



**MVR INSTITUTE
OF LIFE SCIENCE
& RESEARCH STUDIES**

AFFILIATED TO KANNUR UNIVERSITY & APPROVED BY GOVT OF KERALA

**MVR INSTITUTE
OF LIFE SCIENCE
& RESEARCH
STUDIES**

PROSPECTUS
UG ADMISSIONS 2023-24

www.mvrlifescienceinstitute.com

Greetings from

MVR INSTITUTE OF LIFE SCIENCE AND RESEARCH STUDIES, PAPPINISSERI, KANNUR.

Renowned visionary and social leader **Sri. M.V.Raghavan** with his commitment to Human Welfare and Social Development through Education, established Visha Chikilsa Kendram at Pappinisseri in 1964. MVR Institute of Life Science and Research Studies, established in 2022 is an Innovative venture in the field of Life Sciences by MVR Group of Institutions. The Institution is a pioneer educational centre providing academically excellent and culturally stable ambience for quality learning.

OUR HIGHLIGHTS:

- 100% placement assistance
- Eminent and Expert faculties
- Opportunities and expert guidance for higher studies and research
- Mentor and tutorial system
- Publication support system
- Industrial/ field visit
- Expert guidance for project works
- Industry collaboration programs
- Certification programs in various disciplines
- Entrepreneurship guidance support
- Student exchange programs
- Internship opportunities in premier research institutes
- Incubation support system
- Online/Offline IELTS, language and communication coaching facility

COURSES OFFERED:

- **B.Sc. Biotechnology**
- **B.Sc. Forestry**
- **B.Sc. Microbiology**
- **B.Sc. Plant Science**
- **B.Sc. Biochemistry**

Eligibility: Passed +2 Science/VHSE

Duration of the course: 3 years (Six Semesters)

Medium of Instruction: English

MESSAGE FROM THE CHAIRMAN



PROF. E. KUNHIRAMAN

CHAIRMAN

MVR INSTITUTE OF LIFE SCIENCE AND RESEARCH STUDIES

Miles to GO...in an age of INNOVATIONS AND SCIENTIFIC DIGITAL TECHNOLOGY REVOLUTIONS...

Power of knowledge (PoK) is the most accepted paradigm of the current Millennium. Accepting all the merits of Globalization, Internalization of Knowledge has contributed in itself the unprecedented advancement of Science and Technology in all walks of life. MVR Ayurveda is named after our founder MV Raghavan, a firebrand and most respected leader of CPI(M). He has always been a pioneer in the Co-operative industry and has put forth many Co-operative institutes in and around Kannur district. Pappinisseri Visha Chikilsa Kendram(PVCK) was one such initiative brought forth by MVR along with public support. PVCK is greatly involved in research activities related to Snake Bite management and Venomics.

We are honoured to share with you our commitment to providing exceptional education and shaping the future leaders of tomorrow. At MVR Institute of Life Science and Research Studies, we firmly believe that education is the key to unlocking one's true potential. Since our establishment, we have dedicated ourselves to nurturing young minds, fostering a love for learning, and empowering students to become well-rounded individuals equipped for success in the ever-evolving global landscape.

Our institution stands as a beacon of excellence, renowned for its academic rigor, innovative teaching methodologies, and holistic development programs. We take immense pride in our highly qualified faculty members who are passionate about imparting knowledge, mentoring students, and igniting their curiosity. Our state-of-the-art facilities and cutting-edge resources create an optimal learning environment, enabling students to explore, discover, and excel. At MVR Institute of Life Science and Research Studies, we believe in the importance of a comprehensive education that goes beyond textbooks and classrooms. We offer a wide array of extracurricular activities that provide students with opportunities to develop their talents, foster leadership skills, and cultivate a sense of community. We are committed to instilling values of integrity, empathy, and social responsibility in our students, preparing them to be compassionate global citizens.

Whether it is our rigorous academic curriculum, specialized courses, or advanced research programs, our aim is to provide a transformative educational experience that equips students with the knowledge and skills necessary to thrive in their chosen fields. Through mentorship programs and networking opportunities, our students benefit from their wisdom, guidance, and connections.

