



CAREER GUIDANCE

A HAND BOOK

A comprehensive path to students after UG

Compiled by: Padmashree Institute of Management and Sciences (Autonomous)

#149, Padmashree Campus, Tavarekere – Kengeri road, Kengeri, Bengaluru, Karnataka-560060

Greetings

Dear Students and parents,
Greetings from Padmashree Institute of Management and Sciences,

Choosing a right career path after 12th/PUC is a challenging task. Today modern world opened up for umpteen opportunities and making students and parents much more confused. Leaving aside engineering and medical there are hundreds of parallel, innovative and job-oriented programs, which many of us are not aware. To create awareness and help them to take a conscious decision we at Padmashree Group of Institutions is bringing this comprehensive hand book. The purpose of this book is to provide information, web links about various other options in life sciences, paramedical courses and more importantly information about scholarships for Pursuing higher education. This will surely assist students to take an informed decision. This is a noble and humble attempt by us to lend a helping hand for students who are at the cross roads.

We wish you all the best

The list of web links which provide guidance and career counselling

www.shiksha.com | www.promilo.com
www.mapmytalent.in | www.careerafter12th.in
www.youngbuzz.com | www.youthofest.com
www.jagranjosh.com | www.aashwasan.org
www.career.webindia123.com

ABOUT PADMASHREE INSTITUTE OF MANAGEMENT AND SCIENCES

Padmashree Institute of Management and Sciences (PIMS), had its start in the year 2000. The motto of PIMS is to impart quality education, inculcate scientific temper and ethical values among its students. Now the institute has accelerated its expansion in establishing new courses of scientific and global importance. Under the able governance and leadership The college has been recognised by UGC under sections 2(f) and 12(b), affiliated to Bangalore university and recognised by Government of Karnataka. PIMS is one and only DDU KAUSHAL Kendra in Bangalore, supported by UGC, New Delhi and approval from the state government to offer unique job-oriented courses in Food sector and Medical Biotechnology. Government of Karnataka and DBT, New Delhi supported to establish prestigious Biotech Finishing School in phase I and continued as Biotechnology Skill Enhancement Program in phase II. PIMS also has recognised R&D center with state of art laboratory facilities

HIGHLIGHTS OF PIMS

- Sprawling 35 acres of Campus
- Qualified and experienced faculty
- Industry live projects and paper publications by students
- Regular industry interactions
- Job-oriented add-on programs
- 100% placement assistance
- Secured prizes in conferences and seminars
- Published many research articles and filed patents
- Academic and Industry collaborations
- Industry and Government sponsored projects

What after 12th Science?

Medical Courses (5 Years)

MBBS –Allopathy
BUMS- Unani
BHMS- Homeopathy
BSMS- Siddha
BNYS- Naturopathy
BDS- Dental
BVSc- Veterinary

Paramedical Diploma/UG (2/3 Years)

Nursing
Pharmacy
Anaesthesia- Technician
Cardiac Care- Technician
Cathlab Technician
Clinical Optometry
Dental Hygiene
Dental Mechanic
Dental Technician
Health Inspector
Medical Imaging & Tech
Medical Lab Tech
Medical Records Tech
Medical X-ray Tech
Nuclear Medicine Tech
Occupational Therapist
Operation Theatre Tech
Ophthalmic Assistant
Physiotherapy
Radiographic Assistant
Radiography Tech
Rehabilitation Therapy
Respiratory Therapy Tech
Blood Transfusion Tech

Integrated Courses BS/MS/M Tech/M Sc/MBA (4/5/6 Years)

Biological Sciences
Life Sciences
Earth & Atmospheric Sciences
Applied Physics
Mathematics
Physics, Chemistry & Maths
Bioinformatics/Biotechnology
Computer Science
Engineering
Geo Technology & Geo Info
Mass Communication

M.Voc Courses (2 years)

On completion of one year will receive PG diploma certificate and on completion of two years will get the degree certificate (After completing UG)

Engineering Courses B.E/B. Tech (4 Years)

Aeronautical Engineering
Aerospace Engineering
Agricultural Engineering
Architecture Engineering
Automobile Engineering
Automation & Robotic Engineering
Avionics Engineering
Bio Medical Engineering
Civil Engineering
Chemical Engineering
Ceramic Engineering
Computer Science Engineering
Construction Tech Management
Electronics & Comm. Engineering
Electrical & Electronics
Environmental Science
Information Science
Industrial Engineering
Instrumentation Technology
Marine Engineering
Medical Electronics Engineering
Mechanical Engineering
Mining Engineering
Manufacturing Science
Naval Architecture
Polymer Technology
Silk Technology
Carpet Technology
Textile Engineering

B.Sc. Courses (3 Years)

Physics
Chemistry
Botany
Zoology
Biotechnology
Microbiology
Biochemistry
Genetics
Maths
PCM, CBZ
Agricultural Science
Horticulture
Forestry
Sericulture
Home Science
Anthropology
Forensic Science
Food Technology
Dairy Technology
Hotel Management
Fashion Design
Economics
Mass communication
Electronic media
Multimedia
3D Animation
Oceanography
BCA (Bachelor of Computer Application) 3 years

B.Voc Courses (3 Years)

On Completion of first year will receive Diploma certificate, on completion of second year will get advanced diploma certificate and on completion of third year will get the degree certificate
Food Processing and Nutraceuticals
Medical Lab Technology
Food Quality Management
Medical Biotechnology
Fashion & Apparel Technology
Hospitality & Tourism
Animation
Health Care
Data Analytics
Software Development
Theatre and Acting
Soil and Water Conservation
Interior Design

Padmashree group of Institutions offer programs affiliated to Bangalore University and Rajeev Gandhi University of Health Sciences.

