DIFFICULTY LEVEL** TOTAL(AVARGE) .92 2.16 PHYSICS 1.45 CHEMISTRY 2.16 BIOLOGY

DIFFICULTY LEVEL ANALYSIS: NO OF QUESTIONS

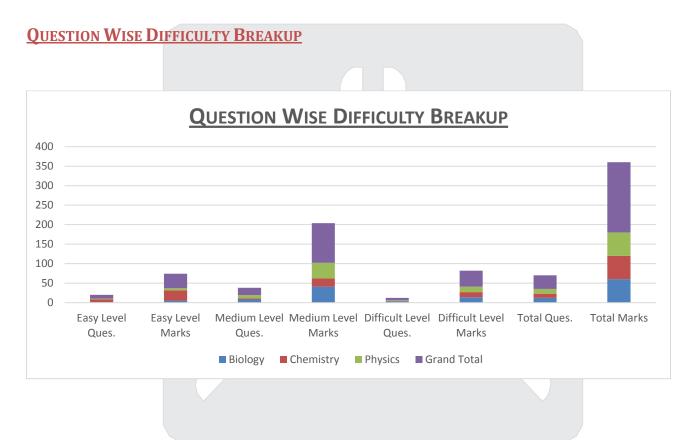
| Subject | Easy Level Ques. | Easy Level Marks | Medium Level Ques. | Medium Level Marks | Difficult Level Ques. | Difficult Level Marks | Total Ques. | Total Marks |
|----------------|---------------------|------------------------|--------------------------|--------------------------|-----------------------------|-----------------------------|----------------|----------------|
| Biology | 1 | 5 | 8 | 41 | 3 | 14 | 12 | 60 |
| Chemistry | 7 | 26 | 3 | 21 | 1 | 13 | 11 | 60 |
| Physics | 2 | 6 | 8 | 40 | 2 | 14 | 12 | 60 |
| Grand Total | 10 | 37 | 19 | 102 | 6 | 41 | 35 | 180 |



INJSO -2023 Analysis

Resonance's Experts feel that Chemistry was on easier side as compare to remaining subjects Physics was lengthy and difficult as compare to last year. While around 37 Marks can be considered easy overall, 102 marks are moderately difficulty and 41 marks are considered difficult by Resonance Team.

Overall, it is felt by Resonance Faculty Team that this year paper was on tougher side as compared to last year paper.





SUBJECT WISE ANALYSIS

PHYSICS ANALYSIS

| ΤΟΡΙϹ ΝΑΜΕ | No of Marks | (%) WEIGHTAGE | |
|-------------------------------------|-------------|---------------|--|
| Physics | | | |
| Unit and Dimension | | | |
| Angular size | 3 | 5% | |
| Kinematics | | | |
| Relative Motion | 3 | 5% | |
| Projective Motion | 5 | 8% | |
| Newton's Laws of motion(NLM) | | | |
| Friction | 5 | 8% | |
| Impulsive force | 7 | 12% | |
| Sound | | | |
| Echo | 5 | 8% | |
| Work, Power & Energy | | | |
| Collision | 3 | 5% | |
| Electricity | | | |
| Ohm's Law | 11 | 18% | |
| Fluid | | | |
| Spring balance and weighing machine | 7 | 12% | |
| Light | | 0% | |
| Lens | 3 | 5% | |
| Magnetic Effect Of Current & EMI | | | |
| Lorentz's force | 5 | 8% | |
| Heat | | | |
| Calorimetery | 3 | 5% | |
| Grand Total | | | |
| | 60 | 100.00% | |



CHEMISTRY ANALYSIS

| TOPIC NAI | ME | No of Marks | (%) WEIGHTAGE | |
|--------------------------------|----|----------------|---------------|--|
| Chemistry | | INO OF IVIARKS | | |
| Acids Bases and Salts | | 3 | 5% | |
| Biomolecules | | 3 | 5% | |
| Chemical reaction and equation | | 3 | 5% | |
| Mole concept | | 3 | 5% | |
| Mole concept | | 3 | 5% | |
| Periodic Table | | 5 | 8% | |
| Periodic Table | | 5 | 8% | |
| Mole concept | | 5 | 8% | |
| Equivalent Concept | | 13 | 22% | |
| Carbon and its compunds | | 13 | 22% | |
| Matter-II | | 4 | 7% | |
| Grand Total | | | 0% | |
| | | 60 | 100.00% | |

BIOLOGY ANALYSIS

| ΤΟΡΙϹ ΝΑΜΕ | | (%) WEIGHTAGE | |
|-----------------------------------|-------------|---------------|--|
| Biology | No of Marks | | |
| Biotechnology | 3 | 5% | |
| Biotechnology | 8 | 13% | |
| Heridity & Revoution | 3 | 5% | |
| Heridity & Revoution | 3 | 5% | |
| Nutrition | 3 | 5% | |
| Ecology | 5 | 8% | |
| Ecology | 5 | 8% | |
| Ecology | 8 | 13% | |
| Ecology | 6 | 10% | |
| Transportation in Plants | 3 | 5% | |
| Microorganism in Human welfare | 5 | 8% | |
| Microorganism in Human welfare | 8 | 13% | |
| Grand Total | 60 | 100.00% | |



INJSO -2023 Analysis

EXPECTED CUTOFF

Overall, it is felt by Resonance faculty team that paper was on tougher side as compared to last year's paper and the cut-off is expected to be lower than that of last year. The expected cut off would be 90-95.