We understand the importance of adapting to the changing landscape of education and equipping our students with skills for the future. We continuously strive to stay ahead of the curve by incorporating emerging technologies, fostering innovation, promoting interdisciplinary learning and empowering our students. We are proud to be at the forefront of educational advancements, preparing our students for the challenges and opportunities of the digital age. We are excited to join you on your educational journey and empower you to achieve your dreams. Together, let us unlock the doors to a world of knowledge and endless possibilities.

PROF. E. KUNHIRAMAN

CHAIRMAN

MVR INSTITUTE OF LIFE SCIENCE AND RESEARCH STUDIES

COURSE INTRODUCTION

B.Sc. BIOTECHNOLOGY

Biotechnology is a multi disciplinary field that involves the integration of natural sciences and engineering sciences in order to achieve the application of organisms, cells, parts thereof and molecular analogues for products and services. It has led to the development of essential products like life-saving drugs, biofuels, genetically modified crops, and innovative materials.

B.Sc. FORESTRY

Forestry is an interdisciplinary field that the theory and practice of all that constitutes the creation, conservation and scientific management of forests and the utilization of their resources. It involves understanding the complex relationships between trees, wildlife, ecosystems, and human society. Forestry professionals play a crucial role in ensuring the sustainable use and preservation of forest resources for future generations.

B.Sc. MICROBIOLOGY

Microbiology is a broad discipline of biology which works with the function, structure, uses and existence of microscopic organisms. It is one of the applied branches of life science that directly impacts essential areas of our lives. It includes the study of microscopic organisms such as bacteria, viruses, archaean, fungi, algae, protozoa etc.

B.Sc. PLANT SCIENCE

Plant Science explores the diverse disciplines of plant biology, from genetics to ecology, providing a comprehensive understanding of plants and their interactions with the environment. It includes plant anatomy, morphology, and the intricate processes involved in plant growth, development, and reproduction.

B.Sc. BIOCHEMISTRY

Biochemistry is the application of chemistry to the study of biological processes at the cellular and molecular level. It provides a strong foundation in the chemical processes and molecular interactions that occur within living organisms, and the ways to control them.



