

NSEJS 2023-24 Exam Paper - Detailed Analysis

26th November 2023 (2:30 - 4:30 pm)

National Standard Examinations - Junior Science (NSEJS) is a nationwide examination organized by IAPT (Indian Association of Physics Teachers). IAPT has been conducting NSEJS at CBSE class X level. The NSEs are the First stage and THE ONLY SCREENING TESTS in India leading towards International Olympiads in the respective science subjects.

NSEJS will contain a maximum of 60 Questions having Maximum Marks of 216, which is bifurcated in two parts in following manner:

In part A1 (Q. No.1 to 48) each question has four alternatives, out of which only one is correct. Each correct answer carries 3 marks whereas 1 mark will be deducted for each wrong answer.

In part A2 (Q. No. 49 to 60) each question has four alternatives out of which any number of alternative (s) (1, 2, 3, or 4) may be correct. You have to choose all the correct alternative(s) and fill the appropriate bubble(s). Students get 6 marks if all the correct alternatives are marked. No negative marks in this part. .

NSEJS 2023-24 was conducted on Sunday, November 26, 2023 from 2:30 PM to 4:30 PM for eligible students

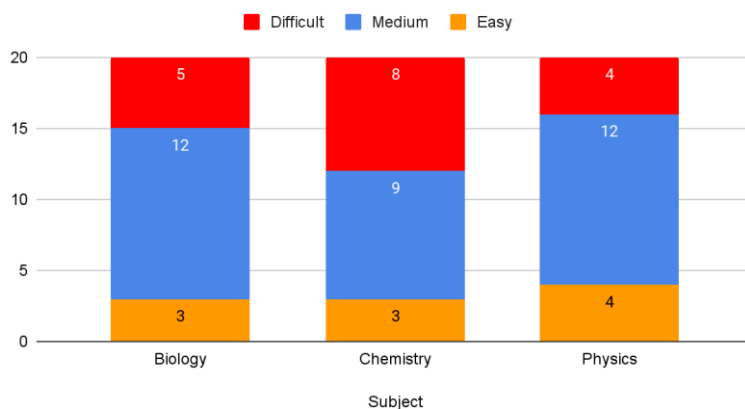
As per our expert faculty analysis, below are the **Key Take-Aways from NSEJS 2023-24:**

Subject Wise Difficulty Level

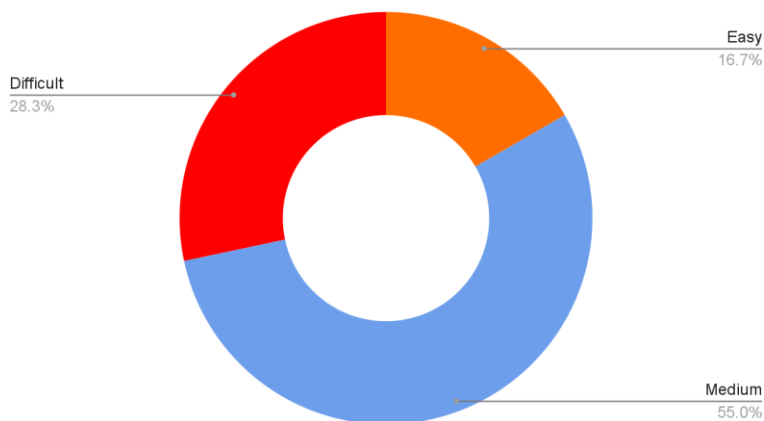
- Physics was rated as moderate on the difficulty level. It was on an easier side compared to other subjects. It consisted mostly of moderate questions.
- Chemistry was rated as moderate to difficult. It was the most difficult among all subjects. It consisted mostly of moderate & difficult questions.
- Biology was rated as moderate to difficult on the difficulty level. It consisted mostly of moderate questions.

