

A Detailed Question Paper Analysis of NEET-UG 2023 (Code - H3)
May 7, 2023 (2:00 pm - 5:20 pm)

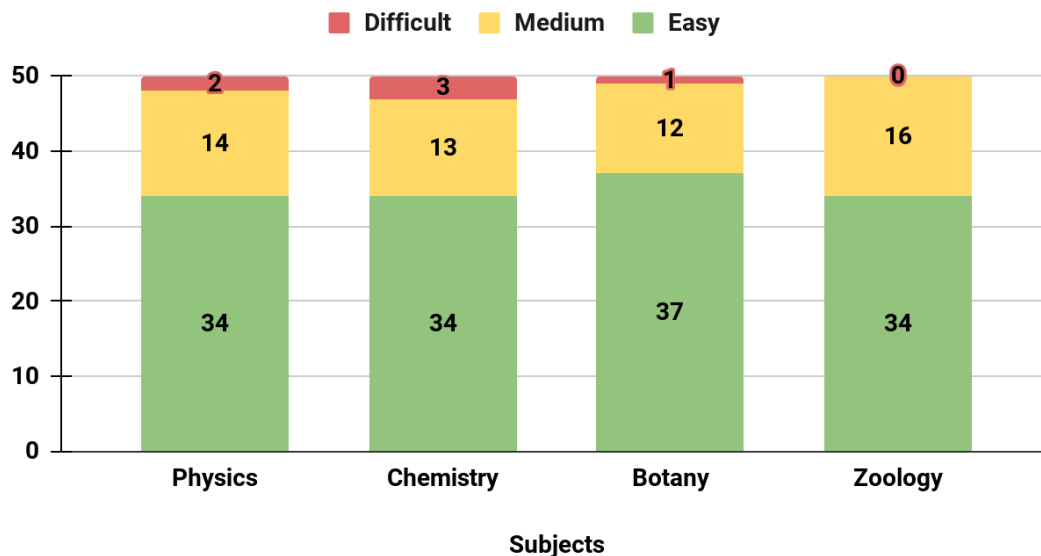
NATIONAL ELIGIBILITY CUM ENTRANCE TEST [NEET (UG) – 2023] was conducted by the National Testing Agency (NTA) on Sunday, May 7, 2023 (Sunday) in pen and paper mode in 13 languages as a common and uniform National Eligibility-cum-Entrance Test for admission to undergraduate medical education in all medical institutions. It was conducted from 02:00 p.m. to 05:20 p.m. (Indian Standard Time) as a common and uniform entrance test in about 499 cities throughout India as well as cities outside India.

The students had to attempt 180 questions out of 200. Each question had four marks. The correct answer awards four marks and the wrong answer deducts one mark. These 200 questions were divided into four subject-wise sections (Physics, Chemistry, Botany & Zoology). Each of these sections has subsections (A and B). In Section A, all the questions were compulsory and in Section B, one had to attempt any 10 questions out of 15 in each subject.

Subject Wise Analysis

Subjects	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
Physics	34	136	14	56	2	8	50	200
Chemistry	34	136	13	52	3	12	50	200
Botany	37	148	12	48	1	4	50	200
Zoology	34	136	16	64	0	0	50	200
Grand Total	139	556	55	220	6	24	200	800

Subject Wise Difficulty Level



- Physics was rated as easy to moderate on the difficulty level. It consisted mostly of easy and moderate questions. Most of the questions were NCERT based and were evenly distributed among all major units.
- Chemistry was rated as the most difficult among all subjects. Inorganic and organic chemistry had more weightage compared to physical chemistry.
- Botany was rated as easy to moderate on the difficulty level. It consisted mostly of easy and moderate questions.
- Zoology was rated as easy to moderate on the difficulty level. It consisted mostly of easy and moderate questions.