B.Sc. BIOTECHNOLOGY

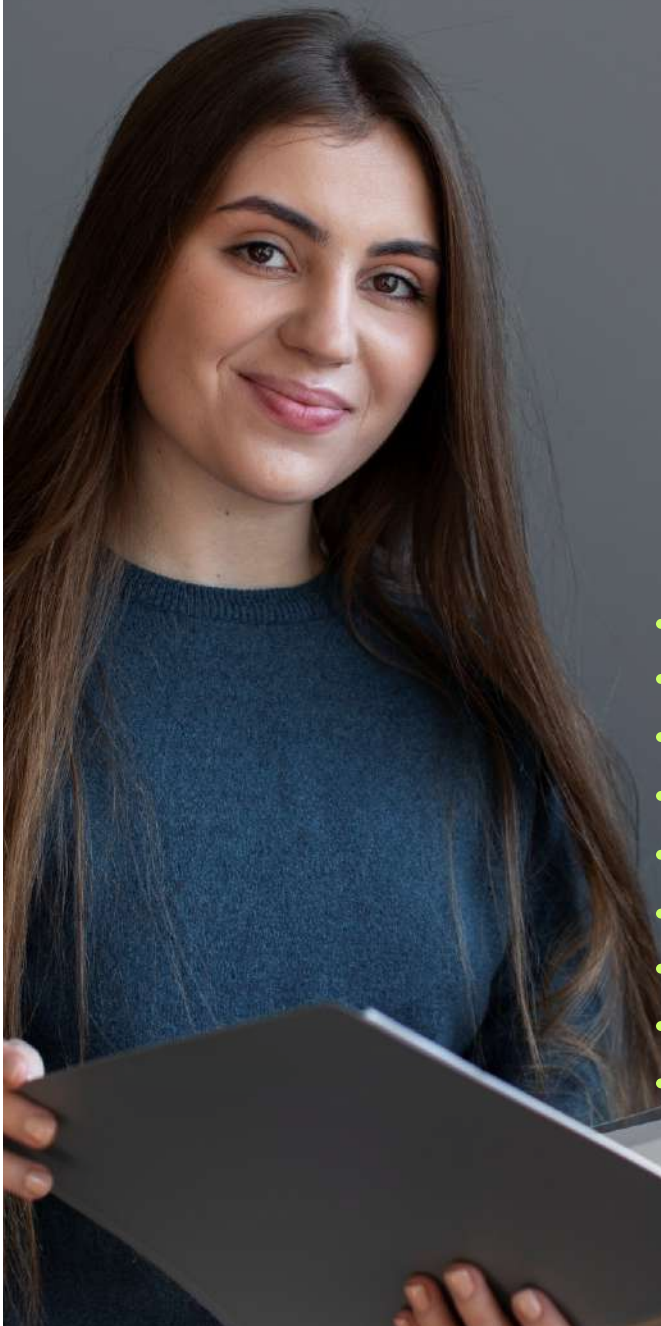
Biotechnology is the branch of science and technology concerned with the controlled and deliberate manipulation of biological systems for the effective manufacturing or processing of valuable products in order to get a large number of substances useful to man as food, fuel, and medicines. Biotechnology has altered established sectors such as food processing and fermentation, as well as spawned the development of an entirely new technology for industrial production. It employs cellular and biomolecular processes in the development of product solutions that can be used to solve problems and improve people's lives. It has numerous uses, including healthcare, pharmacy, food production, animal husbandry, agriculture, textiles, nutrition, and many others. It prepares students to work in various industries, including pharmaceuticals, medical research, diagnostics, bioprocess engineering, and biotechnology-related industries.

SCOPE OF B.Sc. BIOTECHNOLOGY

Students can find work prospects after earning a bachelor's degree in biotechnology in various fields and industries, including agriculture, animal husbandry, environmental conservation, genetic engineering, health care, and medicine. Higher education options like a M.Sc. in Biotechnology are also available. With a degree in Biotechnology, you can become a scientist, researcher, or entrepreneur working in fields such as medicine, agriculture, and food production.

THE LIST OF THE MOST PROMINENT JOB OPPORTUNITIES OFFERING IMMENSE CAREER SCOPE IN BIOTECHNOLOGY:

- Environmental Biotechnologist
- Geneticist
- Molecular Biotechnologist
- Epidemiologist
- R&D Scientist
- Biochemist
- Biomanufacturing Specialist
- Bioproduction Specialists
- Pharmaceutical Biotechnologist



B.Sc. FORESTRY

The study of forestry covers various aspects, including forest ecology, silvi culture, forest economics, forest policy, forest conservation, and sustainable resource management. The course deals with the biological, ecological, and environmental factors that influence forest ecosystems, as well as the social and economic aspects of forestry practices.

It imparts knowledge about tree species identification, forest measurements, forest inventory techniques, forest planning, and management strategies. They also learn about the impacts of climate change on forests, the conservation of biodiversity, the restoration of degraded ecosystems, and the role of forests in mitigating climate change.

SCOPE OF B.Sc. FORESTRY

Graduates in forestry can work as forest managers, responsible for the sustainable and efficient management of forest resources, can contribute to the conservation and restoration of forest ecosystems involving in activities such as reforestation, wildlife habitat restoration, and implementing conservation policies. With their knowledge of forest ecosystems, forestry professionals can assess the environmental impact of various projects and activities, evaluate the potential consequences of logging, mining, infrastructure development, and other activities on forests and recommend measures to mitigate negative impacts. They can work in universities, research institutions, or government agencies, conducting studies to improve forest management practices, develop new technologies, or understand the ecological dynamics of forests. Forestry professionals play a crucial role in managing urban forests and planning departments, municipal governments, or consulting firms, focusing on maintaining and enhancing urban green spaces, managing tree populations, and promoting sustainable urban development and also can work with wildlife agencies, national parks, or private organizations, contributing to the protection and management of wildlife populations.