CAMPUS LIFE

- ☛ Wi-Fi enabled campus
- ☛ Digital library UGC InFLIBnet & Delnet facility
- ☛ State of the art laboratory infrastructure
- ☛ ICT enabled seminar halls
- ☛ Language labs
- ☛ Sports and Gymnasium
- ☛ Hostels and Guest rooms
- ☛ Health Centre
- ☛ Free transportation

RECOGNITIONS AND AFFILIATIONS:

- ▶ Affiliated to Bangalore University
- ▶ Recognized as Research center by Bangalore University
- ▶ Accredited by NAAC with 'A++' Grade
- ▶ Recognized by UGC under sections 2(f) and 12 (b)
- ▶ Biotechnology skill enhancement program (BiSEP), supported by Government of Karnataka and Department of Biotechnology, New Delhi
- ▶ DDU KAUSHAL KENDRA, recognized by UGC, New Delhi
- ▶ Affiliated with Life Science Sector Skill Development Council (LSSSDC) under the Ministry of Skill Development and Entrepreneurship, Govt of India.

COURSES OFFERED AT PADMASHREE AFFILIATED TO BANGALORE UNIVERSITY

SCIENCES UNDERGRADUATE PROGRAMS

- ▶ B.Sc. Microbiology, Biotechnology, Biochemistry
- ▶ B.Sc. Genetics, Biotechnology, Biochemistry
- ▶ B.Sc., Clinical Nutrition and Dietetics
- ▶ B.Sc., Food Science and Nutrition
- ▶ B.Sc., Food Technology
- ▶ B.Sc. Environmental Science
- ▶ B.Sc. Psychology
- ▶ B.Sc. Statistics

MANAGEMENT / COMMERCE STREAM

- ▶ Bachelors in Business management (BBM)
- ▶ Bachelors in commerce (B.Com)
- ▶ Masters in Business Administration (MBA)
- ▶ Masters in Commerce (M.Com)

POSTGRADUATE PROGRAM

- ▶ M.Sc. Biotechnology
- ▶ M.Sc. Biochemistry
- ▶ M.Sc. Microbiology
- ▶ M. Sc. Food and Nutrition
- ▶ M. Sc. Clinical Nutrition and Dietetics
- ▶ M.Voc Food Processing and Nutraceuticals
- ▶ M. Voc Food Quality Management
- ▶ M. Voc Medical Biotechnology
- ▶ Masters in Business Administration (MBA)
- ▶ Masters in Commerce (M.Com)

COURSES OFFERED BY PADMASHREE AFFILIATED TO RAJIV GANDHI UNIVERSITY OF HEALTH SCIENCES

PHYSIOTHERAPY

Bachelors in physiotherapy (BPT)
Masters in Physiotherapy (MPT)

NURSING

B.Sc. Nursing | P.B.B.Sc. (Nursing)
M.Sc. Nursing
Diploma - General Nursing & Midwifery (GNM)

Medical Lab Technology

B.Sc. MLT | M.Sc. MLT

PUBLIC HEALTH

Bachelors in Public Health (BPH)
Masters in Public Health (MPH)

PUBLIC HEALTH

Bachelors in Public Health (BPH)
Masters in Public Health (MPH)

HOSPITAL ADMINISTRATION

Bachelors in Hospital Administration
Masters in Hospital Administration

CLINICAL RESEARCH

M.Sc. Clinical Research

Information about the scholarships / Financial Assistance:

Scholarship is boon for economically weaker section of students. This is beneficial to students who are unable to continue their education for some or the other reason. Scholarship is an incentive as well as encouragement for students, who are talented, but do not have the means to study further. There are a variety of scholarships – merit-based, need-based, student specific, career-specific, and college-specific. There are some useful details mentioned below:

Central/State government scholarships:

1. National Scholarship Portal: National Scholarships Portal is one-stop solution through which various services starting from student application, application receipt, processing, sanction and disbursal of various scholarships to Students are enabled. This initiative aims at providing a Simplified, Mission-oriented, Accountable, Responsive & Transparent 'SMART' System for faster & effective disposal of Scholarship applications and delivery of funds directly into beneficiaries account without any leakages. The Mission Mode Project (MMP) of National Scholarship Portal under the National e-Governance Plan aims at providing common electronic portal for implementing various Scholarships schemes launched by Union Government, State Government and Union Territories across the country.

Through this single portal students can apply for scholarships of Central scheme, UGC scheme and State scheme.

