

A Detailed Question Paper Analysis of NEET-UG 2022 (Code - S5)
July 17, 2022 (2:00 pm - 5:20 pm)

- NEET-UG – 2022 was conducted on 17th July 2022 in offline pen & paper-based Examination
- The NEET-UG has 4 subjects - Physics, Chemistry, Botany & Zoology
- As per the new exam pattern, there were 2 sections in each subject consisting of 35 questions in Section A (all the questions were compulsory) and 15 questions in Section B (out of which 5 were optional).
- There were 200 Multiple Choice Questions, 50 per subject. Each correct answer will be awarded 4 marks and for each incorrect answer 1 mark will be deducted. Zero marks will be awarded for each unattempted question.
- The total duration of the NEET 2022 Exam was 3 hours 20 minutes (200 minutes)

NEET UG 2022 Subject-wise Weightage of Marks :

Subject	Section	Number of Questions	Total Marks
Physics	Section A	35	140
	Section B	15	40
Chemistry	Section A	35	140
	Section B	15	40

Botany	Section A	35	140
	Section B	15	40
Zoology	Section A	35	140
	Section B	15	40
Total Subjects = 4	Total Section = 8	Total Questions = 200	Total Marks = 720

- Section A consists of 35 questions in each subject (Question Numbers – 001 to 035, 051 to 085, 101 to 135, and 151 to 185). All questions are compulsory.
- Section B consists of 15 questions in each subject (Question Nos – 036 to 050, 086 to 100, 136 to 150, and 186 to 200). In Section B, a candidate needs to attempt any 10 questions out of 15 in each subject.

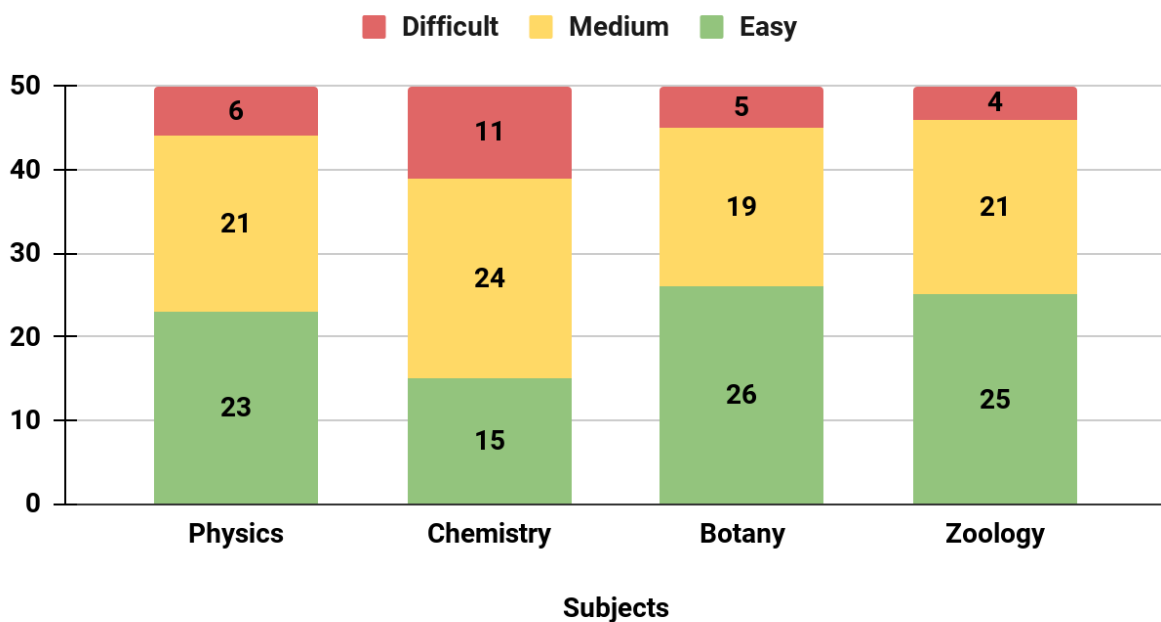
Note - In the analysis Sections A & B are marked in different colors as kown below :

Section A
Section B

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	23	92	21	84	6	24	50	200
Chemistry	15	60	24	96	11	44	50	200
Botany	26	104	19	76	5	20	50	200
Zoology	25	100	21	84	4	16	50	200
Grand Total	89	356	85	340	26	104	200	800

Subject Wise Difficulty Level



- In **Physics**, questions were of easy to moderate level & few were difficult.
- In **Chemistry**, questions were a mix of easy, moderate and difficult levels.
- In **Botany**, questions were of easy to moderate level & few were difficult.
- In **Zoology**, questions were of easy to moderate level & few were difficult.

