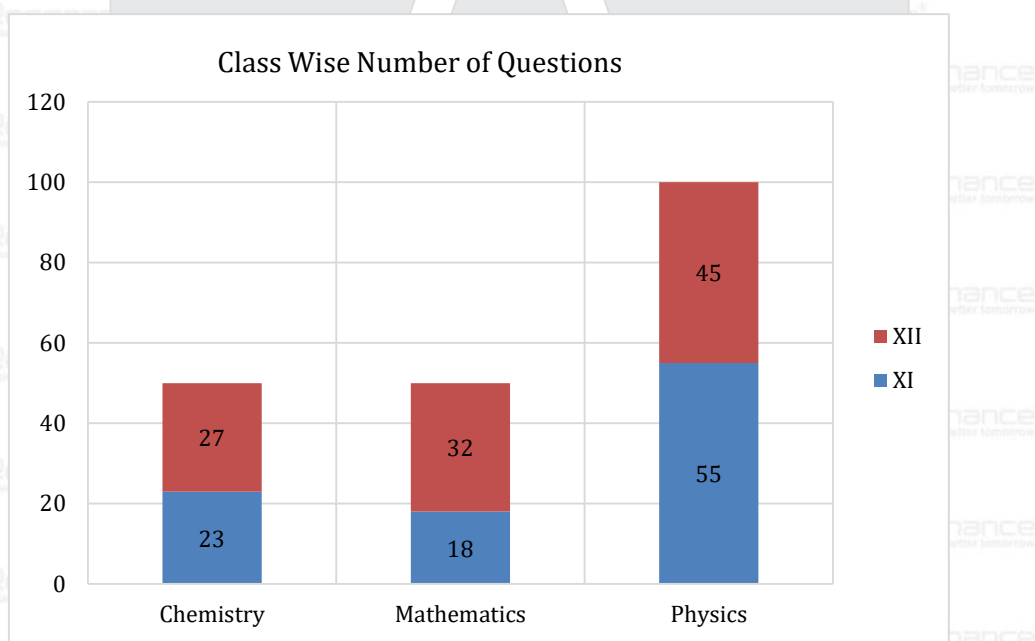


### Overall Question Distribution

Subject	Class 11		Class 12		Total Percentage	
	No of Questions	Total Marks	No of Questions	Total Marks	Class 11	Class 12
Chemistry	23	92	27	108	46%	54%
Physics	18	72	32	128	36%	64%
Biology	55	220	45	180	55%	45%
<b>Grand Total</b>	<b>96</b>	<b>384</b>	<b>104</b>	<b>416</b>	<b>48%</b>	<b>52%</b>



### 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 of Resonance. The individual ratings are then averaged to calculate overall difficulty level.