Scholarships under central schemes:

- ▶ Post Matric Scholarships Scheme for Minorities (Ministry of Minority Affairs)
- ▶ Merit Cum Means Scholarship for Professional and Technical Courses CS (Ministry of Minority Affairs)
- ▶ Post-matric Scholarship for Students with Disabilities (Department of Empowerment of Persons with Disabilities)
- ▶ Scholarships for Top Class Education for students with disabilities (Department of Empowerment of Persons with Disabilities)
- ▶ Top Class Education Scheme for SC Students (Ministry of Social Justice and Empowerment)
- ▶ Financial Assistance for Education of the Wards of Beedi/Cine/IOMC/ LSDM Workers - Post-Matric (Ministry of Labour and Employment)
- ▶ Aam Aadmi Bhima Yojna Scholarship for Andhra Pradesh (Ministry of Labour and Employment)
- ▶ National Fellowship and Scholarship for Higher Education of ST Students - Scholarship (Formally TopClass Education for Schedule Tribe Students) - only for scholarships. (Ministry of Tribal Affairs)
- ▶ Central sector scheme of scholarships for college and university students (Department of Higher Education)
- ▶ Prime Minister's Scholarship Scheme for Central Armed Police Forces And Assam Rifles (WARB, Ministry of Home Affairs)
- ▶ Prime Minister's scholarship scheme for wards of States/UTs police personnel martyred during terror/naxal attacks (WARB, Ministry of Home Affairs)
- ▶ Prime Minister's Scholarship Scheme For RPF/RPSF (RPF/RPSF, Ministry of Railways)

Scholarships under UGC schemes:

- ▶ PG Indira Gandhi scholarship for single girl child
- ▶ ISHAN UDAY - Special Scholarship Scheme for North Eastern Region
- ▶ PG scholarship for university rank holders (1st and 2nd Rank holders)
- ▶ PG scholarship scheme for SC / ST students for pursuing professional courses

Scholarships under state schemes:

- ▶ Under this scheme candidate belonging to one state, but studying in another state, will be awarded scholarship by the state to which they belong and will submit their applications to the competent authorities in that state. Under NSP students belongs to the following state can apply for the scholarship - Assam, Chandigarh, Bihar, Uttarakhand, Tripura, Karnataka, Meghalaya, Arunachal Pradesh, Jammu Kashmir, Dadra and Nagar Haveli, Himachal Pradesh and Manipur.

For more information check - <https://scholarships.gov.in>

1. **State Scholarship Portal** : This is a simple and transparent system introduced by DPAR (e-Governance), Government of Karnataka in the year 2019. Under this system students have to e-attest their documents with the aid of e-attestation officers in their institute and then can apply for the scholarship online. The entire process is easy and transparent. Only SC, ST and Minority class students can apply through this portal.

For more information check - <https://ssp.postmatric.karnataka.gov.in>

2. **Electronic Payment and Application systems of Scholarships (ePASS)**: This is another scholarship scheme under Department of Backward Classes Welfare, Government of Karnataka. Students of backward classes can avail scholarship by applying online.

For more information check - <https://karepass.cgg.gov.in>

3. **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)** : PMKVY is a prestigious scheme of the Ministry of Skill Development & Entrepreneurship (MSDE). Under this scheme, students can gain skill training in related industries, which will help them find a job and build a better life. The training and assessment fee will be completely paid by the government for training conducted at PMKVY approved training centers.

For more information check - <http://pmkvyoofficial.org>

4. **Department of College Education** : This is another scholarship program of Government of Karnataka in order to provide necessary encouragement and motivation to pursue higher education the Department of Collegiate Education is providing Scholarships to meritorious and economically backward students studying at Government as well as Government Aided First Grade Colleges.

► **Sanchi Honnamma Student Scholarship**: This scholarship began in the year 2003-2004 for meritorious girl students so as to encourage them to pursue higher education. This is specifically meant for girl students who have scored high marks in II year PUC.

► **Sir C.V. Raman Student Scholarship**: This scholarship was launched in the year 2001-2002. This scholarship focused on encouraging students studying in science stream. It is meant for talented and meritorious students who are pursuing their education in basic sciences in government and private aided degree colleges.

► **Kittur Rani Channamma Award**: This scheme began in the year 2006-07. It was meant to encourage girl students, who have finished their studies in the II PUC, pursuing their higher education through CET examination by taking up vocational courses. If the students fulfill the criteria mentioned below, the government shall repay the amount paid by the student. For this award from every district, 10 girl students are selected by a committee headed by the District Commissioner. They shall get the award till they complete the course provided they clear the course in one attempt.

► **Scholarship for HIV/AIDS or Leprosy Infected Parents' Children**: Students infected from HIV/AIDS or Leprosy and students born to HIV/AIDS or Leprosy infected parents' (dead or alive) children are eligible to get free education and scholarship.

► **Rajiv Gandhi Debt Scholarship** : Under this scheme, a loan from a bank is being paid by the government for the subsidy of the periodic interest for the students of the family of less than Rs. 2.5 lakh annual income.

► **Anglo-Indian Scholarship** : Scholarships are being offered for fee reimbursement for Anglo Indian students attending government and aided graduate colleges.

For more information check - <https://dce.karnataka.gov.in>

1. **Kishore Vaigyanik Protsahan Yojana** : The “Kishore Vaigyanik Protsahan Yojana” (KVPY) is a program started in 1999 by the Department of Science and Technology (DST), Government of India to encourage students who are studying Basic Sciences to take up research career in Science. The aim of the program is to identify and encourage talented and motivated students to pursue career in research.

- ▶ The fellowship of the students selected under this stream will be activated only if they join an undergraduate course in Basic Sciences (B.Sc./B.S./B.Stat./B.Math. /Int. M.Sc./Int. M.S.) in the academic year 2021-22 after having secured a minimum of 60% (50% for SC/ST/PWD) marks in aggregate in science subjects in the XII standard/ (+2) Board Examination.
- ▶ Candidates meeting the eligibility criteria for various streams, will be called for aptitude test conducted both in Hindi and English at different centers across the country.
- ▶ Based on the performance in the aptitude test, short-listed students will be asked to appear for an interview which is the final stage of the selection procedure.