Physics (For Test Booklet Code S5)

Physics was of easy to moderate level. Physics had 23 easy, 21 medium and 6 difficult questions. Following is the question distribution table as per Class, Chapter, Topic & Difficulty -

Question No.	Class	Chapter Name	Topic Name	Difficulty Level
1	11th	Units and Measurements	Dimensions of Physical Quantities	Medium
2	11th	Thermodynamics	Thermodynamic Processes	Medium
3	12th	Ray Optics and Optical Instruments	Refraction by Lenses	Easy
4	11th	System of Particles and Rotational Motion	Moment of Inertia	Easy
5	12th	Electrostatic Potential and Capacitance	Equipotential Surfaces	Easy
6	11th	System of Particles and Rotational Motion	Centre of Mass	Easy
7	11th	Motion in a Straight Line	Kinematic Equations for Uniformly Accelerated Motion	Easy
8	11th	Mechanical Properties of Fluids	Viscosity	Easy
9	11th	System of Particles and Rotational Motion	Angular Velocity & angular acceleration and its Relation with Linear Velocity	Easy
10	11th	Wave Optics	Interference of light wave and youngs double slit experiment	Medium
11	12th	Electromagnetic Waves	Electromagnetic Spectrum	Medium
12	12th	Dual Nature of Radiation and Matter	Wave Nature of matter	Easy
13	12th	Electromagnetic Waves	Relation Between Electric Field, Magnetic Field and Speed of Light	Medium
14	11th	Mechanical Properties of Fluids	Surface Tension	Easy
15	11th	Gravitation	Acceleration Due To Gravity Of The Earth	Medium

16	12th	Nuclei	Radioactivity	Easy
17	12th	Atoms	Bohr Model of the Hydrogen atom	Medium
18	12th	Dual Nature of Radiation and Matter	Einstein's Photoelectric Equation: Energy Quantum Of Radiation	Medium
19	12th	Wave Optics	Polarisation	Easy
20	11th	Laws of Motion	Conservation of Momentum	Medium
21	12th	Electrostatic Potential and Capacitance	Electrostatic Potential	Medium
22	12th	Current Electricity	Temperature Dependence of Resistivity	Easy
23	11th	Motion in a Straight Line	Instantaneous Velocity and Speed	Easy
24	12th	Electromagnetic induction	Magnetic Flux	Medium
25	12th	Semiconductor Electronics : Materials, Devices and Simple Circuits	Semiconductor diode	Difficult
26	12th	Current Electricity	Drift of Electrons and the Origin of Resistivity	Medium
27	11th	Work Energy and Power	Power	Medium
28	12th	Moving Charges and Magnetism	Magnetic Field Due to a Current Element : BIOT-savart law	Difficult
29	12th	Current Electricity	Electrical Energy, Power	Easy
30	12th	Current Electricity	Electrical Energy, Power	Easy
31	12th	Moving Charges and Magnetism	The Solenoid and the Toroid	Easy
32	11th	Units and Measurements	The International System of Units	Easy
33	12th	Semiconductor Electronics : Materials, Devices and Simple Circuits	Application of junction diode as a rectifier	Easy

34	12th	Alternating Current	Representation of AC Current and Voltage by Rotating Vectors Phasors	Easy
35	11th	Waves	Transverse and Longitudinal Waves	Easy
36	11th	Oscillations	Some Systems Executing Simple Harmonic Motion	Difficult
37	11th	Motion in a Plane	Projectile Motion	Easy
38	12th	Current Electricity	Wheatstone Bridge	Medium
39	12th	Electric Charges and Fields	Electric Dipole	Easy
40	11th	Mechanical Properties of Solids	Elastic Moduli	Difficult
41	12th	Nuclei	Size of the Nucleus	Medium
42	11th	Units and Measurements	Dimensions of Physical Quantities	Medium
43	11th	Units and Measurements	Significant figures	Easy
44	12th	Electromagnetic induction	Faradays Law of Induction	Medium
45	12th	Ray Optics and Optical Instruments	Total Internal Reflection	Medium
46	12th	Alternating Current	AC Voltage Applied to a Series LCR Circuit	Medium
47	12th	Electrostatic Potential and Capacitance	Energy Stored in a Capacitor	Medium
48	12th	Moving Charges and Magnetism	Amperes Circuital Law	Medium
49	12th	Semiconductor Electronics : Materials, Devices and Simple Circuits	Digital Electronics and Logic Gates	Difficult
50	11th	Kinetic Theory	Kinetic Theory of An Ideal Gas	Difficult