A DEGREE IN FORESTRY OPENS UP DIVERSE CAREER OPPORTUNITIES LIKE

- Remote Sensing and Geo spatial Analyst
- Project Officer
- Forestry Auditor
- Sustainability Lead
- Field Associate
- Forestry manager/technicians
- Forest rangers
- Forest officers



B.Sc. MICROBIOLOGY

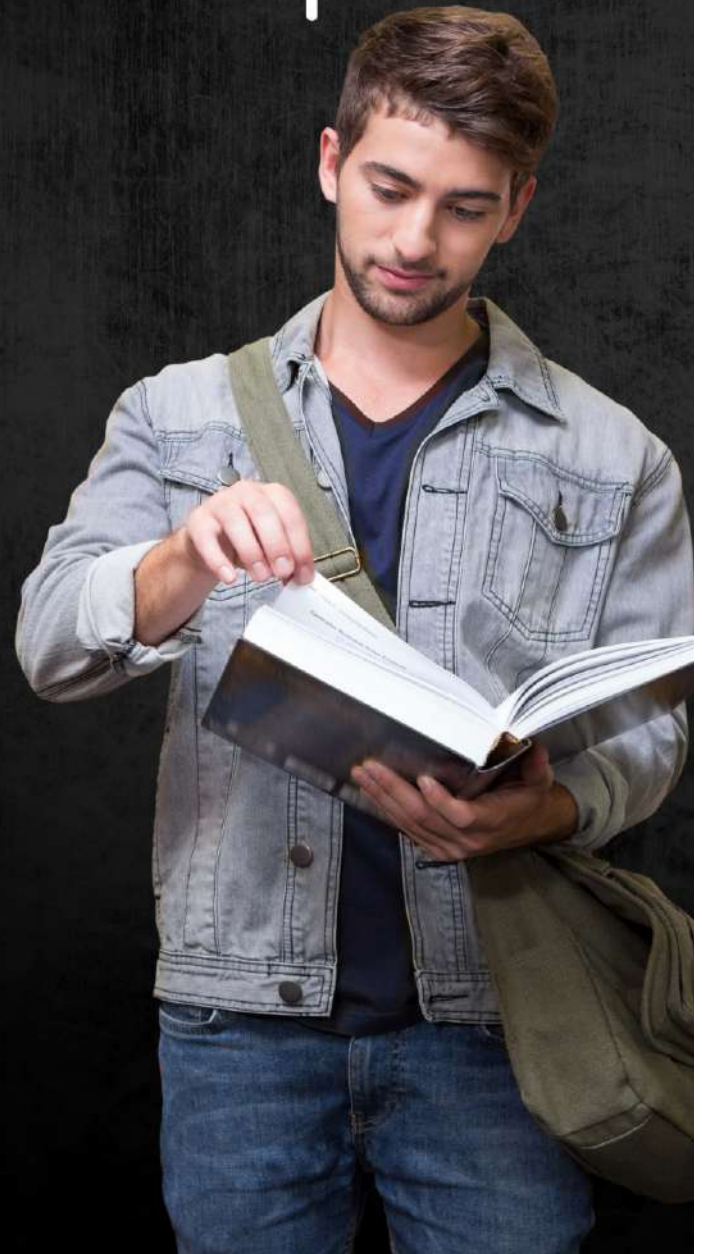
With tremendous potential in basic research and applied sciences, the discipline of microbiology is one of the most critical components of modern day science. The science of microbiology has an important role to play with health, agriculture, environment and industry. Several discoveries in the last two to three decades have put microbiology on the centerstage of teaching, research and development all over the globe.

SCOPE OF B.Sc. MICROBIOLOGY

There is a continuous demand for microbiologists as workforce- education, research and industry. The scope of microbiology is vast and extends to many areas of science. Over the years, the development of microbiology has been seen in the fields of medicine, pharmacy, clinical research, dairy and food industry, agriculture, water industry and Chemical technology. Microbiology also impacts the areas of bioremediation, alternative fuels and astrobiology.