For more information check - <http://www.kvpy.iisc.ernet.in>

2. **INSPIRE Scholarship For Higher Education (SHE)** : Scholarship for Higher Education (SHE) is a component program under Innovation in Science Pursuit for Inspired Research (INSPIRE) program, which is a flagship scheme of the Department of Science and Technology (DST), under the Ministry of Science and Technology, Government of India. INSPIRE programme includes three components namely Scheme for Early Attraction of Talents

for Science (SEATS), Scholarships for Higher Education (SHE) and Assured Opportunity for Research Careers (AORC). Scholarship for Higher Education (SHE) aims at attracting talented youth into undertaking higher education in science intensive programmes, by providing scholarships and mentoring through ‘summer attachment’ to performing researchers.

For more information check - <http://online-inspire.gov.in/>

3. **Central Sector Interest Subsidy Scheme (CSIS)**: One of the major objectives of the Government is to ensure that no student is denied the opportunity to pursue higher education because he or she is poor. To achieve this objective, Ministry of Human Resource Development (MHRD) launched a Scheme titled “Central Sector Interest Subsidy Scheme” (CSIS) in 2009.
 - ▶ This scheme benefits all categories of economically weaker students for pursuing professional/ technical courses in India only, and intends to provide affordable higher education.
 - ▶ The Scheme, envisages to uplift the students from the grassroot level and increase the number of qualified technicians/ professionals in the nation.
 - ▶ The Scheme is adopted by all Scheduled Banks and is linked with the existing Model Educational Loan scheme of the Indian Banks’ Association, and restricted to students enrolled in professional/ technical courses only from NAAC accredited Institutions or professional/ technical programs accredited by NBA or Institutions of National Importance or Central Funded Technical Institutions (CFTIs).

For more information check - <https://mhrd.gov.in>

4. Vidyasaarathi : Vidyasaarathi is a platform by NSDL e-Gov for applying to various scholarships provided by corporates. Vidyasaarathi does not charge any fees to students in any way to apply for scholarships and awarding of scholarship is the sole discretion right of a corporate. Applying to scholarships does not in any way guarantee the award of scholarship.
For more information check - <https://www.vidyasaarathi.co.in>
5. Private scholarships : There are some private funding agencies, which support students for higher education by providing funds/ scholarships. Some such foundations are listed below :
- ▶ Sitaram Jindal Foundation Scholarships (<https://www.sitaramjindalfoundation.org/>)
 - ▶ The J. N. Tata endowment for the higher education of Indians (<https://www.jntataendowment.org/>)

PADMASHREE IS OFFERING VARIOUS SKILL UPGRADING AND JOB ORIENTED COURSES IN FOOD SCIENCES

Get started with a professional career planning in Food, Nutrition and Health Sectors

FOOD INDUSTRY

One of the biggest globally and expected to reach US \$ 3.03 trillion by 2020

India is the second largest producer | There is a huge requirement of professionally skilled manpower

9 million skilled personnel are required by 2024

B.VOC AND M.VOC IN FOOD PROCESSING AND NUTRACEUTICALS/FOOD TECHNOLOGY AND QUALITY MANAGEMENT

Recognized by UGC, New Delhi as DDU KAUSHAL KENDRA

- First of its kind flagship program of UGC, New Delhi
- Complies with national skill quality frame work guidelines of ministry of skill development and entrepreneurship
- Multi entry and exit options with industry internship/ project at every exit point
- 100% industry internship and job placement assistance Employable at Food processing industries, Milk and Milk products manufacturing setups, Herbal industries, Health food companies, Beverages segment, Snacks and Savouries manufacturing companies, Baking technology, Chocolates and Biscuit industry, Nutraceuticals and dietary supplement organizations, Fish and Meat product manufacturing set ups, Food parks, Flour manufacturing companies, Canneries, Breweries, Wineries, Fruit and Vegetable Processing units, Ready to eat technologies, Frozen foods, Fortified

foods, Functional foods, Probiotics, Prebiotics, Packaging technologies, Flavours and food colours, Pickle Industry, Sugar Industry, Enzyme technologies, Protein supplements, Health food manufacturing set ups, Starch industry.

Job roles: Production managers, Supervisors, Packaging technologist, Food Analyst, Food Technician, Quality Control -Manager, Quality control officer, Quality assurance officer, Food auditor, Product development technologist, Research officers, Scientist, Brewer, Business Executives, Scientific officers, Food safety supervisor, Sales and marketing executives.

Eligibility:

B.Voc - PU or 10+ 2, or any other equivalent qualification

M.Voc - Graduation in any branch of life sciences or biological sciences with 40% aggregate marks and 45% in cognate subjects.

OPPORTUNITIES GALORE IN JOB ORIENTED PROGRAMS

Genetics

A genetics degree can lead to a career in scientific research or industry, as well as setting you up with skills that can be used in a range of alternative jobs.

Employability

Genomic biologist, Medical geneticist, Clinical Research Associate, Healthcare Scientist, Genomics Scientist, Plant breeder/geneticist, Research officer, Molecular geneticist in diagnostics, Research Scientist (life sciences), Research Scientist (medical), Gene therapy Research Scientist, Genomic Biologist, Proteomic Biologist, Genomic Curator, Proteomic Curator, Biologist, Scientific Officer.

Microbiology

Opens avenues in fascinating world of microbes having wide array of applications in Life science sector. Curriculum covers Microbial technology, industrial microbiology Recombinant DNA Technology, Immunology, Enzyme technology, Molecular biology.