Chemistry (For Test Booklet Code S5)

Chemistry had moderate to difficult level of questions. Chemistry had 24 medium and 15 easy & 11 difficult questions. Following is the question distribution table as per Class, Chapter, Topic & Difficulty -

Question No.	Class	Chapter Name	Topic Name	Difficulty Level
51	11th	The p-Block Elements	Some Important Compounds of Boron	Medium
52	12th	The p-Block Elements	Group 17 Elements	Difficult
53	11th	Some basic concepts of chemistry	Reactions in Solutions	Easy
54	12th	Electrochemistry	Electrochemical Cell	Difficult
55	11th	Structure of Atom	Quantum Mechanical Model of the Atom	Difficult
56	11th	Some basic concepts of chemistry	Stoichiometry and Stoichiometric Calculations	Medium
57	12th	Aldehydes, Ketones and Carboxylic Acids	Methods of Preparation for Carboxylic Acids	Medium
58	11th	The s-Block Elements	Group-1 Elements : Alkali Metals	Difficult
59	12th	Chemistry in Everyday Life	Drugs and their Classification	Medium
60	11th	States of Matter	Dalton's Law of Partial Pressures	Difficult
61	12th	Polymers	Classification of Polymers	Easy
62	12th	Aldehydes, Ketones and Carboxylic Acids	Physical Properties of Aldehydes and Ketones	Medium

63	11th	Classification of Elements and Periodicity in Properties	Nomenclature of Elements With Atomic Number > 100	Easy
64	12th	Electrochemistry	Electrochemical Cell	Difficult
65	11th	Organic Chemistry : Some Basic Principles and Techniques	Qualitative analysis of organic compounds	Easy
66	12th	Chemical Kinetics	Order of Reaction	Medium
67	11th	The s-Block Elements	Group-1 Elements : Alkali Metals	Difficult
68	12th	The Solid State	Imperfections or Defects in Solids	Medium
69	12th	Coordination Compounds	Nomenclature of Coordination Compounds	Medium
70	11th	The p-Block Elements	Allotropes of carbon	Easy
71	12th	Surface Chemistry	Colloids	Easy
72	12th	Amines	Diazonium Salts	Medium
73	12th	The d and f-Block Elements	The Lanthanoids	Difficult
74	11th	Hydrogen	Hydrides	Difficult
75	12th	Aldehydes, Ketones and Carboxylic Acids	Chemical Reactions of Aldehydes and Ketones	Medium
76	12th	The p-Block Elements	Simple Oxides	Medium
77	11th	Equilibrium	Buffer Solution	Medium
78	11th	Chemical Bonding and Molecular Structure	The Valence Shell Electron Pair Repulsion (VSEPR) Theory	Medium

79	12th	Haloalkanes and Haloarenes	Stereochemical Aspects of Nucleophilic Substitution Reactions	Easy
80	11th	Chemical Bonding and Molecular Structure	Molecular Orbital Theory (MOT)	Difficult
81	11th	Hydrocarbons	Aromatic Hydrocarbon	Medium
82	11th	Hydrocarbons	Aromatic Hydrocarbon	Medium
83	12th	Biomolecules	Enzymes	Easy
84	11th	Thermodynamics	Pressure-Volume Work	Medium
85	12th	Alcohols, Phenols and Ethers	Chemical Properties	Medium
86	11th	Hydrocarbons	Alkenes	Medium
87	11th	Equilibrium	Homogeneous Equilibria	Easy
88	11th	States of Matter	Ideal Gas Equation	Easy
89	12th	General Principles and Processes of Isolation of Elements	Occurrence of Metals	Medium
90	12th	Amines	Diazonium Salts	Medium
91	11th	Organic Chemistry : Some Basic Principles and Techniques	Nomenclature of Organic Compounds	Easy
92	12th	Coordination Compounds	Bonding in Coordination Compounds	Medium
93	12th	Chemical Kinetics	Integrated Rate Equations	Easy
94	12th	The Solid State	Calculation of Density	Medium
95	11th	Structure of Atom	Bohr's Model for Hydrogen Atom	Easy