THE CAREER POSSIBILITIES FOR MICROBIOLOGY ASPIRANTS WILL INCREASE WITH A M.SC. AND PH.D DEGREE. GRADUATES WITH MICROBIOLOGY HAVE OPPORTUNITIES FOR EMPLOYMENT AS

- Research scientist
- Environmental microbiologist
- Technical associate
- Food microbiologist
- Academician
- Laboratory technician
- Medical microbiologist



B.Sc. PLANT SCIENCE

Plant science encompasses a diverse range of biological disciplines, spanning from genetics and molecular/cellular biology to the study of complete organisms. Field studies are a fundamental component of the plant science curriculum. Pursuing a Plant Science degree provides a deep understanding of how plants function across different scales, from molecular physiology to global ecology. This field of study exposes students to a wide array of techniques and ideas that are integral to modern biology. By focusing on plants while exploring all aspects of their biology, students gain an exceptional integrated understanding of current biological principles.

SCOPE OF B.Sc. PLANT SCIENCE

B.Sc. in Plant Science equips students with a comprehensive understanding of plants, encompassing their biology and their interactions with the environment. This degree program prepares graduates for careers in agriculture, research, conservation, and related fields. B.Sc. Plant Science is useful in providing the advanced theoretical and practical knowledge needed for biotechnology industry jobs, as well as in equipping students with the skills they need to undertake advanced studies in this field.

THE ASPIRANTS OF THE COURSE MAY SEEK CAREER OPTIONS LIKE

- Plant Biochemist
- Food Science Technician
- Agricultural Manager
- Farming Sector
- Academician



B.Sc. BIOCHEMISTRY

B.Sc. Biochemistry course provides a strong foundation in the chemical processes and molecular interactions that occur within living organisms. It combines the principles of biology and chemistry to explore the intricacies of life at the molecular level.

SCOPE OF B.Sc. BIOCHEMISTRY

Our program equips students with a deep understanding of the structure, function, and interactions of biological macromolecules, such as proteins, nucleic acids, and carbohydrates. Graduates of our program are prepared for diverse career paths in research, healthcare, pharmaceuticals, biotechnology, and more. A career in Biochemistry will involve the person's ability to comprehend the chemical combinations and reactions that will take place because of the biological processes such as growth, reproduction, metabolism, heredity, etc. One arena of the science will also look into the effect that the organism has on its environment.

GRADUATES OF THE B.Sc. BIOCHEMISTRY PROGRAM CAN PURSUE A WIDE RANGE OF CAREER PATHS, INCLUDING:

- Biochemist
- Research Scientist
- Pharmaceutical Sales Representative
- Quality Control Analyst
- Clinical Research Associate
- Genetic Counselor
- Forensic Scientist
- Food and Beverage Scientist



OUR SISTER CONCERNS



PAPPINISSERY VISHA CHIKILSA KENDRAM (PVCK)

The Pappinisseri Visha Chikilsa Kendram today stands as an ode to the resilience of one leader who wanted to provide immediate and accessible health care to the common man. In an age when death due to snake bites was a common affair, M.V. Raghavan, then Panchayath President, recognised the lacuna of a treatment facility that catered to snake bites exclusively.

In 1973, the unit was established as a charitable institution and since its inception, this non-governmental organisation has done full justice to

its principles treating snake envenomation free of cost integrating both Ayurveda and Allopathy. Since 1964, the center has treated close to two lakh snake bite cases with a unique record of less than 1 percentage of casualties. We are proud to say that we have had a zero mortality rate. The clinical documentation of the snake bite treatment center is the most reliable resource center for toxicological statistics hence the center is the best resource for research activities related to toxicology and it has scope to facilitate many research activities of both Ayurveda and Modern Medicine streams utilizing the amenities and patients of the center.