Employability

Microbiologist, Research Associate, Research Officer, Research Assistant, Senior lab Technologists, Immunologist, Quality Control Analyst, Quality Control Biologist, Quality Control Scientist, Quality control Manager, Bioinformatics Biologist, Biomedical Scientist, Clinical Research Associate, Food Microbiologist, Probiotics Production manager, Pharmacologist, Research Scientist, Technical Brewer, Water Quality Scientist, Quality Analyst Research Scientist, Genomic Biologist.

Biotechnology

A modern era of biology harnessing living systems develops or makes products improving life and health. Curriculum covers basic, applied and industrial aspects of Molecular biology, Microbiology, Biochemistry of plants, animals and microbes.

Employability

Biotechnologist, Scientist, Research associate, Research officer, Research assistant, Lab technologist, Immunologist, Informatics Biotechnologist, Biomedical technician, Molecular biologist, Biomedical scientist, Clinical research scientist, Food biotechnologist, Healthcare scientist, Nanotechnologist, Pharmacobiotechnologist, Senior analyst Biochemistry, Biofuels – Scientific officer, Fermentation biologist, Genetic engineer.

Biochemistry

An exciting interdisciplinary science dealing with Molecular and biochemical processes of living organisms. Biochemistry can encompass a wide range of studies, including biomolecules, metabolism, medical biochemistry, enzymes, genetic research, immunology, pharmacology, forensics, cancer research, environmental science and food science.

Employability

Biochemist, Research associate, Research officer, Research assistant, lab technologists, Immunologist, QC Analyst, QC Biochemist, QC Scientist, QC – lead, Manager- QC, Informatics biologist, Chemi informatics scientist, Biomedical scientist, Clinical biochemist, Food biochemist, Healthcare scientist, Nanotechnologist, Pharmacologist, Research scientist, Biologist – biofuels.

Clinical Nutrition and Dietetics:

Clinical nutrition and dietetics is important to provide a comprehensive professional education that focuses on nutrition and its application in prevention and disease management that prepares graduates to practice in a wide range of clinical, consulting, and industry settings.

Employability:

Practice and implement state of art nutrition care or consultancy in health food industry, critical care nutrition segments, clinical setups, nutraceutical industry, sports and fitness centres, therapeutic nutrition product manufacturing set ups, geriatric care units, meal/food distribution centres, women and child development organizations, Food auditing set ups, Food testing labs, academic colleges, research institutes and Food corporations.

Food Science and Nutrition:

This course offers advanced learning in food science of healthy food and nutrition. It is most sought discipline and covers wide range of areas related to Food science, Food chemistry, Nutrition, Food Microbiology, Functional foods, Dietary supplements.

Employability:

Employable at Hospitals, Health clubs, Diagnostic labs, Sports centres, Fitness centres, Food processing industries, Health departments, Schools, Colleges, Restaurants, Milk and Milk Product Development (R&D), Health Food Companies, Beverage's segment, Snacks and Savouries manufacturing companies, Baking technology, Confectionaries, food parks.

Nutrition and Dietetics:

Nutrition & Dietetics The four-year program aims at conceptual understanding of the key elements of nutrition and dietetics. Students would be trained in areas such as nutritional assessment, diet planning, food product development, health communication, clinical nutrition, nutrition education and behavior modification.

Employability:

Practice and implement state of art nutrition care or consultancy in health food industry, critical care nutrition segments, clinical setups, nutraceutical industry, sports and fitness centers, therapeutic nutrition product manufacturing set ups, geriatric care units, meal/food distribution centers, women and child development organizations, Food auditing set ups, Food testing labs, academic colleges, research institutes and Food corporations.

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B. Voc Food Processing and Nutraceuticals:

Recognized by DDU KAUSHAL KENDRA which is a skill enhancement program. This course helps students to become industry ready and gives life science students excellent opportunity to acquire skills and apply them in the 6 months industry internship which is a part of the curriculum.

Employability:

The course is pro-industry and students coming out of the course would be placed in food processing industries, herbal extraction in various roles such as production, packaging, quality control, auditing, product development, sales, and marketing.

The course is also designed to groom the students into entrepreneurs.

M Voc Food Processing and Nutraceuticals:

- ▶ Skill up gradation and job orientation is the main objective.
- ▶ Complies with National Skill Quality Frame Work guidelines of Ministry of Skill Development and Entrepreneurship.
- ▶ Industry participation in curriculum design and delivery.
- ▶ Multi-exit and Entry options with industry internship at every exit point.
- ▶ 100% industry internship and Job assistance.
- ▶ Training from entry level jobs to entrepreneurship.
- ▶ Course provides vertical and horizontal mobility.

Employability:

Food processing is a sun-rising sector in India has been facing a severe shortage of industry-ready graduates and post-graduates for a long time.

The most common areas of employment are Canning, Dairy and Food Processing, Packaging, Frozen Food / Refrigeration and Thermo-Processing. Some of the sub-sectors of the food processing industry are Fruits & Vegetables Processing, Fisheries, Milk & Milk Products, Meat & Poultry, Alcoholic Beverages & Soft Drinks and Grain processing.

B. Voc Medical Biotechnology:

Recognized by DDU KAUSHAL KENDRA which is a skill enhancement program. This course helps students to become industry ready and gives life science students excellent opportunity to acquire skills and apply them in the 6 months industry internship which is a part of the curriculum.