Physics (for Test Booklet Code H3)

Following is the question distribution table as per class, chapter, topic and difficulty -

CODE H3 Paper Analysis						
Question No.	Class	Subject	Chapter Name	Topic Name	Difficulty Level	Section
1	12th	Physics	Current Electricity	Cells in Series and Parallel	Easy	A
2	12th	Physics	Magnetism & Matter	Magnetism & Gauss's Law	Easy	A
3	11th	Physics	Mechanical Properties Of Fluids	Surface Tension	Easy	A

4	12th	Physics	Alternating Current	Transformers	Easy	A
5	12th	Physics	Alternating Current	AC Voltage Applied To LCR Circuits	Easy	A
6	12th	Physics	Semiconductor Electronics : Materials, Devices & Simple Circuits	Special Purpose PN Junctions	Easy	A
7	11th	Physics	Kinetic Theory	RMS Speed	Easy	A
8	11th	Physics	Mechanical Properties Of Fluids	Bernoullis Principle	Easy	A
9	11th	Physics	Motion In A Straight Line	Average Speed & Average Velocity	Easy	A
10	12th	Physics	Alternating Current	AC Voltage Applied To Capacitor	Easy	A
11	12th	Physics	Ray Optics & Optical Instruments	Total Internal Reflection	Medium	A
12	12th	Physics	Electrostatic Potential & Capacitance	Grouping Of Capacitors	Easy	A
13	12th	Physics	Electromagnetic Induction	Energy Stored in Inductor	Easy	A
14	12th	Physics	Semiconductor Electronics : Materials, Devices & Simple Circuits	Diode As Rectifier	Medium	A
15	12th	Physics	Electromagnetic Waves	Relation Between Electric Field, Magnetic Field and Speed of Light	Easy	A
16	11th	Physics	Units & Measurements	Accuracy, precision of instruments and errors in measurement	Easy	A
17	11th	Physics	Mechanical Properties Of Solids	Stress & Strain	Easy	A
18	12th	Physics	Current Electricity	Colour Coding	Medium	A
19	12th	Physics	Dual Nature Of Matter & Radiations	Einsteins Photoelectric Equation: Energy Quantum Of Radiation	Difficult	A
20	12th	Physics	Wave Optics	Interference of light wave and youngs double slit experiment	Difficult	A

21	12th	Physics	Nuclei	Radioactivity	Easy	A
22	11th	Physics	Laws Of Motion	Newtons Second Law of Motion	Easy	A
23	12th	Physics	Atoms	Hydrogen Spectrum	Easy	A
24	11th	Physics	Gravitation	Gravitational Potential	Medium	A
25	12th	Physics	Atoms	X rays	Medium	A
26	11th	Physics	System Of Particles & Rotational Motion	Moment Of Inertia	Easy	A
27	11th	Physics	Units & Measurements	Accuracy, precision of instruments and errors in measurement	Medium	A
28	12th	Physics	Electric Charges & Fields	Gauss's Law	Easy	A
29	12th	Physics	Current Electricity	Kirchhoffs Rules	Medium	A
30	11th	Physics	Oscillations	Energy In SHM	Easy	A
31	11th	Physics	Thermodynamics	Carnot's Engine	Easy	A
32	11th	Physics	System Of Particles & Rotational Motion	Relation Between Angular & Linear Velocity	Easy	A
33	11th	Physics	Waves	Superposition Principle	Easy	A
34	11th	Physics	Motion In A Plane	Projectile Motion	Easy	A
35	12th	Physics	Electric Charges & Fields	Dipole In External Uniform Field	Easy	A
36	12th	Physics	Electrostatic Potential & Capacitance	Potential Due to a Dipole	Easy	B
37	12th	Physics	Ray Optics & Optical Instruments	Refraction Due to Lenses	Easy	B
38	12th	Physics	Ray Optics & Optical Instruments	Refraction Due to Lenses	Medium	B
39	12th	Physics	Semiconductor Electronics : Materials, Devices & Simple Circuits	Digital Electronics & Logic Gates	Easy	B
40	12th	Physics	Current Electricity	Temperature Dependence of Resistance	Medium	B
41	11th	Physics	Motion In A Straight Line	Kinematics Equation	Easy	B
42	11th	Physics	Gravitation	Satellite Motion	Medium	B

