

NEHRU MEMORIAL COLLEGE

(AUTONOMOUS)

NATIONALLY ACCREDITED WITH "A" GRADE BY NAAC

PUTHANAMPATTI, TRICHY – 621007



Botany

1.1.1 Curricula developed and implemented have relevance to the local, national, regional and global developmental needs

Name of the Programme	Course code	Title of Course	Need	Description
B.Sc., Botany	19BY101	Plant Diversity I (Algae, Fungi, Lichens and Bryophytes)	Global	Plant diversity is critical to addressing food, nutrition security and medicinal needs of people.
B.Sc., Botany		Practical - I - Diversity- I &II	Global	The most urgent needs are for the completion of the global botanical inventory and an assessment of the conservation status of the 94% of plant species not yet evaluated
B.Sc., Botany	19BY205	Plant diversity II (Pteridophytes, Gymnosperms and Paleo botany)	Global	plant species have a specific human use, many more play important roles in natural ecosystems and the services
B.Sc., Botany	19EVS	EVS- Environmental Science	Global	Because it enables you to understand how these relationships work. For example, humans breathe out carbon dioxide, which plants need for photosynthesis.
B.Sc., Botany	19XBY21	Bio-fertilizers and Organic Farming	Local	Need a safe and sustainable environment
B.Sc., Botany	19BY308	Microbiology And Plant Pathology	Global	Natural and commonly acquired micro-flora of the food and the ability of the food to support microbial growth
B.Sc., Botany	19BY308L	Practical -II (Microbiology and Plant Pathology & Cytology and Genetics)*	Global	Ensuring our food is safe, treating and preventing disease, developing green technologies or tracking the role of microbes in climate change
B.Sc., Botany	19XBY32	Mushroom Technology	Local	To realize the nutritive and medicinal value of mushrooms. Knowledge of mushroom cultivation

B.Sc., Botany	119BY411	Cytology and Genetics	Global	In the future, doctors and scientists hope to use our genetic information to diagnose, treat, prevent and cure many illnesses
B.Sc., Botany	19BY4Nb	Horticulture	Local	Horticultural crops i.e. fruits and vegetable acquire a place of important as protective food
B.Sc., Botany	19BY4Na	Food science and Nutrition	National	Provide knowledge on preservation of food, solve the under nutrient problems
B.Sc., Botany	19BY513	Plant Anatomy and Embryology	National	lead to a better understanding of how to care for plants and fight plant diseases
B.Sc., Botany	19BY514	Plant Systematics and Economic Botany	Global	plant taxonomy have some positive contributions to agriculture
B.Sc., Botany	19BY515	Biochemistry and Biophysics	Global	Plants based Biochemistry is the research of the basic chemistry of living things.
B.Sc., Botany	19BY516L	Practical -III (Plant Anatomy and Embryology & Plant Systematic and Economic Botany & Biochemistry and Biophysics	National	Develop the skill to increase plant quality, identification of plant drugs for medicinal fields
B.Sc., Botany	19BY517a	Horticulture and Plant Breeding	National	Horticultural crops play an important role in commerce, particularly in export trade and processing industry
B.Sc., Botany	19BY517b	Medicinal Botany	National	Medicinal herbs or plants have been known to be an important potential source of therapeutics or curative aid
B.Sc., Botany	19BY5Na	Edible Mushroom Cultivation	Local	Mushrooms provide several important nutrients. Mushroom cultivation can help reduce vulnerability to