Employability:

Biotechnology and Applied Sciences are the future of the world. The Biotech sector in India is projected to grow by 30.46% CAGR by 2025, making India stand amongst the top 12 biotech destinations in the world. There are many career opportunities available in Research and Development, Pharmaceutical Companies, Hospitals, Diagnostic Centres, the Manufacturing Sector of Biotechnology, Academic Sector for students who want to make a career in Medical Biotechnology. The course is also designed to groom the students into entrepreneurs.

M Voc in Medical Biotechnology:

- ▶ Skill up gradation and job orientation is the main objective.
- ▶ Complies with National Skill Quality Frame Work guidelines of Ministry of Skill Development and Entrepreneurship.
- ▶ Industry participation in curriculum design and delivery.
- ▶ Multi-exit and Entry options with industry internship at every exit point.
- ▶ 100% industry internship and Job assistance.
- ▶ Training from entry level jobs to entrepreneurship.
- ▶ Course provides vertical and horizontal mobility.

Employability:

The course is also designed to groom the students into entrepreneurs.

Candidates with M. Voc Medical Biotechnology are employable as Executive/ Officer/Technical Officer/Scientific Officer/Scientist in R&D/QA/QC and production divisions of food and beverage, pharma, nutraceutical and herbal industries.

Bright Careers in Life Sciences

Bachelors of Science (Genetics, Biochemistry and Biotechnology)

Bachelors of Science (Microbiology, Biochemistry and Biotechnology)

About the Course

All fields of biology are moving ahead at breakneck speed whether it may be solving human genomic puzzles or drug discoveries. The courses have been designed keeping in view the demands of present and future. The curriculum includes subjects to cover a wide range of concepts which is a prerequisite to excel in this inter-disciplinary program.

Duration : 3 years (6 semesters)

Eligibility:

PUC/12TH Std / 10+2/ equivalent with at least biology and chemistry as two optional Subjects.

Master of Science (Microbiology)

About the Course

The field of Microbiology covers area such as Bacteriology, Virology, Mycology and Parasitology. The industrial visits and internships are arranged to allow the students to gain insight into the application of the subject in the industry. The curriculum has been designed to train the students in good lab practices and encourage them to expand their knowledge base by applying for projects and publishing papers. Intensive lab assignments and project works are carried out to equip the students in microbiological techniques.

Eligibility: Graduation in any branch of life sciences having Microbiology/ Botany as optional with 40% aggregate marks and 45% in cognate subjects.

Duration: 2 years (4 semesters)

Employability:

Postgraduate microbiologists are in high demand in quality control and assurance in a range of product based companies such as food processing, beverages, breweries and cosmetics, diagnostics .they can also work as Biomedical scientist, Biotechnologist, Clinical research associate, Food technologist, Healthcare scientist, immunology Microbiologist, Nanotechnologist, Pharmacologist, Research scientist (life sciences), Technical brewer and Water quality scientist.

Master of Science (Biotechnology)

The course is designed to equip the students with the necessary skills to excel in the various domains of biotechnology ranging from the research and development to bioprocess engineering. The curriculum involves exposure to various segments of the domain and appreciation of the rapidly growing technology in the field. Students are encouraged to further their expertise in various affiliated domains such as IPR and biosafety as well as hands-on experience in tools and techniques via extensive practical experiments. Students are encouraged and assisted to earn projects, grants and fellowships. Assistance to join internships in the relevant industries is provided to ensure the students are industry-ready.

Eligibility: Graduation in any branch of life sciences having 40% aggregate

marks and 45% in cognate subjects.

Duration: 2 years (4 semesters)

Employability

The career prospects are lucrative for Postgraduates in biotechnology and can gain entry into a wide array of jobs in Academics, Research, Health sector, Clinical Research, Drug design, Product development, Sales and Marketing, Business development, Production and manufacturing, Bio informatics, Bioprocess and Fermentation, Food and Agri biotech, IPR, Environmental Biotechnology

Master of Science (Biochemistry)

About the Course

The students are encouraged to understand the basics through extensive practical classes. The industrial visits and internships are arranged to allow the students to gain insight into the application of the subject in the industry. The students are also assisted in applying for DBT, DST sponsored projects as well as assistance is given in preparation for JRF exams.

Eligibility: Graduation in any branch of life sciences having Biochemistry/ Chemistry as an optional subject with 40% aggregate marks and 45% in cognate subjects.

Duration: 2 years (4 semesters)

Employability:

Biochemists are in high demand in diagnostics, health care sector, contract research organizations, quality control and quality assurance and applied research to develop methods and protocols for qualitative and quantitative assays in drug development and clinical research.

All the above are applied branches of life sciences and have job opportunities at Pharma Industry, Bio informatics companies, Clinical research organisations, Testing and Analytical centres, Diagnostics, Health care sector, Food and beverage industry, Agri technology, Biofertilizer, Spice industry, Dairy and milk products, Meat industry, Marine products, Poultry industry, Biofuels and Bio - energy, Herbal Industry, Nutraceutical industry, Biotechnology companies, Forensic Science laboratories, Research organisations, Public health organisations, Environmental organisations, waste management, water treatment, Regulatory bodies like FSSAI, ISO, Defence research, Central, State and Private research and development organisations, Agriculture research organizations, Breweries, Vaccine development organisations, Wineries, Testing laboratories, Fermentation industry, Drug Discovery organisations, Plant and Animal tissue culture technologies, Seed development organizations.