43	12th	Physics	Atoms	Bohr Model of the Hydrogen atom	Easy	B
44	12th	Physics	Moving Charges & Magnetism	Magnetic Force	Easy	B
45	12th	Physics	Alternating Current	AC Applied to LCR Circuits	Medium	B
46	12th	Physics	Current Electricity	Grouping Of resistors	Easy	B
47	11th	Physics	Laws Of Motion	Friction	Easy	B
48	11th	Physics	Oscillations	Velocity and Acceleration in Simple Harmonic Motion	Medium	B
49	11th	Physics	Work Energy & Power	Work Energy Theorem	Medium	B
50	12th	Physics	Moving Charges & Magnetism	Magnetic Field Due to a Current Element : BIOT-savart law	Medium	B

Chemistry (for Test Booklet Code H3)

Following is the question distribution table as per class, chapter, topic and difficulty -

51	11th	Chemistry	Equilibrium	Acids, Bases and Salts	Easy	A
52	11th	Chemistry	States of Matter	The Gas Laws	Easy	A
53	12th	Chemistry	Aldehydes, Ketones and Carboxylic Acids	Chemical Reactions of Aldehydes and Ketones	Easy	A
54	11th	Chemistry	Hydrogen	Position of hydrogen in the periodic table	Medium	A
55	12th	Chemistry	Electrochemistry	Dependence of emf on Concentration and Temperature	Easy	A
56	12th	Chemistry	Amines	Diazonium Salts	Medium	A
57	12th	Chemistry	Solutions	Solubility	Easy	A
58	12th	Chemistry	Chemical Kinetics	Collision Theory of Reaction Rates	Easy	A
59	11th	Chemistry	Some basic concepts of chemistry	Mole Concept and Molar Masses	Medium	A
60	11th	Chemistry	Chemical Bonding and Molecular Structure	Kössel - Lewis Approach to Chemical	Easy	A

				Bonding		
61	11th	Chemistry	Structure of Atom	Quantum Mechanical Model of the Atom	Easy	A
62	12th	Chemistry	Amines	Preparation of Amines	Medium	A
63	12th	Chemistry	Coordination Compounds	Classification of Ligands	Easy	A
64	12th	Chemistry	Chemistry in Everyday Life	Therapeutic Action of Different Classes of Drugs	Easy	A
65	12th	Chemistry	Polymers	Polymers of Commercial Importance	Easy	A
66	11th	Chemistry	Some basic concepts of chemistry	Mole Concept and Molar Masses	Easy	A
67	11th	Chemistry	The s-Block Elements	Biological Importance of sodium and Potassium	Medium	A
68	11th	Chemistry	The p-Block Elements	Allotropes of carbon	Easy	A
69	12th	Chemistry	The d and f-Block Elements	General Properties of the Transition Elements (d-Block)	Easy	A
70	12th	Chemistry	Haloalkanes and Haloarenes	Classification	Easy	A
71	12th	Chemistry	Biomolecules	Nucleic Acid	Easy	A
72	11th	Chemistry	Organic Chemistry : Some Basic Principles and Techniques	Qualitative analysis of organic compounds	Easy	A
73	11th	Chemistry	Organic Chemistry : Some Basic Principles and Techniques	Classification of organic compounds	Easy	A
74	12th	Chemistry	The Solid State	Close Packed Structures	Easy	A
75	11th	Chemistry	Chemical Bonding and Molecular Structure	Molecular Orbital Theory (MOT)	Easy	A
76	11th	Chemistry	The s-Block Elements	General characteristics of the compounds of the alkali metals	Easy	A
77	12th	Chemistry	Surface Chemistry	Catalysis	Easy	A

