

Competency Statements

Standard XI

<i>Unit</i>	Competency Statements After studying the content in Textbook students will ...
<i>Diversity in living world</i>	<ul style="list-style-type: none"> • Analyse basic characteristics of living and non-living. • Collect and analyse useful data by observing diversity of living organisms using different tools. • Describe plants and animals in the surrounding on scientific basic and classify them using taxonomic hierarchy. • Develop hobbies by watching and collecting the things (livings) and their conservation using databases. • Classify different organisms based on cell structure, body organisation, mode of nutrition etc. • Compare and analyse similarities and differences along with phylogeny amongst different groups of organisms. • Recognize, analyse and compare structural similarities and differences and progressive evolutionary changes in different plants and animals.
<i>Cell structure and functions</i>	<ul style="list-style-type: none"> • Explain and draw the structure and functions of different cell organelles. • Elaborate the role of nucleus in heredity and controlling characters with structure of chromosome. • Compare cell division process and know their role in life cycle of organisms. • Analyse and specify different biomolecules of cell with their role in structural and functional aspect of cell.
<i>Structural organization in organisms</i>	<ul style="list-style-type: none"> • Explain basic morphology of dominant plant group of this era i.e. Angiosperms. • Compare morphological features of different plant parts in different plant families. • Draw floral parts and floral diagram. • Identify economic importance of Angiosperms with respect to fruit and seeds. • Compare morphological feature of two major classes of Angiosperms. • Explain different types of tissues in plants and reasons for growth viz. primary and secondary. • Analyse basic differences in anatomy of different plants like dicot and monocots with respect to root, stem and leaf. • Elaborate different animal tissues and their role. • Explain and draw mechanisms of different physiological process like digestion and excretion. • Review the contribution of different scientists in systematics and taxonomy.
<i>Plant physiology</i>	<ul style="list-style-type: none"> • Explain the scientific reasons behind the various physiological activities based on relationship. • Understand the relationship between chemical reactions of molecules in daily life and analyse them to solve various problems. • Review the contribution made by different workers. • Plan and implement programs about conservation of environment. • Explain the importance of green energy and save energy in daily life.

***Animal
Physiology***

- Explain the need and importance of various physiological processes.
- Explain the structural modifications, observed in various living organisms to carry out various physiological processes.
- Observe and correlate the histological structure of various organs with their function.
- Comprehend mechanisms by which these physiological processes help maintain homeostasis.
- Create memory maps, flow charts to depict major events in these processes.
- Develop insight about connection between life style/habits and physiological disorders.
- Collect information about latest diagnostic tools and treatments for various physiological disorders.
- Critically analyse given situational data and come up with rationale of possible physiological disorders/suggest proper remedial measures.
- Perform various analytical tests to detect presence of certain components in food materials/waste products.