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- 6. Rotational Motion** 67-82  
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Molar conductivity, equivalent conductivity, variation of conductivity with dilution, electrolysis, electrochemical cells, standard reduction potential of a half-cell and cell reaction, emf and its measurement, Nernst equation, relationship between the potential, free energy and equilibrium constant ( $k$ ), fuel cells.	
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<b>20. s-block Elements</b>	<b>665-677</b>
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<b>35. Biomolecules</b>	<b>880-891</b>
Monosaccharides, oligosaccharides, amino acids, essential and non-essential amino acids, structure of proteins, classification of vitamins and nucleic acids.	
<b>36. Chemistry in Everyday Life</b>	<b>892-900</b>
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# BIOLOGY

903-1495

- 1. The Living World** 905-915  
Binomial nomenclature and taxonomic hierarchy.
- 2. Biological Classification** 916-928  
Classifications systems, kingdom-Monera, kingdom-Fungi and Viruses.
- 3. Plant Kingdom** 929-946  
General characters, reproduction, economic importance of algae, Bryophyta, Pteridophyta, Gymnosperm and Angiosperm.
- 4. Animal Kingdom** 947-963  
Basis of classification, general characteristics of all phylums specially Annelida, Arthropoda and Chordata.
- Unit Test 1** 964-965
- 5. Morphology of Flowering Plants** 966-987  
Fruits, Roots, Inflorescence.
- 6. Anatomy of Flowering Plants** 988-1003  
Simple and complex tissue system, meristem ate tissues, vascular (conductive) tissue and epidermal tissue
- 7. Structural Organisation in Animals** 1004-1028  
Types of epithelial tissues, connective tissues, muscular tissues and morphology and anatomy of cockroach and earthworm.
- Unit Test 2** 1029-1030
- 8. Cell : The Unit of Life** 1031-1047  
Fluid mosaic model, endoplasmic reticulum, Golgi complex, ribosomes.
- 9. Biomolecules** 1048-1062  
Carbohydrates (different types of carbohydrates), lipids, amino acid (structure) and enzyme activity.
- 10. Cell Cycle and Cell Division** 1063-1073  
Interphase, mitosis, meiosis, differences between mitosis and meiosis.
- Unit Test 3** 1074-1075
- 11. Transport in Plants** 1076-1088  
Means of transport, transpiration, guttation, transpiration pull theory, phloem transport and opening and closing of stomata.
- 12. Mineral Nutrition** 1089-1102  
Function and deficiency symptoms of essential elements, nitrogen cycle.
- 13. Photosynthesis in Higher Plants** 1103-1117  
Light and dark reaction, photophosphorylation and limiting factors.
- 14. Cellular Respiration** 1118-1136  
Glycolysis, Kreb's cycle and terminal oxidation.

<b>15. Plant Growth and Development</b>	<b>1137-1149</b>
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<b>17. Breathing and Exchange of Gases</b>	<b>1167-1180</b>
Carbon monoxide poisoning, oxygen dissociation curve.	
<b>18. Body Fluids and Circulation</b>	<b>1181-1196</b>
Function of blood cells, blood groups, conducting cells of heart and cardiac cycle.	
<b>19. Excretion in Animals</b>	<b>1197-1209</b>
Types of organisms based on their excretory product, structure of human excretory system, structure of nephron.	
<b>20. Locomotion and Movement</b>	<b>1210-1224</b>
Types of muscle, Structure of skeletal muscle, Sliding filament theory, mechanism of muscle contraction, different types of joints.	
<b>21. Neural Control and Coordination</b>	<b>1225-1239</b>
Structure to neuron, Impulse conduction of nerve, Cerebrum, Cranial nerve, Spinal arc, Sensory organs.	
<b>22. Endocrine System</b>	<b>1240-1253</b>
Endocrine glands and their hormones endocrine disorders, mechanism of hormone action.	
<b>Unit Test 5</b>	<b>1254-1255</b>
<b>23. Reproduction in Organisms</b>	<b>1256-1265</b>
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<b>24. Sexual Reproduction in Flowering Plants</b>	<b>1266-1279</b>
Gametogenesis (micro and mega both), pollination (types of pollination and floral adaptations), fertilisation, polyembryony and apomixis.	
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Male and female reproductive systems, gametogenesis menstrual cycle. Fertilisation, embryo development.	
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Contraceptives measures and artificial reproductive technologies.	
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RNA, DNA replication, transcription and translation , genetic codes DNA recombination technology regulation of gene expression.	

<b>29. Evolution</b>	<b>1342-1359</b>
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<b>30. Human Health and Diseases</b>	<b>1360-1376</b>
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<b>32. Microbes in Human Welfare</b>	<b>1390-1399</b>
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<b>37. Biodiversity and Its Conservation</b>	<b>1465-1477</b>
Levels of biodiversity, patterns of biodiversity, biodiversity conservation, etc.	
<b>38. Environmental Issues</b>	<b>1478-1493</b>
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