	Easy		Medium		Difficult		Grand Total	
Subject	No of Questions	Total Marks	No of Questions	Total Marks	No of Questions	Total Marks	No of Questions	Total Marks
Biology	3	9	12	39	5	24	20	72
Chemistry	3	9	9	30	8	33	20	72
Physics	4	12	12	42	4	18	20	72
Total	10	30	33	111	17	75	60	216

Subject Wise Difficulty Level



Difficulty Level Distribution of NSEJS 2023-24



Chapter/Topic Level Level Distribution

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

Question No.	Subject	Chapter	Topic Name	Difficulty Level	Marks	Class	Section
1	Biology	Life Processes	Circulation	Easy	3	X	A1
2	Biology	Control and Coordination	Reflex Action	Easy	3	X	A1
3	Biology	Strategies for Enhancement in Food Production	Hybridization	Medium	3	XII	A1
4	Biology	Tissue	Animal Tissue	Medium	3	IX	A1
5	Biology	Principles of Inheritance and Variation	Human Genetics	Medium	3	XII	A1
6	Biology	Control and Coordination	Adrenal Gland	Medium	3	X	A1

7	Biology	Neural Control and Coordination	Eye	Easy	3	XI	A1
8	Biology	Improvement in Food Resources	Crop Protection Management	Medium	3	IX	A1
9	Biology	How do Organisms Reproduce?	Sexual Reproduction in Flowering Plants	Difficult	3	X	A1
10	Biology	Diversity in Living Organisms	Pteridophytes	Medium	3	IX	A1
11	Biology	Cell : The Unit of Life	Nucleus	Difficult	3	XI	A1
12	Biology	Fundamental Unit of Life	Cell Wall	Medium	3	IX	A1
13	Biology	Morphology of Flowering Plants	The Inflorescence	Medium	3	XI	A1
14	Biology	Human Reproduction	Embryogenesis	Medium	3	XII	A1
15	Biology	Life Processes	The CAM Pathway	Medium	3	X	A1
16	Biology	Life Processes	Nutrition	Medium	3	X	A1
17	Physics	Work and energy	Kinetic Energy	Easy	3	IX	A1
18	Physics	Electricity	Resistance	Medium	3	X	A1
19	Physics	Sound	Factors Affecting Speed of Sound	Medium	3	IX	A1
20	Physics	Electromagnetic Induction	Lenz Law	Medium	3	XII	A1
21	Physics	Gravitation	Pressure Exerted by Liquid Column	Easy	3	IX	A1
22	Physics	Light	Refraction Through Convex Lens	Medium	3	X	A1
23	Physics	Work and Energy	Conservation of Energy	Medium	3	IX	A1
24	Physics	Electricity	Combination of Resistors	Difficult	3	X	A1
25	Physics	Gravitation	Pressure	Medium	3	IX	A1
26	Physics	Electricity	Heating Effect of Current	Medium	3	X	A1
27	Physics	Light	Reflection Through Convex Mirror	Easy	3	X	A1
28	Physics	Electricity	Combination of Resistors	Medium	3	X	A1
29	Physics	Work and Energy	Conservation of Energy	Difficult	3	IX	A1
30	Physics	Magnetic Effect of Current	Force Between Two Parallel Current Carrying Conductor	Medium	3	X	A1
31	Physics	Thermal Properties of Matter	Temperature	Easy	3	XI	A1
32	Physics	Gravitation	Orbital Velocity	Medium	3	IX	A1
33	Chemistry	Periodic Classification of Elements	Electron affinity and ionization energy	Medium	3	XI	A1

34	Chemistry	Hydrogen	Properties of hydrogen .	Medium	3	XI	A1
35	Chemistry	Hydrogen	Comparison between H ₂ O and D ₂ O	Difficult	3	XI	A1
36	Chemistry	s-Block Elements	Uses of alkali metals	Medium	3	XI	A1
37	Chemistry	Carbon and its compounds	Lewis dot structure	Medium	3	X	A1
38	Chemistry	Periodic Classification of Elements	Classification of elements	Difficult	3	XI	A1
39	Chemistry	Matter in Our Surroundings	States of Matter	Easy	3	IX	A1
40	Chemistry	Carbon and its compounds	Ethanoic acid	Difficult	3	X	A1
41	Chemistry	Some Basic Concepts of Organic Chemistry	Resonance (Acidic and basic strength)	Difficult	3	XI	A1
42	Chemistry	Carbon and its Compounds	Hydrocarbons	Medium	3	X	A1
43	Chemistry	States of Matter	Gas Laws	Medium	3	XI	A1
44	Chemistry	Acids Bases and Salts	pH	Medium	3	X	A1
45	Chemistry	Structure of Atom	Atomic Mass	Easy	3	IX	A1
46	Chemistry	Atoms and Molecules	Mole Concept	Difficult	3	IX	A1
47	Chemistry	Atoms and Molecules	Mole Concept	Medium	3	IX	A1
48	Chemistry	Carbon and its Compounds	Cleansing Action of Soap and Detergent	Easy	3	X	A1
49	Biology	Animal Kingdom	Mammalia	Difficult	6	XI	A2
50	Biology	Principles of Inheritance and Variation	Pedigree Analysis	Difficult	6	XII	A2
51	Biology	Control and Coordination	Tropic Movement	Difficult	6	X	A2
52	Biology	Life Processes	Cyclic Photophosphorylation	Medium	6	X	A2
53	Physics	Work and Energy	Power	Difficult	6	IX	A2
54	Physics	Electricity	Electrical Power	Medium	6	X	A2
55	Physics	Gravitation	Archimedes Principle	Difficult	6	IX	A2
56	Chemistry	Structure of Atom	Bohr's atomic Model	Medium	6	IX	A2
57	Chemistry	Periodic Classification of Elements	Ionization Energy	Difficult	6	XI	A2
58	Chemistry	Acids Bases and Salts	Properties of Acids and Bases	Difficult	6	X	A2
59	Chemistry	Chemical Reactions and Equations	Redox Reaction	Difficult	6	X	A2
60	Physics	Motion	Velocity Time Graph	Medium	6	IX	A2