78	12th	Chemistry	Chemical Kinetics	Order of Reaction	Easy	A
79	11th	Chemistry	Structure of Atom	Discovery of Fundamental Particles	Medium	A
80	12th	Chemistry	Haloalkanes and Haloarenes	Methods of Preparation of Haloalkanes	Easy	A
81	11th	Chemistry	The p-Block Elements (11th)	Important Trends and Anomalous Properties of Boron	Easy	A
82	12th	Chemistry	Aldehydes, Ketones and Carboxylic Acids	Chemical Reactions of Aldehydes and Ketones	Medium	A
83	12th	Chemistry	Electrochemistry	Metallic/Electrolytic Conductors	Easy	A
84	11th	Chemistry	Classification of Elements and Periodicity in Properties	Electronic Configuration of Elements and The Periodic Table	Easy	A
85	11th	Chemistry	States of Matter	Intermolecular Forces	Easy	A
86	12th	Chemistry	General Principles and Processes of Isolation of Elements	Extraction of Metals and Non-Metals (General)	Difficult	B
87	12th	Chemistry	The p-Block Elements	Oxoacids of Sulphur	Medium	B
88	12th	Chemistry	Surface Chemistry	Colloids	Easy	B
89	11th	Chemistry	Environmental Chemistry	Water Pollution	Easy	B
90	12th	Chemistry	Aldehydes, Ketones and Carboxylic Acids	Chemical Reactions of Aldehydes and Ketones	Difficult	B
91	11th	Chemistry	Hydrocarbons	Aromatic Hydrocarbon	Medium	B
92	12th	Chemistry	Alcohols, Phenols and Ethers	Chemical Properties	Easy	B
93	12th	Chemistry	Aldehydes, Ketones and Carboxylic Acids	Chemical Reactions of Aldehydes and Ketones	Easy	B
94	12th	Chemistry	Coordination Compounds	Stability of Coordination Compounds	Medium	B
95	11th	Chemistry	Equilibrium	Relationship between Equilibrium constant (K), Reaction Quotient (Q) and Gibbs Energy	Medium	B

				(G)		
96	12th	Chemistry	The Solid State	Unit Cell	Easy	B
97	11th	Chemistry	Thermodynamics	Enthalpy (H)	Easy	B
98	11th	Chemistry	Redox Reactions	Balancing of Redox Reactions	Medium	B
99	12th	Chemistry	The d and f-Block Elements	General Properties of the Transition Elements (d-Block)	Difficult	B
100	12th	Chemistry	Alcohols, Phenols and Ethers	Chemical Properties	Medium	B

Botany (for Test Booklet Code H3)

Following is the question distribution table as per class, chapter, topic and difficulty -

101	11th	Botany	Plant Growth and Development	Differentiation, Dedifferentiation and Redifferentiation	Easy	A
102	12th	Botany	Ecosystem	Ecosystem - components - Productivity	Easy	A
103	11th	Botany	Transport in Plants	Transpiration	Medium	A
104	12th	Botany	Sexual Reproduction in Flowering Plants	Double Fertilization	Easy	A
105	11th	Botany	Anatomy of Flowering Plants	The Tissue systems	Medium	A
106	11th	Botany	Photosynthesis in Higher Plants	Where are ATP and NADPH used?	Easy	A
107	11th	Botany	Plant Growth and Development	Plant Growth Regulators	Easy	A
108	11th	Botany	Cell Cycle and Cell Division	Interphase	Easy	A
109	12th	Botany	Ecosystem	Ecosystem - Decomposition	Medium	A
110	11th	Botany	Plant Kingdom	Pteridophytes	Easy	A
111	11th	Botany	Respiration in Plants	Glycolysis	Medium	A
112	12th	Botany	Biodiversity and Conservation	Loss of Biodiversity	Easy	A
113	12th	Botany	Molecular Basis of	The Search For	Easy	A