Apart from all these courses the college also supports the students to take up Skill Enhancement Certification Programs recognised under Life Science Sector Skill Development Council (LSSSDC), Govt of India. The students get equipped for specific job roles and become job ready based on industry needs.



Apart from curriculum, we encourage the students learning through ICT/E-Learning:

SWAYAM, e – krishi shiksha, ICMR- NIN, Open WHO

SWAYAM – (<https://swayam.gov.in/>)

“Study Webs of Active-Learning for Young Aspiring Minds”(SWAYAM) is an Indian Massive open online course (MOOC) platform. SWAYAM is an initiative launched by the All India Council for Technical Education (AICTE) and Ministry of Human Resource Development (MHRD), Government of India. It facilitates 2,000 courses (Life sciences, Food technology, Management, communication and Programming courses etc). This Course is conduct by nine coordinators, all over India. They are:

- ▶ AICTE (All India Council for Technical Education) for self-paced and international courses
- ▶ NPTEL (National Programme on Technology Enhanced Learning) for Engineering
- ▶ UGC (University Grants Commission) for non - technical post-graduation education
- ▶ CEC (Consortium for Educational Communication) for under-graduate education
- ▶ NCERT (National Council of Educational Research and Training) for school education
- ▶ NIOS (National Institute of Open Schooling) for school education
- ▶ IGNOU (Indira Gandhi National Open University) for out-of-school students

▶ IIMB (Indian Institute of Management, Bangalore) for management studies

▶ NITTTR (National Institute of Technical Teachers Training and Research) for Teacher Training programme.

e – krishi shiksha - (<http://ecoursesonline.iasri.res.in/>)

Under Learning and Capacity Building program of NAIP, several course Home sciences, Dairy technology, Horticulture and Fisheries sciences have been developed at Agricultural Education Division of ICAR -Agricultural Universities (AUs) System comprising State Agricultural Universities (SAUs), Deemed to be universities (DUs), Central Agricultural University (CAU) and Central Universities (CUs) with Agriculture Faculty.

ICMR-NIN POSHAN Abhiyaan - (<http://poshan-abhiyaan.ninindia.org/>)

The e-learning portal have various nutritional focus - Basics of Nutrition, Child feeding, Mothers' Health & Nutrition, Anemia, Yoga, Food fortification, Physical activity, etc. have been developed at Ministry of women and Child development (MWCD) and Ministry of Health and Family welfare (MHFW).

Open WHO - (<https://openwho.org/>)

Open WHO is World Health Organization (WHO) interactive, web-based, knowledge-transfer platform offering online courses to improve the response to health emergencies. It provides a knowledge of latest scientific and operation know-how.

NAHEP (National Agricultural Higher education project)

<https://nahep.icar.gov.in/>

CSIR NET coaching-

PIMS is a leading South India's prestigious institutes in Bangalore. We are providing Classroom and Online Coaching for CSIR Net and JRF Life Sciences.

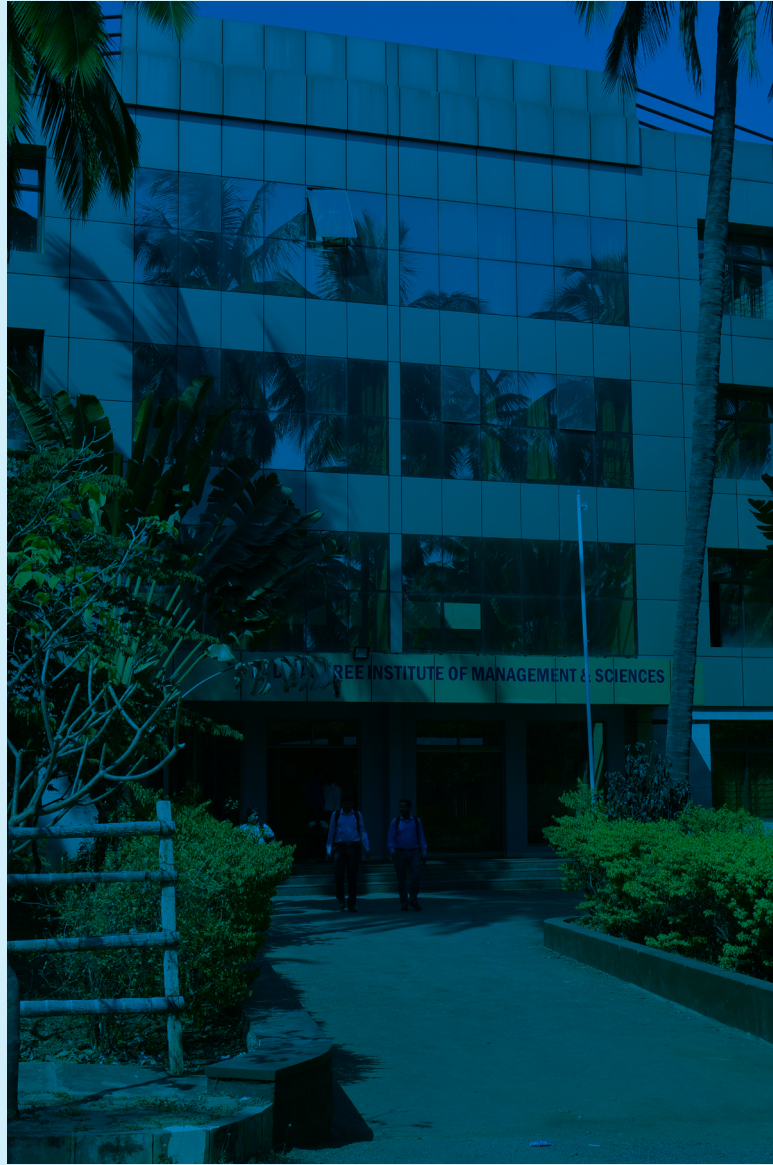
We are offering all kind of Coaching for CSIR NET For Lectureship (LS) and Junior Research Fellowship (JRF) entrance exam Preparation. Along with the regular syllabus, Phd entrance exam preparation also available at PIMS.