				poverty and strengthens livelihoods
B.Sc., Botany	19BY5Nb	Green House Technology	National	It is rather used to protect the plants from the adverse climatic conditions such as wind, cold, precipitation, excessive radiation, extreme temperature, insects and diseases.
B.Sc., Botany	19BY618	Plant Physiology	Global	Plant Physiology welcomes contributions that extend studies of molecules, cells, tissues, and organs to the whole-plant level — providing insight into plants'
B.Sc., Botany	19BY619	Plant Biotechnology	Global	Genetic engineering techniques can be mastered, they could be used in the design of plants as our requirements.
B.Sc., Botany	19BY620L	Practical –IV (Plant Physiology & Plant biotechnology)	Global	Plant Physiology welcomes contributions that extend studies of molecules, cells, tissues, and organs to the whole-plant level — providing insight into plants'
B.Sc., Botany	19BY621b	Plant Ecology and Phytogeography	Global	enriches our world and is crucial for human well-being and prosperity
B.Sc., Botany	19BY621a	Floriculture	Global	satisfying the aesthetic needs of the people, creating more employment, ensuring higher rate of returns to rural people and facilitating earning more foreign exchange
B.Sc., Botany	19BY622a	Bio-informatics and Bio-statistics	Global	Analyze whole-genome sequencing data. This involves algorithm, pipeline and software development, and analysis, transfer and storage/database development of genomics data.

B.Sc., Botany	19BY622b	Seed Science Technology	National	Knowledge to maintain a high quality, abundant food supply. Food Science allows us to make the best use of our food resources and minimize waste.
B.Sc., Botany	19 XBY 63	Nursery and Gardening	Local	Production of proposed size and age of seedlings. Production of the desired number of seedlings. Production of healthy plants of the desired app.
B.Sc., Botany	19Z103 A	Allied Botany	National	Used in many aspects of human life. Botany is an important field of science that is very much related to plants
M.Sc., Botany	18PBY101	Plant Diversity – I (Algae, Fungi, Lichens & Bryophytes)	National	Plant diversity is critical to addressing food, nutrition security and medicinal needs of people.
M.Sc., Botany	18PBY102	Plant Diversity– II (Pteridophytes, Gymnosperm & Paleobotany)	National	Plant species have a specific human use, play important roles in natural ecosystems and the services.
M.Sc., Botany	18PBY103	Microbiology, Plant Pathology & Immunology	Global	Natural and commonly acquired micro flora of the food and the ability of the food to support microbial growth.
M.Sc., Botany	18PBY104	Genetics, Plant breeding and Bio-statistics.	Global	Researcher hope to use our genetic information to diagnose, treat, prevent and cure many illnesses.
M.Sc., Botany	18PBY106	Forestry	National	Fulfill the needs of fuel, floodor, energy, housing, and timber, raw material for artisans and industries and employment.
M.Sc., Botany	18PBY217	Developmental Botany	National	Satisfying human needs for sustenance and safety.
M.Sc., Botany	18PBY208	Cell and Molecular Biology	National	Study of living things, and cellular or molecular biology level.

M.Sc., Botany	18PBY209	Plant Biochemistry	Global	Research of the basic chemistry of living things.
M.Sc., Botany	18PBY210L	Core Practical- II (Covering CC-V to CC-VII)	National	Developing skills relating to molecular level in laboratories.
M.Sc., Botany	18PBY211	Plant Tissue Culture	Global	Plant tissue culture techniques used to solve the global food shortage by higher yield and disease resistance.
M.Sc., Botany	18PBY312	Plant Physiology	National	Studies of molecules, cells, tissues and organs to the whole-plant level and providing insight into plants.
M.Sc., Botany	18PBY313	Plant Systematics	Global	Plant taxonomy have some positive contributions to agriculture, can identify the beneficial plants used for food and medicine
M.Sc., Botany	18PBY314L	Core Practical- III (Covering CC-VIII to CC-IX)	Global	Develop skills to work in plant samples and their derivatives and gaining knowledge of plants.
M.Sc., Botany	18PBY315	Ecology and Phytogeography	Global	Enriches our world and is crucial for human wellbeing and prosperity
M.Sc., Botany	18PBY316	Bio-fertilizers Technology	Regional	Helps to increase the soil fertility and protect the land from inorganic synthetic pollution
M.Sc., Botany	18PBY417	Research Methodology	Global	Solving various planning and operational problems.
M.Sc., Botany	18PBY418L	Core Practical – Research methodology	National	Formulating a hypothesis, collection of data, it's collected for either theoretical or practical research.
M.Sc., Botany	18PBY420	Plant Biotechnology and Genetic Engineering	Global	This can be mastered, they could be used in the design of genetically modified plants for our requirements.