			Inheritance	Genetic Material		
114	12th	Botany	Environmental Issues	Ozone Depletion in the Stratosphere	Easy	A
115	11th	Botany	Mineral Nutrition	Essential Mineral Elements	Easy	A
116	11th	Botany	Morphology of Flowering Plants	Description of Some important families	Easy	A
117	11th	Botany	Plant Kingdom	Bryophytes	Medium	A
118	12th	Botany	Molecular Basis of Inheritance	Human Genome Project (HGP)	Easy	A
119	12th	Botany	Principles of Inheritance and Variation	Inheritance of Two Gene	Easy	A
120	12th	Botany	Sexual Reproduction in Flowering Plants	Pre-Fertilization - Structures and Events	Easy	A
121	11th	Botany	Transport in Plants	Means of Transport	Easy	A
122	12th	Botany	Biotechnology - Principles and Processes	Tools of Recombinant DNA Technology	Easy	A
123	11th	Botany	Anatomy of Flowering Plants	Secondary Growth	Easy	A
124	11th	Botany	Morphology of Flowering Plants	The Flower	Easy	A
125	12th	Botany	Principles of Inheritance and Variation	Pleiotropy	Easy	A
126	12th	Botany	Biotechnology - Principles and Processes	Processes of Recombinant DNA Technologies	Easy	A
127	11th	Botany	Plant Growth and Development	plant growth regulators	Easy	A
128	11th	Botany	Cell Cycle and Cell Division	Cell division -Meiosis	Easy	A
129	12th	Botany	Molecular Basis of Inheritance	Transcription	Easy	A
130	12th	Botany	Sexual Reproduction in Flowering Plants	Pollination	Easy	A
131	12th	Botany	Biotechnology - Principles and Processes	Tools of Recombinant DNA Technology	Easy	A
132	11th	Botany	Biomolecules	Carbohydrates	Easy	A
133	11th	Botany	Cell cycle & Cel divisions	Cell division -Meiosis	Medium	A

134	11th	Botany	Photosynthesis in Higher Plants	Light reactions	Easy	A
135	12th	Botany	Biodiversity and Conservation	Biodiversity ,Conservation	Easy	A
136	11th	Botany	Cell cycle & Cell division	Cell cycle phases	Easy	B
137	12th	Botany	Organisms and Populations	Population interactions -competition	Medium	B
138	12th	Botany	Cell : The unit of Life	Ribosomes	Difficult	B
139	11th	Botany	Respiration in Plants	Glycolysis,Link reaction,Krebs cycle	Medium	B
140	12th	Botany	Principles of Inheritance and Variation	Chromosomal disorders	Easy	B
141	11th	Botany	Biomolecules	Enzymes	Easy	B
142	11th	Botany	Photosynthesis in Higher Plants	Chemiosmosis	Medium	B
143	11th	Botany	Transport in Plants	Transpiration	Easy	B
144	11th	Botany	Mineral nutrition	Role of macro,micro nutrients	Easy	B
145	12th	Botany	Biotechnology principles and processes	Processes of Recombinant DNA Technology	Easy	B
146	12th	Botany	Organisms and Populations	Population interactions	Easy	B
147	11th	Botany	Morphology of Flowering Plants	Floral meristem	Easy	B
148	12th	Botany	Environmental Issues	Water pollution	Medium	B
149	11th	Botany	Anatomy of Flowering Plants	Secondary Growth	Medium	B
150	11th	Botany	Plant Kingdom	Gymnosperms	Medium	B

Zoology (for Test Booklet Code H3)

Following is the question distribution table as per class, chapter, topic and difficulty -

151	12th	Zoology	Human Health and Disease	Drugs and Alcohol Abuse	Medium	A
152	12th	Zoology	Molecular Basis of Inheritance	The Search For Genetic	Easy	A