Class Wise Distribution Level

- In Physics, majorly questions were from the Class IX & X syllabus, few questions were from Class XI & XII Concepts as well.
- In Chemistry, mostly questions were from the Class IX & X syllabus & many questions were from Class XI & XII Concepts as well
- In Biology, mostly questions were from the Class IX & X syllabus & many questions were from Class XI & XII Concepts as well
- Overall the questions were majorly from the Class IX & X syllabus where as approximately 30% of questions were from Class XI & XII syllabus
- Portions of Class IX & X dominated the paper on marks distribution, where as concepts of Class XI & XII also fetched good chunk of scores

Section	Subject	IX		X		XI		XII		Total	
		No. of Questions	Total Marks	No. of Questions	Total Marks	No. of Questions	Total Marks	No. of Questions	Total Marks	No. of Questions	Total Marks
A1	Biology	4	12	6	18	3	9	3	9	16	48
	Chemistry	4	12	5	15	7	21			16	48
	Physics	7	21	7	21	1	3	1	3	16	48
A2	Biology			2	12	1	6	1	6	4	24
	Chemistry	1	6	2	12	1	6			4	24
	Physics	3	18	1	6					4	24
Grand Total		19	69	23	84	13	45	5	18	60	216

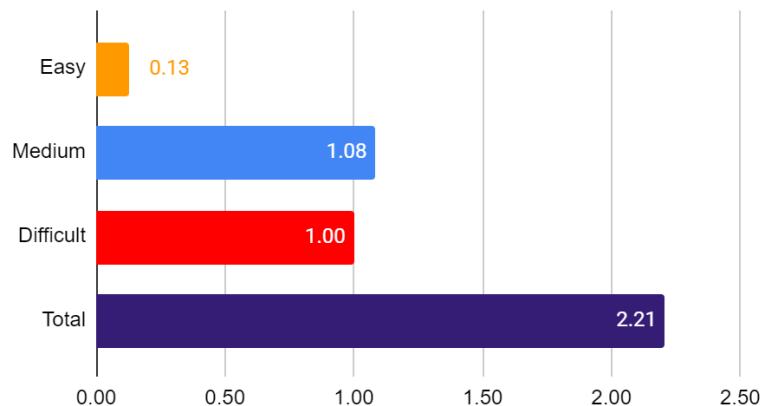
Overall Difficulty Level

In this analysis, we have rated every question on a scale of 1 to 3. The individual ratings are then averaged to calculate the overall difficulty level.

- 1: Easy
- 2: Moderate
- 3: Difficult

Difficulty Level	Overall Difficulty Level
Easy	0.13
Medium	1.08
Difficult	1.00
Total	2.21

Overall Difficulty Level of NSEJS 2023-24



As evident from the question distribution, the overall difficulty of NSEJS 23-24 Paper is Moderate to Difficult. Compared to the previous year, the Paper seemed to be at a similar level.

Hence, in the evaluation conducted by our team of experts from Aakash BYJU'S, it was observed that **NSEJS 2023-24** was of Moderate to Difficult level for students