96	12th	Aldehydes, Ketones and Carboxylic Acids	Chemical Reactions of Aldehydes and Ketones	Difficult
97	12th	Electrochemistry	Dependence of emf on Concentration and Temperature	Medium
98	12th	Alcohols, Phenols and Ethers	Chemical Properties	Easy
99	11th	Redox Reactions	Oxidation Number	Easy
100	11th	Environmental Chemistry	Atmospheric Pollution	Medium

Botany (For Test Booklet Code S5)

Botany had moderate to difficult level of questions. It had 19 medium, 26 easy & 5 difficult questions. Following is the question distribution table as per Class, Chapter, Topic & Difficulty -

Question No.	Class	Chapter Name	Topic Name	Difficulty Level
101	12th	Biotechnology - Principles and Processes	Processes of Recombinant DNA Technologies	Medium
102	12th	Principles of Inheritance and Variation	Mendels Laws of Inheritance	Medium
103	11th	Plant Kingdom	Algae	Medium
104	12th	Principles of Inheritance and Variation	Sex Determination	Easy
105	11th	Cell Cycle and Cell Division	Meiosis	Easy
106	12th	Biodiversity and Conservation	Biodiversity Conservation	Easy
107	12th	Sexual Reproduction in Flowering Plants	Pre-Fertilization - Structures and Events	Medium
108	11th	Photosynthesis in Higher Plants	The C4 Pathway (Hatch and Slack pathway)	Medium
109	11th	Anatomy of Flowering Plants	Secondary Growth	Difficult
110	11th	Mineral Nutrition	Metabolism of Nitrogen	Easy
111	12th	Ecosystem	Ecosystem - Function	Medium
112	12th	Biodiversity and Conservation	Biodiversity	Easy
113	11th	Plant Kingdom	Algae	Easy
114	11th	Transport in Plants	Phloem Transport : Flow from source to sink	Easy

115	11th	Morphology of Flowering Plants	The Flower	Easy
116	11th	Photosynthesis in Higher Plants	The Electron Transport	Medium
117	12th	Environmental Issues	Air pollution And Its Control	Easy
118	12th	Biotechnology - Principles and Processes	Processes of Recombinant DNA Technologies	Medium
119	11th	Plant Growth and Development	Development	Easy
120	12th	Molecular Basis of Inheritance	Translation	Medium
121	12th	Molecular Basis of Inheritance	The DNA	Medium
122	11th	Anatomy of Flowering Plants	Anatomy of Dicotyledonous and Monocotyledonous plants	Difficult
123	11th	Biomolecules	Carbohydrates	Easy
124	11th	Respiration in Plants	Glycolysis	Easy
125	11th	Transport in Plants	Long Distance Transport of water	Medium
126	11th	Morphology of Flowering Plants	The Flower	Easy
127	12th	Molecular Basis of Inheritance	DNA Fingerprinting	Medium
128	11th	Respiration in Plants	Fermentation	Easy
129	11th	Morphology of Flowering Plants	The Leaf	Difficult
130	12th	Organisms and Populations	Populations	Easy
131	12th	Sexual Reproduction in Flowering Plants	Pre-Fertilization - Structures and Events	Medium
132	11th	Plant Growth and Development	Plant Growth Regulators	Easy
133	11th	Mineral Nutrition	Essential Mineral	Medium

			Elements	
134	11th	Cell Cycle and Cell Division	Mitosis	Easy
135	11th	Plant Growth and Development	Plant Growth Regulators	Medium
136	11th	Plant Kingdom	Plant life cycles and alternation of generations	Medium
137	12th	Sexual Reproduction in Flowering Plants	Post-Fertilization : Structures and Events	Easy
138	12th	Ecosystem	Nutrient cycle	Easy
139	11th	Cell : The unit of Life	Eukaryotic cells	Easy
140	11th	Anatomy of Flowering Plants	Secondary Growth	Medium
141	12th	Principles of Inheritance and Variation	Mendels Laws of Inheritance	Medium
142	11th	Biomolecules	Lipids	Difficult
143	11th	Photosynthesis in Higher Plants	The C4 Pathway (Hatch and Slack pathway)	Easy
144	12th	Molecular Basis of Inheritance	The DNA	Easy
145	12th	Environmental Issues	Air pollution And Its Control	Easy
146	11th	Transport in Plants	Plant-water Relations	Easy
147	12th	Biotechnology and its applications	Biotechnological Applications in Agriculture	Difficult
148	12th	Organisms and Populations	Populations	Medium
149	12th	Molecular Basis of Inheritance	Genetic Code	Easy
150	12th	Molecular Basis of Inheritance	Genetic Code	Easy