				Material		
153	12th	Zoology	Human Reproduction	The Male Reproductive System	Easy	A
154	11th	Zoology	Cell : The unit of Life	Eukaryotic cells	Easy	A
155	12th	Zoology	Human Reproduction	Menstrual Cycle	Medium	A
156	12th	Zoology	Reproductive Health	Methods of Birth Control	Easy	A
157	12th	Zoology	Principles of Inheritance and Variation	Genetic Disorders	Easy	A
158	11th	Zoology	Cell : The unit of Life	Eukaryotic cells	Easy	A
159	11th	Zoology	Neural Control and Coordination	Eye	Medium	A
160	11th	Zoology	Body Fluids and Circulation	ECG	Medium	A
161	11th	Zoology	Chemical Coordination and Integration	Hormones of Heart, Liver, Kidney and Gastrointestinal Tract	Easy	A
162	12th	Zoology	Molecular Basis of Inheritance	Regulation of Gene Expression	Easy	A
163	11th	Zoology	Breathing and Exchange of Gases	Respiratory volume and capacities	Easy	A
164	12th	Zoology	Evolution	What is Adaptive Radiation?	Easy	A
165	12th	Zoology	Human Health and Disease	Common Diseases in Humans	Easy	A
166	11th	Zoology	Locomotion and Movement	Joints	Easy	A
167	11th	Zoology	Excretory Products and their Elimination	Human Excretory System	Easy	A
168	12th	Zoology	Biotechnology and its applications	Biotechnological Applications in Medicine	Easy	A
169	12th	Zoology	Reproductive Health	Sexually Transmitted Diseases	Easy	A
170	12th	Zoology	Environmental Issues	Air pollution And Its Control	Easy	A
171	12th	Zoology	Biotechnology - Principles and Processes	Tools of Recombinant DNA Technology	Easy	A

