DEPARTMENT OF BOTANY

COURSE – SPECIFIC

Core-1

Study of cells which are the basic unit of life will enlighten the knowledge of the students about how life exists in the world, cell structure, its organization can be studied. The microbes plays the most important role for ecosystem functioning. Study of microbiology will enhance the knowledge on both harmful and beneficial effect of microbes.

Core-2

Study of cells – its structure and organelles along with the biomolecules will let the students know how the cells are formed. How important role of each of the organelles plays in our life.

Core-3

Study of non-green plants are very interesting and important too as it is relate to plant pathogens. Mostly the fungal plants infect the crop field there by lowering the yield. Students will know their life cycle and control measures of the crops. Lichen being a dual organism plays a vital role for the formation of the soil and that can be studied by the students by going through its life – cycle.

Core-4

Study of Archegoniate helps to know all about the primitive organisms, the cell structure and their evolution.

Core-5

Students will be able to know the internal structure of the plant and the plant parts and can know how it differs from plant to plant, what is the significance of each cell type. By doing practical they can know the difference of anatomical structure of different plants.

Core-6

Study of economic botany will help the student to know the economic value of each plant there by increasing the earning knowledge of the students. The study of life pattern of economically important plants will help them to grow it and set their future goals.

Core-7

Genetic system is the most important course which will give knowledge of the structure and function of genes. Genetic engineering will be of great help in increasing the yield of agricultural crops.

Core-8

This study of environment is the most important challenge for the nation now. Environmental pollution is the major cause of concern. Study of phytogeography will let the students know about the land type in any area and the weather condition of that area will give knowledge for its optimum utilization. Global warming, green house effect, carbon trading, social forestry, acid rain is the major concern which all should know.

Core-9

Study of all angiospermic plants in a systematic way will help the student to recognize and know about all the plants. Each plant can be known by each of us all over the world by a common name i.e. binomial nomenclature. Study of classification of plants will make it easy to recognize all the plants.

Core-10

It deals with the study of reproductive biology which will increase the knowledge of students to know the detail life cycle of plants how they are formed and grow.

<u>Core-11</u>

Students will be able to know about all the physiological activities of plants. How the plant absorbs water and minerals, synthesizes food proteins etc. can be known. This branch will let the students know the lively activities of the plants.

Core-12

It deals with the study of plants metabolism it will let the students to learn how the different foods are transformed into metabolites and know how other enzymatic reactions leads to formation of lively materials like nucleic acids, proteins etc.

Core-13

This is about the plant metabolites and metabolic processes. Action of allosteric enzymes will give the knowledge about how the metabolism will proceed when normal enzyme stop functioning.

Core-14

Plant tissue culture, totipotency, recombination DNA technology restriction endonuclease – study of all these subjects is highly necessary to know about the biotechnology which is the demand of the time now.

DSE-1

This will let the student know about all the tools and techniques used for microscopic preparation all the technologies are used for biological research.

DSE-2

This will make the students know about all the renewable and non-renewable natural resources and their sustainable utilization. Student will learn the resource management, waste management and conservation of biodiversity.

DSE-3

Study of horticulture will lead to enhance the knowledge of the students about the minimum utilization of the source to get maximum outputs. Organic farms can be maintained to conserve the original verities which will help for genetic engineering. Moreover it will create earning capabilities of the students.

DSE-4

It is a project work. By preparing a project students will have to go for a field visit which will increase their practical knowledge. They will know how to prepare a project or a thesis.