Zoology (For Test Booklet Code S5)

Zoology had moderate to difficult level of questions. It had 22 medium and 24 easy & 4 difficult questions. Following is the question distribution table as per Class, Chapter, Topic & Difficulty -

Question No.	Class	Chapter Name	Topic Name	Difficulty Level
151	12th	Evolution	Hardy-Weinberg Principle	Easy
152	11th	Biological Classification	Kingdom : Monera	Medium
153	11th	Biomolecules	Carbohydrates	Medium
154	11th	Cell : The unit of Life	Eukaryotic cells	Easy
155	11th	Structural Organisation in Animals (Contd....) (Animal Morphology)	COCKROACH	Easy
156	12th	Molecular Basis of Inheritance	The DNA	Easy
157	12th	Reproduction in Organisms	Asexual Reproduction	Easy
158	11th	Animal Kingdom (Chordates)	Phylum Chordata	Difficult
159	12th	Strategies for Enhancement in Food Production	Plant Breeding	Easy
160	11th	Breathing and Exchange of Gases	Transport of gases	Easy
161	11th	Animal Kingdom (Chordates)	craniata	Medium
162	11th	Digestion and Absorption	Digestion of food	Medium
163	11th	Excretory Products and their Elimination	Introduction	Medium
164	12th	Molecular Basis of Inheritance	Regulation of Gene Expression	Medium
165	11th	Structural Organisation in Animals (Animal Tissues)	Connective Tissue	Easy
166	11th	Digestion and Absorption	Absorption of digested products	Difficult
167	11th	Cell Cycle and Cell Division	Mitosis	Easy

168	12th	Human Reproduction	Gametogenesis	Medium
169	11th	Body Fluids and Circulation	Blood	Medium
170	12th	Microbes in Human Welfare	Microbes in Industrial Products	Easy
171	12th	Human Reproduction	Gametogenesis	Difficult
172	12th	Biodiversity and Conservation	Biodiversity Conservation	Easy
173	12th	Reproductive Health	Methods of Birth Control	Easy
174	11th	Locomotion and Movement	Disorder of Muscular and Skeletal System	Medium
175	11th	Breathing and Exchange of Gases	Respiratory Organs	Easy
176	11th	Cell Cycle and Cell Division	Meiosis	Medium
177	12th	Ecosystem	Ecosystem - Function	Easy
178	11th	Structural Organisation in Animals (Animal Tissues)	Connective Tissue	Easy
179	11th	The Living World		Easy
180	12th	Biotechnology - Principles and Processes	Tools of Recombinant DNA Technology	Medium
181	12th	Biotechnology and its applications	Biotechnological Applications in Medicine	Medium
182	11th	Locomotion and Movement	Disorder of Muscular and Skeletal System	Medium
183	12th	Human Reproduction	Gametogenesis	Easy
184	12th	Organisms and Populations	Organism and its environment	Easy
185	12th	Human Health and Disease	Immunity	Easy
186	12th	Principles of Inheritance and Variation	Linkage	Difficult