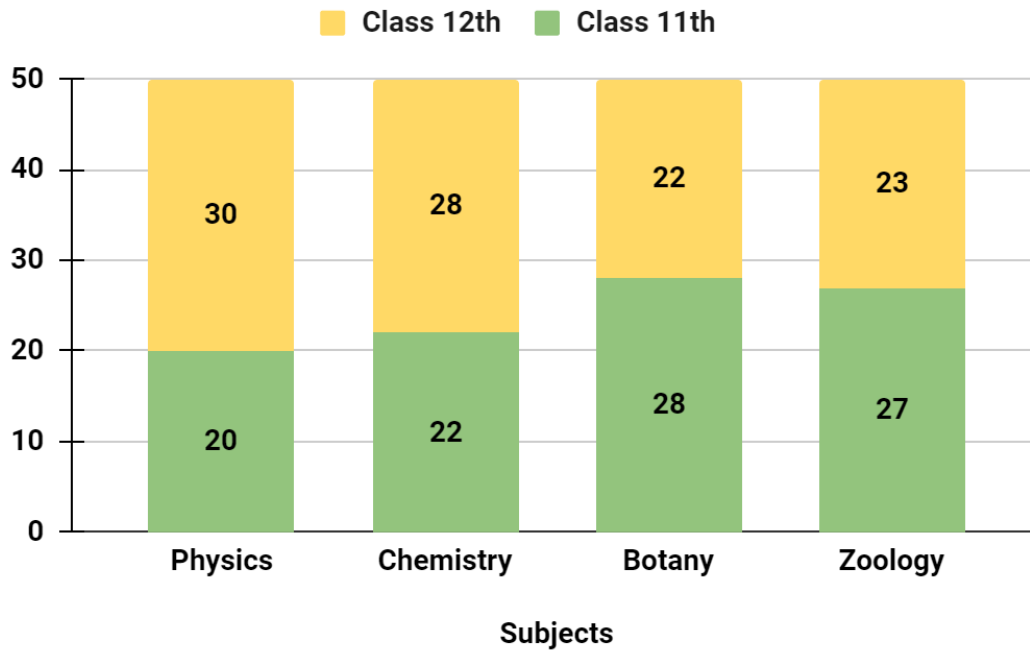
172	11th	Zoology	Animal Kingdom (General Accounts & Non-Chordates)	Basis of Classification	Easy	A
173	11th	Zoology	Digestion and Absorption	Digestion of food	Easy	A
174	11th	Zoology	Digestion and Absorption	DIGESTIVE SYSTEM	Easy	A
175	12th	Zoology	Molecular Basis of Inheritance	The DNA	Easy	A
176	11th	Zoology	Structural Organisation in Animals (Animal Tissues)	Connective tissue	Easy	A
177	11th	Zoology	Biomolecules	Enzymes	Medium	A
178	12th	Zoology	Environmental Issues	Water pollution And Its Control	Easy	A
179	11th	Zoology	Biomolecules	proteins	Easy	A
180	12th	Zoology	Human Health and Disease	AIDS	Easy	A
181	12th	Zoology	Human Reproduction	fertilisation and implantation	Medium	A
182	11th	Zoology	Animal Kingdom (General Accounts & Non-Chordates)	Non chordates	Medium	A
183	12th	Zoology	Organisms and Populations	Population interactions	Easy	A
184	12th	Zoology	Reproductive Health	problem and strategies	Easy	A
185	12th	Zoology	Principles of Inheritance and Variation	Genetic Disorders	Easy	A
186	11th	Zoology	Animal Kingdom (Chordates)	Chordates	Medium	B
187	12th	Zoology	Molecular Basis of Inheritance	Transcription	Medium	B
188	11th	Zoology	Neural Control and Coordination	Central nervous system	Easy	B
189	11th	Zoology	Excretory Products and their Elimination	Regulation of kidney function	Medium	B
190	11th	Zoology	Body Fluids and Circulation	Blood	Medium	B
191	11th	Zoology	Chemical Coordination and Integration	Thyroid gland	Medium	B
192	11th	Zoology	Structural Organisation in Animals (Contd....) (Animal Morphology)	cockroach	Easy	B
193	12th	Zoology	Strategies for Enhancement in Food Production - Animal Husbandry	Animal breeding	Easy	B
194	11th	Zoology	Animal Kingdom (Chordates)	Mammalia	Easy	B

195	11th	Zoology	Cell Cycle and Cell Division	Meiosis	Medium	B
196	11th	Zoology	Cell Cycle and Cell Division	Interphase	Easy	B
197	11th	Zoology	Locomotion and Movement	Muscle	Medium	B
198	12th	Zoology	Organisms and Populations	Populations	Medium	B
199	11th	Zoology	Structural Organisation in Animals (Animal Tissues)	Connective tissue	Easy	B
200	11th	Zoology	Structural Organisation in Animals (Contd....) (Animal Morphology)	COCKROACH	Medium	B

Class Wise Question Distribution

Subjects	11th		12th		Total Percentage	
	No. of Questions	Total Marks	No of Questions	Total Marks	Class 11th	Class 12th
Physics	20	80	30	120	40%	60%
Chemistry	22	88	28	112	44%	56%
Botany	28	112	22	88	56%	44%
Zoology	27	108	23	92	54%	46%
Grand Total	97	388	103	412	49%	52%

Class Wise Question Distribution



- In physics, most questions were from the Class 12th syllabus.
- In Chemistry, most questions were from the Class 12th syllabus.
- In Botany, most questions were from the Class 11th syllabus.
- In Zoology, most questions were from the Class 11th syllabus.
- Overall the questions from the Class 12th syllabus dominated Class 11th syllabus.

