

# OVERVIEW OF SYLLABUS AND SKILLS

S. No.	Chapter Name	Experiments and Activities	Skills	Values	Cross-curricular Links
1.	<b>Crop Production and Management</b> <ul style="list-style-type: none"> <li>Crop</li> <li>Agricultural Practices</li> <li>Preparation of Soil</li> <li>Levelling</li> <li>Sowing</li> <li>Applying Manures and Fertilisers</li> <li>Natural Methods of Replenishing Soil Nutrients</li> <li>Irrigation</li> <li>Protection from Weeds</li> <li>Harvesting</li> <li>Storage</li> <li>Food from Animals</li> </ul>	<b>Activities:</b> <ul style="list-style-type: none"> <li>Map work – mark different crops in different states of India</li> <li>Quiz- Preparation of Soil, Presentation on Ploughing</li> <li>Activity- Float or sink</li> <li>Research on government's initiatives for the betterment of farmers and agricultural output and maintenance</li> <li>Discussion on Green Revolution</li> </ul>	<ul style="list-style-type: none"> <li>Recalling</li> <li>Describing</li> <li>Discussing</li> <li>Creating</li> <li>Interpreting</li> <li>Inferring</li> <li>Applying</li> <li>Presenting information</li> <li>Drawing conclusion</li> </ul>	<ul style="list-style-type: none"> <li>Importance of ICAR in Green revolution</li> <li>Appreciate the role of soil health card for the farmers</li> </ul>	<b>Geography:</b> <ul style="list-style-type: none"> <li>Types of crops grown according to seasons</li> <li>Improving the quality of soil of a region</li> </ul>
2.	<b>Microorganisms: Friend and Foe</b> <ul style="list-style-type: none"> <li>Microorganisms</li> <li>Bacteria</li> <li>Agricultural Uses of Bacteria</li> <li>Fungi</li> <li>Algae</li> <li>Protozoa</li> <li>Diseases Caused by Microorganisms</li> <li>Diseases of Humans, Animals and Plants Caused by Microorganisms</li> <li>Food Preservation</li> </ul>	<b>Experiments:</b> <ul style="list-style-type: none"> <li>To prove the presence of microorganisms in soil</li> <li>To observe the action of yeast on flour dough</li> <li>To observe fermentation of sugar by yeast cells</li> </ul> <b>Activity:</b> <ul style="list-style-type: none"> <li>Demonstration of microscope and its parts</li> <li>Group work- Presenting information on Microorganisms</li> </ul>	<ul style="list-style-type: none"> <li>Recalling</li> <li>Describing</li> <li>Discussing</li> <li>Creating</li> <li>Interpreting</li> <li>Inferring</li> <li>Applying</li> <li>Presenting information</li> <li>Drawing conclusion</li> </ul>	<ul style="list-style-type: none"> <li>Generate awareness on use of antibiotics</li> <li>Bioremediation as a tool to deal with environmental pollution</li> </ul>	<b>Medicine:</b> <ul style="list-style-type: none"> <li>Diseases caused by microorganisms</li> <li>Environmental chemistry: Uses of microorganisms in making environment pollution free</li> </ul>
		<b>Discussion on:</b> <ul style="list-style-type: none"> <li>Diseases Caused by Microorganisms</li> </ul>			
3.	<b>Conservation of plants and animals</b> <ul style="list-style-type: none"> <li>Biodiversity</li> <li>Loss of Biodiversity</li> <li>Conserving Biodiversity</li> <li>Success Story: Project Tiger</li> <li>Project Elephant: For India's Heritage Animal</li> <li>Protected Area</li> </ul>	<b>Discussion on:</b> <ul style="list-style-type: none"> <li>Reasons for migration, Case study: Migratory birds and animals</li> </ul> <b>Activity:</b> <ul style="list-style-type: none"> <li>What if (On Deforestation)</li> <li>Activity (Each one, Teach one): Pollution, Natural Disasters, Exotic species</li> </ul> <b>Discussion on:</b> <ul style="list-style-type: none"> <li>Red data book, extinct and endangered species</li> <li>Two-minute talk on conserving Biodiversity</li> <li>Research and collect data on Project Tiger, Project elephant and conservation heroes in India</li> </ul>	<ul style="list-style-type: none"> <li>Recalling</li> <li>Describing</li> <li>Discussing</li> <li>Creating</li> <li>Interpreting</li> <li>Inferring</li> <li>Applying</li> <li>Presenting information</li> <li>Drawing conclusion</li> </ul>		<b>Geography:</b> <ul style="list-style-type: none"> <li>Flora and fauna of different regions and their conservation</li> </ul> <b>Maths:</b> <ul style="list-style-type: none"> <li>Data on threatened species</li> </ul>