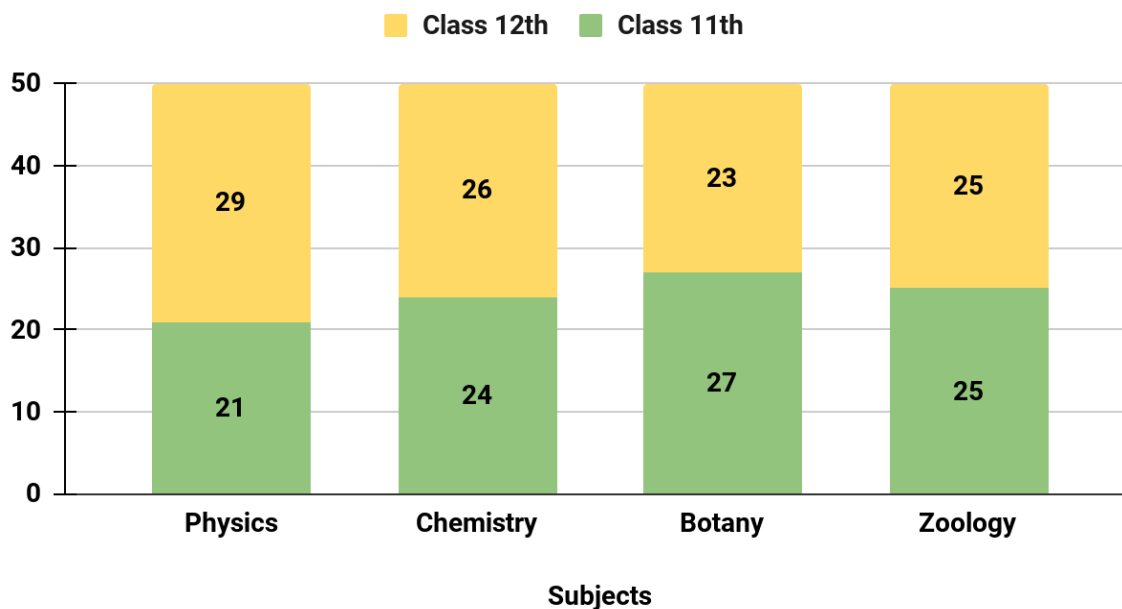
187	11th	Biomolecules	Introduction	Easy
188	11th	Chemical Coordination and Integration	Human Endocrine System	Medium
189	12th	Biotechnology - Principles and Processes	Tools of Recombinant DNA Technology	Easy
190	12th	Reproductive Health	Methods of Birth Control	Medium
191	12th	Principles of Inheritance and Variation	Genetic Disorders	Medium
192	12th	Evolution	What are the Evidences for Evolution?	Easy
193	11th	Biological Classification	Kingdom : Monera	Medium
194	12th	Human Health and Disease	Immunity	Easy
195	11th	Structural Organisation in Animals (Animal Tissues)	Epithelial Tissue	Medium
196	12th	Biotechnology and its applications	Biotechnological Applications in Medicine	Medium
197	12th	Environmental Issues	Air pollution And Its Control	Medium
198	12th	Molecular Basis of Inheritance	Replication	Medium
199	11th	Neural Control and Coordination	Neuron as Structural and Functional Unit of Neural System	Easy
200	11th	Body Fluids and Circulation	Circulatory pathways	Medium

Class Wise Question Distribution

As per our expert faculties, the questions from Class 12th syllabus dominated Class 11th syllabus in Physics. In Botany, the Class 11th syllabus dominated the Class 12th syllabus. Rest of the subjects had equal distribution of both Class 11th & Class 12th syllabus. Below is the Class wise question distribution table -

Subjects	11th		12th		Total Percentage	
	No. of Questions	Total Marks	No of Questions	Total Marks	Class 11th	Class 12th
Physics	21	84	29	116	42%	58%
Chemistry	24	96	26	104	48%	52%
Botany	27	108	23	92	54%	46%
Zoology	25	100	25	100	50%	50%
Grand Total	97	388	103	412	49%	52%