Overall Difficulty Level Analysis of NEET UG 2023 (Code - S5)

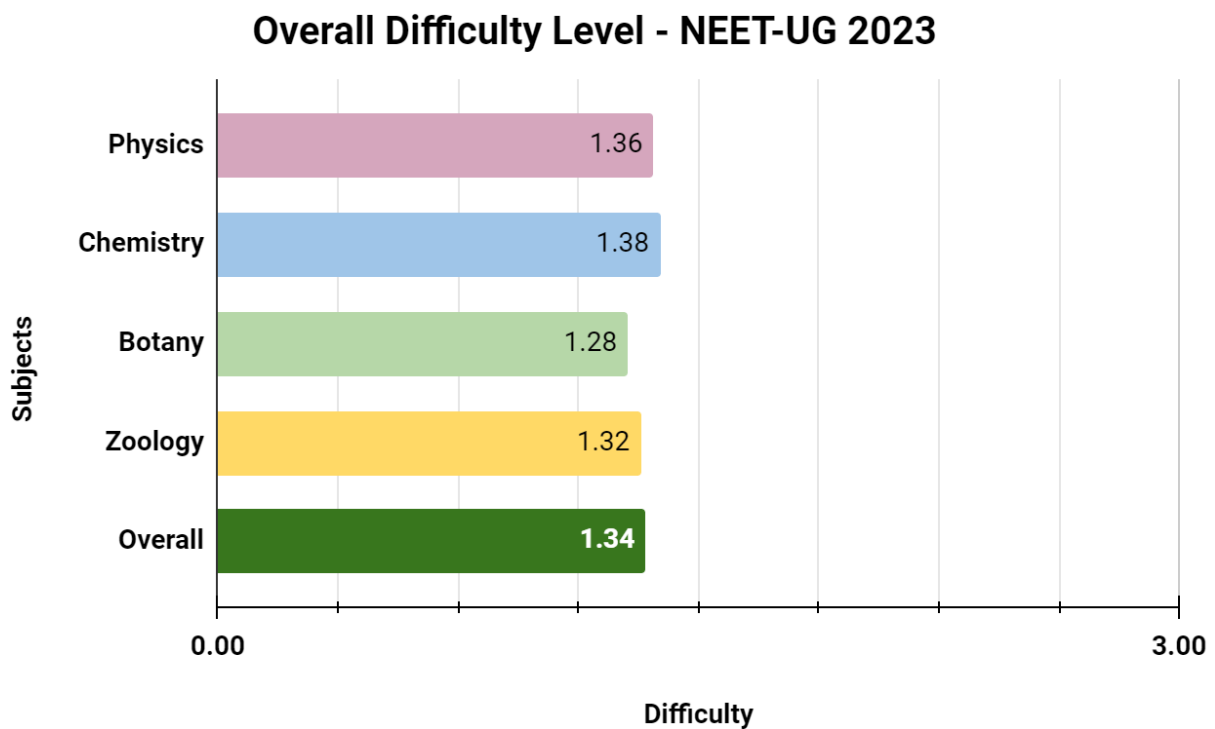
In this analysis, we have rated every question on a scale of 1 to 3. The ratings are done by our expert faculty. The individual ratings are then averaged to calculate the overall difficulty level.

Easy - 1

Medium - 2

Difficult - 3

Subject	Difficulty Level
Physics	1.36
Chemistry	1.38
Botany	1.28
Zoology	1.32
Overall	1.335



Overall Difficulty Level

The overall difficulty of **NEET UG 2023** was **easy to moderate**. The order of difficulty in different subjects- as assessed by our experts is Botany < Zoology < Physics < Chemistry.

- **Overall Review Compared to Previous Year**

Overall the paper was found to be slightly easier than NEET 2022. Compared to last year, Chemistry was found to be on the marginally tougher side. The questions in Chemistry were more tricky and lengthy than last year. The rest of the subjects were almost of similar difficulty compared to last year.

- **Cutoff to secure a seat in government colleges (All India Quota)**

The marks expected to secure a seat in government colleges (All India Quota) would have been similar to the previous year (2022), i.e. 580 to 610 as this time the number of students who attended the exam were nearly 19 lakh, which is 18% (approximately) higher than the previous year, hence expected marks might range from 590 to 620.