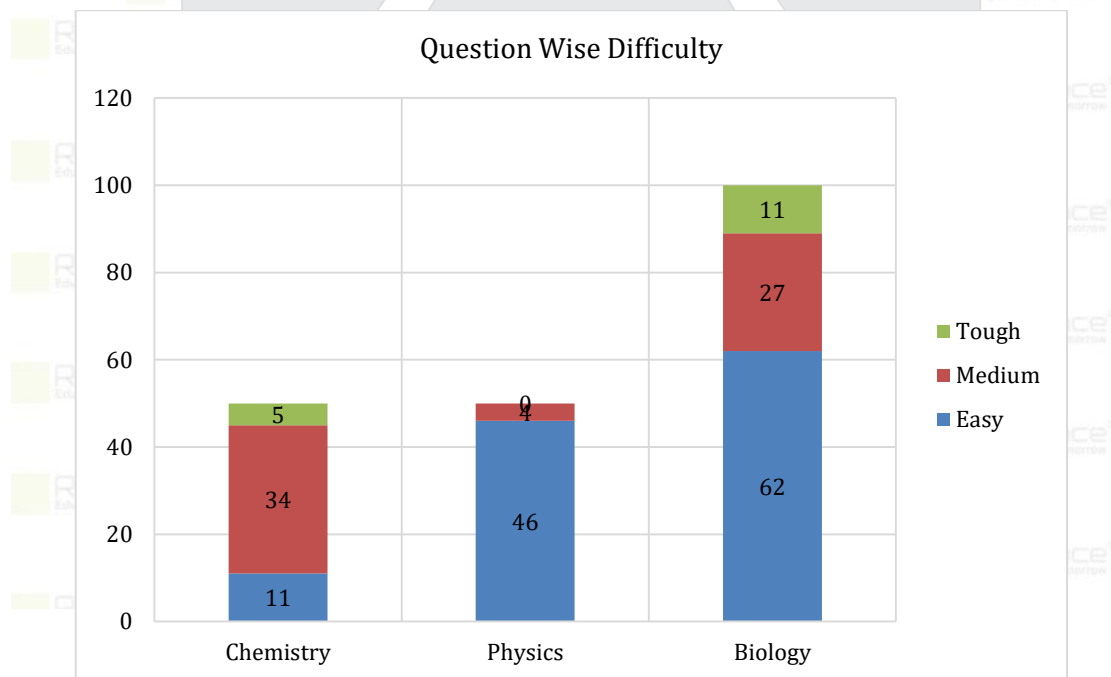
**1: Easy**

**2: Moderate**

**3: Difficult**

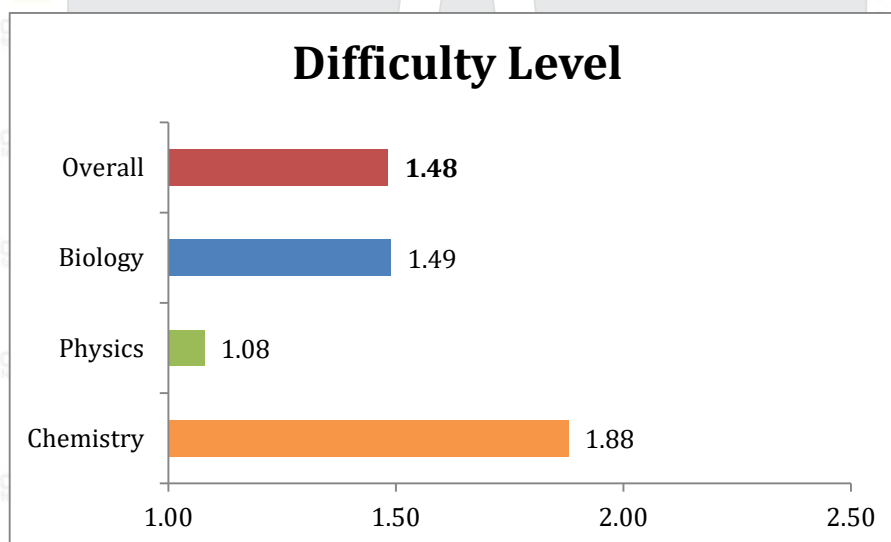
Difficulty Level Analysis: Number of Questions

Subject	Easy Level		Medium Level		Difficult Level	
	No of Questions	Total Marks	No of Questions	Total Marks	No of Questions	Total Marks
Chemistry	11	44	34	136	5	20
Physics	46	184	4	16	0	0
Biology	62	248	27	108	11	44
<b>Grand Total</b>	<b>119</b>	<b>476</b>	<b>65</b>	<b>260</b>	<b>16</b>	<b>64</b>



### Difficulty Level Comparison from previous year papers:

Subject	2023	2022	2021	2020	2019	2018	2017
Biology	1.49	1.63	1.42	1.35	1.36	1.6	2.16
Chemistry	1.88	1.92	1.44	1.5	1.4	1.95	1.36
Physics	1.08	1.60	1.86	1.7	1.76	2.31	1.93
Overall	1.48	1.72	1.70	1.52	1.47	1.87	1.91



### Subject Wise Analysis

#### PHYSICS ANALYSIS (TOPIC WISE ALLOCATION OF MARKS)

PHYSICS			
UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%) WEIGHTAGE
<b>Physics</b>	<b>50</b>	<b>200</b>	<b>100%</b>
<b>Alternating Current</b>	<b>3</b>	<b>12</b>	<b>6%</b>
Average, peak and rms values	3	12	6%
<b>Capacitance</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Definition of capacitance	1	4	2%
<b>Current Electricity</b>	<b>5</b>	<b>20</b>	<b>10%</b>
Definition of Current, Current Densities, Drift	5	20	10%
<b>Electro Magnetic Field</b>	<b>3</b>	<b>12</b>	<b>6%</b>
Magnet and Magnetic field due to a moving charge	3	12	6%
<b>Electro Magnetic Induction</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Flux and faraday's laws of electromagnetic induction	1	4	2%
<b>Electrostatics</b>	<b>3</b>	<b>12</b>	<b>6%</b>
Properties of charge and Coulomb's Law	3	12	6%
<b>Friction</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Kinetic friction	1	4	2%
<b>Gravitation</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Universal law of gravitation	2	8	4%
<b>Modern Physics</b>	<b>5</b>	<b>20</b>	<b>10%</b>
Photoelectric Effect	5	20	10%
<b>Rigid body dynamics</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Kinematics	1	4	2%
<b>Surface Tension</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Surface tension, Surface energy and capillary rise	1	4	2%
<b>Wave Optics</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Principle of superposition, path difference, Wavefronts, and coherence	1	4	2%
<b>Projectile motion</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Definition, Projectile on a horizontal plane	1	4	2%

UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%) WEIGHTAGE
<b>Newton's laws of motion</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Type of forces, newton's third law, free body diagram	1	4	2%
<b>KTG and Thermodynamics</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Kinetic Theory of gases	2	8	4%
<b>Solid and Semiconductor</b>	<b>3</b>	<b>12</b>	<b>6%</b>
Semiconductor, Energy Band	3	12	6%
<b>Measurement Error</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Measurement Error	2	8	4%
<b>Sound Wave</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Equation of sound wave, wavelength, frequency, pressure and displacement amplitude	1	4	2%
<b>Geometrical Optics</b>	<b>3</b>	<b>12</b>	<b>6%</b>
Plane Mirror	3	12	6%
<b>Electromagnetic waves</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Electromagnetic waves	2	8	4%
<b>Rectilinear motion</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Distance and Displacement	2	8	4%
<b>Fluid mechanics</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Measurement and calculation of pressure	1	4	2%
<b>Work, Power, Energy</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Work Done By Constant Force	2	8	4%
<b>Elasticity and viscosity</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Elastic behaviour longitudinal stress, young modulus	2	8	4%
<b>Simple Harmonic motion</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Equation of SHM	1	4	2%

**CHEMISTRY ANALYSIS (TOPIC WISE ALLOCATION OF MARKS)**

CHEMISTRY			
UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%) WEIGHTAGE
<b>Chemistry</b>	<b>50</b>	<b>200</b>	<b>100%</b>
<b>Physical Chemistry</b>	<b>15</b>	<b>60</b>	<b>30%</b>
<b>Chemical Equilibrium</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Properties of Equilibrium, Law of mass action, Equilibrium constant and its properties, Factors affecting Equilibrium constant, Unit of KC and KP	1	4	2%
<b>Chemical Kinetics</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Rate of reaction, Factors affecting rate of reaction	2	8	4%
<b>Electrochemistry</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Basic Terminology, Construction of Electrochemical Cell and Its Representation	2	8	4%
<b>Gaseous State</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Gas Laws (Boyle, Charles, Gaylussac, Avogadro's Law, Ideal Gas Equation)	1	4	2%
<b>Mole Concept</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Units, Atoms, Molecules, Atomic mass, Molecular mass, Gram atomic mass, Gram molecular mass, RAM, Average atomic mass	1	4	2%
<b>Solid State</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Basics of Solid State	2	8	4%
<b>Surface Chemistry</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Adsorption	1	4	2%
<b>Solution Colligative Properties</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Concentration terms	1	4	2%
<b>Atomic Structure</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Cathode, Anode rays, Basic definitions and Rutherford atomic model	2	8	4%
<b>Redox Reaction</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Calculation of oxidation number	1	4	2%
<b>Thermodynamics</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Basic definitions	1	4	2%

UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%) WEIGHTAGE
<b>Inorganic Chemistry</b>	<b>17</b>	<b>68</b>	<b>34%</b>
<b>Chemical Bonding</b>	<b>4</b>	<b>16</b>	<b>8%</b>
Introduction to Bonding and Ionic bond	4	16	8%
<b>Metallurgy</b>	<b>2</b>	<b>8</b>	<b>4%</b>
ORES and method of concentration	2	8	4%
<b>Periodic Table</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Development of Periodic Table, Period, Group and Block	2	8	4%
<b>S-Block Element</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Electronic configuration and Physical Properties of alkali metals	2	8	4%
<b>P-Block Element (B and C)</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Physical and chemical properties of Group 13th elements	1	4	2%
<b>Coordination Compound</b>	<b>2</b>	<b>8</b>	<b>4%</b>
General introduction of complex salts and definitions to be used	2	8	4%
<b>Hydrogen Compounds</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Position of hydrogen in the periodic table; methods of preparation and properties	1	4	2%
<b>P-Block (Nitrogen and Oxygen)</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Physical and Chemical properties of Group 15th elements	1	4	2%
<b>d-f-Block Element Compound</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Electronic configuration, atomic and ionic size, density, melting and boiling points	2	8	4%

UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%) WEIGHTAGE
<b>Organic Chemistry</b>	<b>18</b>	<b>72</b>	<b>36%</b>
<b>Environmental Chemistry</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Gaseous air pollutants	1	4	2%
<b>Aromatic Compound</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Aromaticity	2	8	4%
<b>Reaction Mechanism</b>	<b>3</b>	<b>12</b>	<b>6%</b>
Solvent, Electrophile, Nucleophile and Leaving group ability	3	12	6%
<b>Biomolecule and Polymer</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Carbohydrate : Monosaccharide, Disaccharide, Polysaccharide	2	8	4%
<b>Hydrocarbon part-I</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Alkane	1	4	2%
<b>General Organic Chemistry</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Inductive effect	1	4	2%
<b>Chemistry in Every day life</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Chemistry in every day life	1	4	2%
<b>Carboxylic acid and Derivatives</b>	<b>3</b>	<b>12</b>	<b>6%</b>
Preparation of Carbonyl Compounds	3	12	6%
<b>Grignard Reagent</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Grignard Reagent	1	4	2%
<b>IUPAC nomenclature</b>	<b>3</b>	<b>12</b>	<b>6%</b>
Fundamental of Organic Chemistry	3	12	6%



**BIOLOGY ANALYSIS (TOPIC WISE ALLOCATION OF MARKS)**

<b>Biology</b>			
<b>UNIT &amp; TOPIC NAME</b>	<b>NO OF QUESTIONS</b>	<b>TOTAL MARKS</b>	<b>(%) WEIGHTAGE</b>
<b>Biology</b>	<b>100</b>	<b>400</b>	<b>100%</b>
<b>Biology (Botany)</b>	<b>50</b>	<b>200</b>	<b>100%</b>
<b>Cell Biology</b>	<b>5</b>	<b>20</b>	<b>10%</b>
Introduction, Prokaryotic Cell	5	20	10%
<b>Ecology-Biodiversity and Conservation</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Introduction, Level of biodiversity, Pattern of biodiversity, Loss of biodiversity	2	8	4%
<b>Plant Kingdom</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Plant Kingdom-Algae	2	8	4%
<b>Genetics-I</b>	<b>3</b>	<b>12</b>	<b>6%</b>
INTRODUCTION, MENDELISM, MONOHYBRID CROSS, DIHYBRID CROSS, BACK CROSS, TEST CROSS, INCOMPLETE DOMINANCE, CODOMINANCE, MULTIPLE ALLELISM, PLEIOTROPY	3	12	6%
<b>Sexual Reproduction in Flowering Plants</b>	<b>4</b>	<b>16</b>	<b>8%</b>
Sexual reproduction: Introduction	4	16	8%
<b>Ecology-Ecosystem</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Introduction, Biotic components of ecosystem	2	8	4%
<b>Anatomy of Flowering Plants</b>	<b>3</b>	<b>12</b>	<b>6%</b>
Plant Tissues, Tissue System	3	12	6%
<b>Application Biology (Biotechnology)</b>	<b>4</b>	<b>16</b>	<b>8%</b>
Principles of Biotechnology	4	16	8%
<b>Morphology of Flowering Plants</b>	<b>3</b>	<b>12</b>	<b>6%</b>
Root	3	12	6%
<b>Plant Physiology-II-Plant growth and Growth Hormones</b>	<b>3</b>	<b>12</b>	<b>6%</b>
Growth and Development	3	12	6%
<b>Plant Physiology-II-Photosynthesis In Higher Plants</b>	<b>4</b>	<b>16</b>	<b>8%</b>
Introduction (Early experiments), site of photosynthesis and photosynthetic pigments	4	16	8%
<b>Ecology-Environmental Issues</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Types of pollutants, Types of pollution-Air pollution, Noise pollution, Acid rain, Ozone depletion, Water pollution	1	4	2%

UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%) WEIGHTAGE
<b>Genetics-II</b>	<b>4</b>	<b>16</b>	<b>8%</b>
NUCLEIC ACIDS (THE SEARCH FOR GENETIC MATERIAL, DNA, RNA)	4	16	8%
<b>Plant Physiology-I-Mineral Nutrition</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Methods to study mineral requirements of plants, Essential mineral elements, Role of macro and micronutrients, deficiency symptoms of essential elements, Toxicity of micronutrients	2	8	4%
<b>Plant Physiology-I-Transport in plants</b>	<b>3</b>	<b>12</b>	<b>6%</b>
Diffusion, Facilitated diffusion, osmosis, Active transport, DPD, Water potential plasmolysis, imbibition	3	12	6%
<b>Biomolecule-I</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Carbohydrates	1	4	2%
<b>Ecology-Organisms and Population</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Introduction, Abiotic factors, Responses to abiotic factors	2	8	4%
<b>Plant Physiology-II-Respiration in plants</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Introduction, Glycolysis and Fermentation	1	4	2%
<b>Biomolecule-II</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Nucleic Acids	1	4	2%
<b>Biology (Zoology)</b>	<b>50</b>	<b>200</b>	<b>100%</b>
<b>Cell Biology</b>	<b>4</b>	<b>16</b>	<b>8%</b>
Introduction, Prokaryotic Cell	4	16	8%
<b>Genetics-I</b>	<b>2</b>	<b>8</b>	<b>4%</b>
INTRODUCTION, MENDELISM, MONOHYBRID CROSS, DIHYBRID CROSS, BACK CROSS, TEST CROSS, INCOMPLETE DOMINANCE, CODOMINANCE, MULTIPLE ALLELISM, PLEIOTROPY	2	8	4%
<b>Application Biology (Biotechnology)</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Principles of Biotechnology	2	8	4%
<b>Ecology-Environmental Issues</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Types of pollutants, Types of pollution-Air pollution, Noise pollution, Acid rain, Ozone depletion, Water pollution	1	4	2%
<b>Genetics-II</b>	<b>3</b>	<b>12</b>	<b>6%</b>
NUCLEIC ACIDS (THE SEARCH FOR GENETIC MATERIAL, DNA, RNA)	3	12	6%
<b>Ecology-Organisms and Population</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Introduction, Abiotic factors, Responses to abiotic factors	2	8	4%

UNIT & TOPIC NAME	NO OF QUESTIONS	TOTAL MARKS	(%) WEIGHTAGE
<b>Biomolecule-II</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Nucleic Acids	1	4	2%
<b>Body fluids and circulation</b>	<b>3</b>	<b>12</b>	<b>6%</b>
heart and conduction	3	12	6%
<b>Animal Kingdom-1</b>	<b>4</b>	<b>16</b>	<b>8%</b>
Porifera	4	16	8%
<b>Human Reproduction and Reproductive Health</b>	<b>6</b>	<b>24</b>	<b>12%</b>
Male Reproductive System	6	24	12%
<b>Excretory Product and Their Elimination</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Homeostasis and Osmoregulation	1	4	2%
<b>Neural Control and Coordination</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Nervous Tissue	2	8	4%
<b>Digestion and Absorption</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Nutrition	2	8	4%
<b>Structural organisation in animals</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Connective tissue	1	4	2%
<b>Locomotion and Movement</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Muscles	2	8	4%
<b>Biology In Human Welfare-Human Health and Disease</b>	<b>3</b>	<b>12</b>	<b>6%</b>
Diseases caused by virus	3	12	6%
<b>Breathing and Exchange of Gases</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Respiratory organ	1	4	2%
<b>Origin and Evolution</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Origin of Life	2	8	4%
<b>Chemical Coordination and Integration</b>	<b>3</b>	<b>12</b>	<b>6%</b>
Endocrine Gland	3	12	6%
<b>Biology In Human Welfare-Microbes in human Welfare</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Microbes in human Welfare	1	4	2%
<b>Structural Organisation in Animal</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Epithelial tissue	1	4	2%
<b>Animal Kingdom-2</b>	<b>2</b>	<b>8</b>	<b>4%</b>
Chordata	2	8	4%
<b>Biology In Human Welfare-Strategies for Enhancement of Food Production in Animal</b>	<b>1</b>	<b>4</b>	<b>2%</b>
Strategies for Enhancement of Food Production in Animal	1	4	2%

## **CONCLUSION:**

**Overall the paper was found to be easy to moderate and easier than NEET 2022.**

In Biology, maximum questions were from NCERT and Easy to Moderate level but around 11 questions were analytical hence they would be considered as tough. In Chemistry, around 35 questions from total 50 were from NCERT and paper was not so calculative. In Physics, almost all questions were formula / definition based and easier than last year. This year paper contains straight line MCQ, assertion reason type questions, statement type questions, matching types questions.

**Since the paper is easy than last year, the expected cutoff should be increased and is expected to be around 610 for MBBS govt. seat for Gen. category for AIQ.**

\*\*\*\*\* DOCUMENT END \*\*\*\*\*