Class Wise Question Distribution



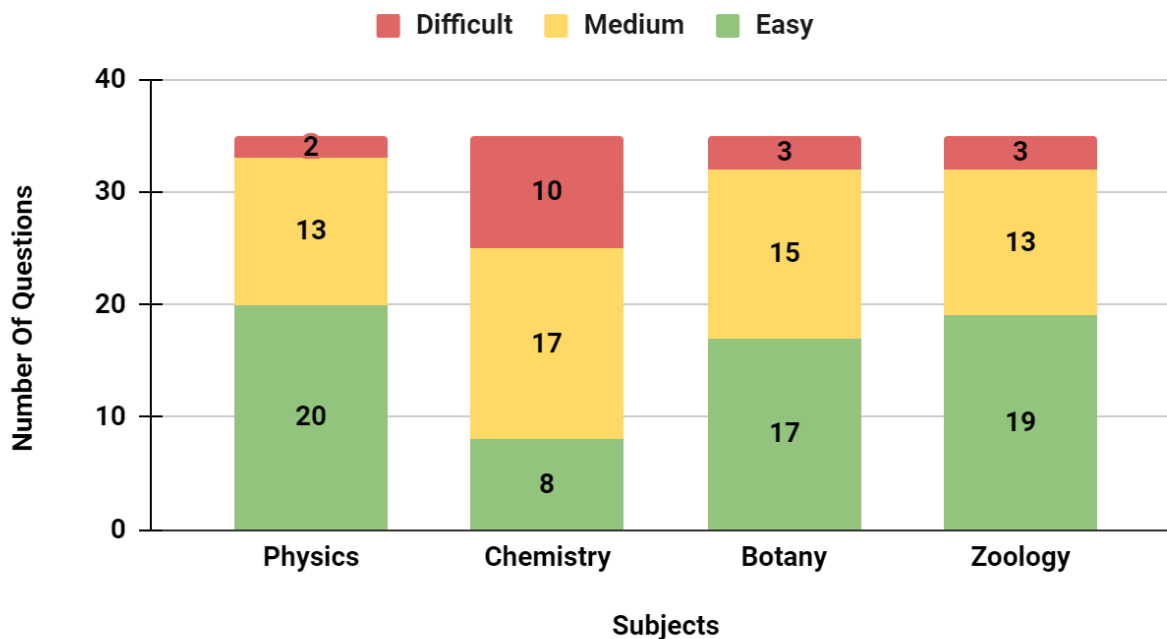
Section Wise Difficulty Distribution

Section A

This section mostly had Easy or Medium type questions in all the subjects except Chemistry. Chemistry had 10 Difficult type questions, which is the most among all the subjects. This made Chemistry the toughest subject in Section A to attempt.

Section A								
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	20	80	13	52	2	8	35	140
Chemistry	8	32	17	68	10	40	35	140
Botany	17	68	15	60	3	12	35	140
Zoology	19	76	13	52	3	12	35	140
Grand Total	64	256	58	232	18	72	140	560

Section A - Difficulty Level

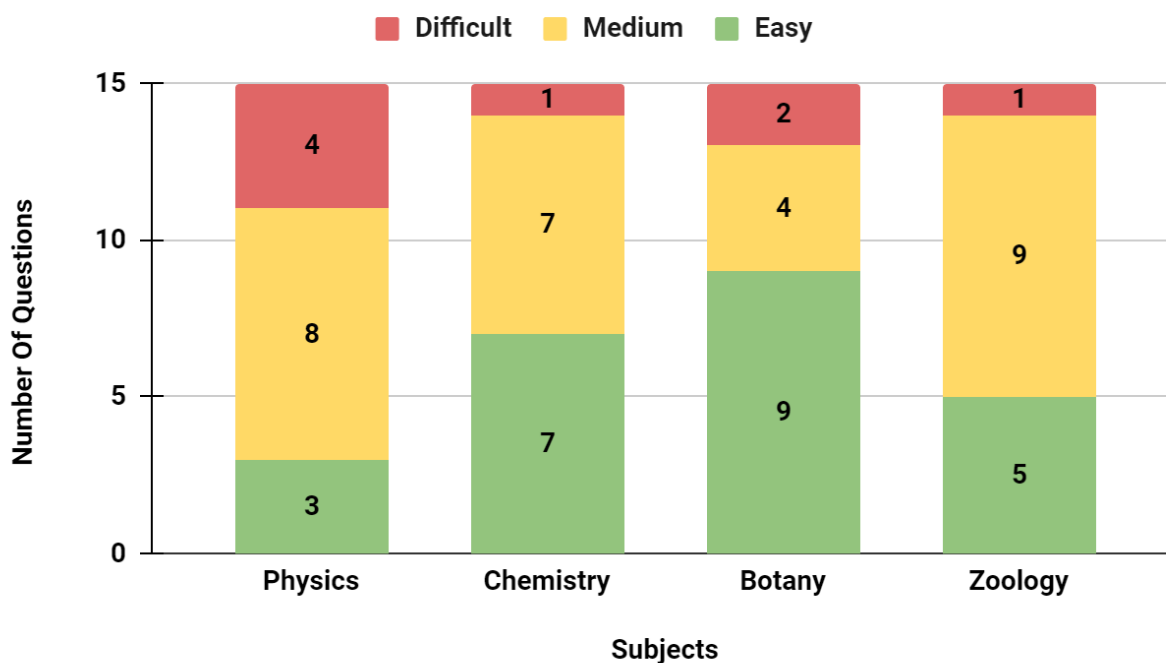


Section B

This section mostly had Easy or Medium type questions in all the subjects except Physics. Physics had 4 Difficult type questions, which is the most among all the subjects. This made Physics the toughest subject in Section B to attempt.