MVR SNAKE PARK AND ZOO PARASSINIKKADAVU

The abundance in the number of captive snakes was a practical problem for the founders of the Pappinisseri Visha Chikilsa Kendram. Understanding the magnitude of these incidences and to expand the research activities later in 1982 Parassinikkadavu Snake Park was established under the leadership of Sri. M. V. Raghavan the then President of Pappinisseri Visha Chikilsa Society with a noble intention for the conservation and protection of reptiles especially snakes and also to provide awareness for the protection of Wildlife and environment.

Parassinkkadavu Snake Park boasts rich collection of snakes from small Hump Nosed Pit Viper to Large Indian Rock Python; Non-Venomous Rat Snake to world's largest venomous snake King Cobra. Parassinkkadavu Snake Park provides an excellent way to get a glimpse of the unfathomed behaviour of different snakes in enclosures resembling natural habitat



MVR AYURVEDA MEDICAL COLLEGE HOSPITAL

In the year of 1987, MVR Ayurveda Hospital was established as a single physician Ayurveda Clinic to meet the treatment requirements of the underprivileged in the district.

Today, spanning over acres of lush green property, complete with an Ayurvedic Medical College, 100 bedded hospital- accredited to international standards with NABH (National Accreditation Board for Hospitals & Healthcare Providers) , GMP licensed Pharmacy, state-of-the-art laboratories, XRay and USG diagnostic facilities, we are in the process of upgrading our institution to ISO accreditation.



MVR AYURVEDA MEDICAL COLLEGE PHARMACY

Medicine is one of the four pillars of treatment according to Ayurveda. Our medicines are a product of quality raw materials, precise manufacturing protocols and formulations of maximum efficacy. We have over 300 classified products which are certified organic and has a global supply. Ayur Pham is an innovative venture of MVR Ayurveda Pharmacy where all medicines can be obtained under a single roof.



MVR AYURVEDA MEDICAL COLLEGE PARASSINIKKADAVU

MVR AYURVEDA MEDICAL COLLEGE seeks to extend the benefits of this science through its teaching institution and hospital. We are in the forefront of imparting the sum of this ancient knowledge as adapted to modern times, to fulfill the ancient words. MVR Ayurveda Medical College is One of the Best Ayurveda college in Kerala serving more than 18 years. We have spacious and adequately ventilated smart classrooms, college library with a vast collection of books and manuscripts, well equipped laboratory and a widespread herbal garden.



ELA RESTAURANT, CATERING & AGRI ECO FARM

Ela (Leaf) is a socially and environmentally conscious venture started in the year 2019 adjacent to MVR Ayurveda College, Hospital and Pharmacy. Keeping in mind the Farm to Table concept, the produce is sourced from the restaurant's own farms in the nearby vicinity and even from the vegetable garden in the premises. The farm, set over one acre undertakes organic and responsible farming practices and some the products are available at Ela for purchase by the patrons. The carefully curated menu comprises all the North Malabar favourites from

traditional Kerala meals to Arabian cuisine at extremely reasonable prices and caters to a wide clientele



ELA NURSERY HERBAL AGRI GARDEN

The herbal garden where rare and indigenous species are planted for educational purposes and for the public.

The vegetable garden which provides for the restaurant and pantry as well as the herbal garden that supplies the raw drugs for therapies in the hospital are our pride and joy. An outlet in the front of our premise for the sale of varieties of plants, various products related to cultivation of plants and also for the Ayurvalam, the bio-manure developed by this institution mainly from the waste of pharmacy factory.



WAVE- AYURVEDA CURE AND CARE FOR WOMEN

With an exemplary background in Ayurvedic healthcare and education over 6 decades, MVR Ayurveda College Hospital is now expanding women oriented wellness to its new horizons. Wave – Ayurveda Cure and Care for Women, the brand new extension is an ultimate destination to explore the timeless wisdom of Ayurveda by facilitating customized treatments for the health and well being of women through integrating the principles of authentic Ayurveda, Cosmetology, Dietetics, Yoga and Counselling. This best women's Health clinic in Kochi is a one stop

destination for every woman's therapeutic and wellness demand by focusing on the triad Healing, Rejuvenation and Beauty.



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