Section B								
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	3	12	8	32	4	16	15	60
Chemistry	7	28	7	28	1	4	15	60
Botany	9	36	4	16	2	8	15	60
Zoology	5	20	9	36	1	4	15	60
Grand Total	24	96	28	112	8	32	60	240

Section B - Difficulty Level



Overall Difficulty Level Analysis of NEET UG 2022 (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.

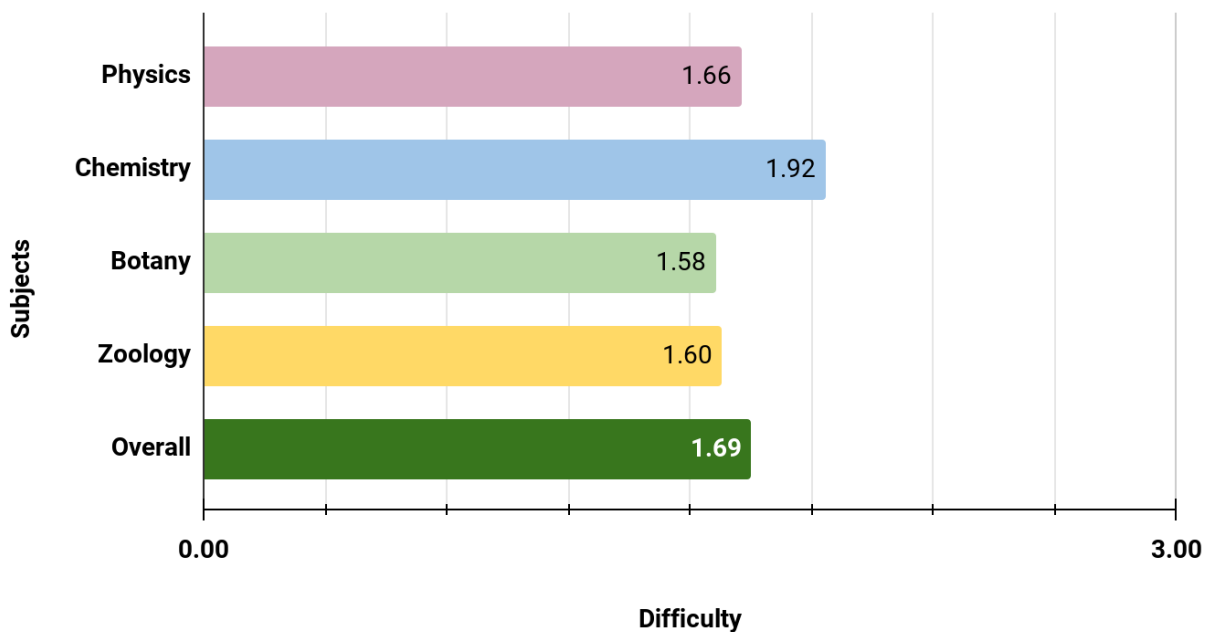
Easy - 1

Medium - 2

Difficult - 3

Subject	Difficulty Level
Physics	1.66
Chemistry	1.92
Botany	1.58
Zoology	1.60
Overall	1.69

Overall Difficulty Level - NEET-UG 2022



Comparative Difficulty Level Of Previous Year Question Papers

The 2022 NEET UG was comparatively a bit easier than 2021, but was difficult than the year 2020. As per expert faculties below are the Difficulty Ratings given to the previous years papers:

Year	Difficult Rating	Difficulty Level
2020	1.44	Easy to Medium
2021	1.71	Medium to Difficult
2022	1.69	Medium to Difficult

Conclusion :

- This year we had a new exam pattern which saw equal distribution of questions among each of the subjects.
- Subject wise Chemistry was toughest to attempt and Botany was the easiest subject.
- Equal weightage was given to the syllabus of Class 11th & Class 12th.
- Section wise difficulty, Section A saw Chemistry to be having more number of difficult questions and Section B saw Physics to be having more number of difficult questions.
- Overall the paper was found to be a bit easier than NEET 2021. Compared to last year, the Chemistry subject was found to be on a tougher side. Questions in Chemistry were more trick and lengthy than last year and were conceptually difficult. Rest of the subjects were almost of similar difficulty compared to last year.
- Expected cutoff to be in the similar range as that of previous years.