PIMS is run by an excellent & highly qualified team of faculties who are doctorates and post doctorates. The institute aims to prepare students for various competitive entrance examinations related to CSIR NET Life Sciences, by using innovative tricks & techniques and coaching methodology to clear easily this exam.

PIMS offers an open platform which can be used by students to increase their subject & course knowledge, strengthen fundamentals and finally beat the competitions. PIMS offers Online coaching & Online classes for Joint CSIR-UGC National Eligibility Test (NET) for Junior Research Fellowship (JRF) and for Lectureship (LS). PIMS is also offering special coaching for CSIR NET JRF LS Repeaters.

Why to choose PIMS in Bangalore?

- ▶ Highly Experienced faculty for best CSIR NET Coaching in Bangalore to provide depth knowledge about the topic.
- ▶ Separate batches, personal attention and advanced level coaching to solve student's queries and doubts
- ▶ Regular Assignment and more attention to weak learners
- ▶ 100% Career focused teaching



The comprehensive study program has been created by PIMS Faculties to provide all round coaching for the students.

Examination Scheme for Joint UGC-CSIR-NET/JRF

Life Sciences	A	15 out of 20 question to be attempted	30	200	3 Hours
	B	5 out of 25 question to be attempted	70		
	C	20 out of 70 question to be attempted	100		

Age Limit and Relaxation:

JRF: Not more than 28 years. A relaxation upto 3 years is provided to the candidates belonging to OBC (Non-creamy layer. Relaxation upto 5 years for SC/ST/PwD/Transgender categories and to women applicants. Relaxation will also be provided to the candidates having research experience, limited to the period spent on research in the relevant/related subject of post-graduation degree, subject to a maximum of 5 years, on production of a certificate from appropriate authority.

Assistant Professor: There is no upper age limit for applying for Assistant Professor.

Exemption (Eligibility for Assistant Professor)

- (i) NET/SET/SLET shall remain the minimum eligibility condition for recruitment and appointment of Assistant Professors in Universities/ Colleges/ Institutions. In this regard, exemption from NET/SET/SLET will be governed by UGC regulations and amendments notified in the Gazette of India from time to time.
- (ii) The candidates who have passed the UGC/CSIR JRF examination prior to 1989 are also exempted from appearing in NET.

- (iii) For SET Candidates: The candidates who have cleared the States Eligibility Test (SET) accredited by UGC for Assistant Professor held prior to 1st June 2002, are exempted from appearing in NET, and are eligible to apply for Assistant Professor anywhere in India. For SET held from 1st June 2002 onwards, the qualified candidates are eligible to apply for the post of Assistant Professor only in the universities/colleges situated in the State from where they have cleared their SET.

Minimum Educational Qualification for NET/JRF:

M.Sc. / MCA / M.Tech or Equivalent degree with at least 55% marks for General and OBC candidates 50% for SC/ST candidates, Physically and Visually handicapped candidates

Eligibility:

- (i) Candidates who have secured at least 55% marks in Master's Degree or equivalent examination from universities/institutions recognised by UGC. The Other Backward Classes (OBC) belonging to non-creamy layer/Scheduled Caste (SC)/Scheduled Tribe (ST)/persons with disability (PwD) category candidates who have secured at least 50% marks.

- (ii) Candidates who are pursuing their Master's degree or equivalent course or candidates who have appeared for their qualifying Master's degree (final year) examination may also apply for this test. Such candidates must complete their Masters degree or equivalent examination within two years from the date of NET result with required percentage of marks, failing which they shall be treated as disqualified.
- (iii) Candidates belonging to the transgender category would be eligible to draw the same relaxation in fee, age and qualifying criteria for NET (i.e. JRF and Assistant Professor) as are available to SC/ST/PwD categories. (iv) The Ph.D.degree holders whose Master's level examination have been completed by 19th September 1991.

NET/JRF Exam Schedule:

NTA-UGC and CSIR-UGC conducts NET twice a year, i.e., in the months of June and December. The notifications announcing the June and December examinations are published in the months of February/March and August/September respectively in the weekly journal of nation-wide circulation, viz, Employment News.

Scholarship:

The scholarship of the JRF (NET) fellowship, at present, is 25,000/- per month plus HRA. The fellowship will be governed by terms and conditions of CSIR, UGC or Research Scheme, as applicable. The number of fellowships for each subject is limited. SC/ST applicants will be given such special considerations as may be decided by the Co-ordination Committee as per policy guidelines.

The duration of fellowship will be initially for 2 years carrying a monthly stipend of 25,000/-. On completion of two years as JRF (NET), the stipend

of a fellow may be increased to 28,000/-p.m. for the 3rd year on the basis of assessment of candidate's research progress through interview by the prescribed Expert Committee and Ph.D. registration. Upon such a recommendation, the fellow will be called SRF (NET). The total tenure as JRF (NET) plus SRF (NET) shall not exceed 5 years.

Advantages of NET- JRF over NET- LS

Candidates who have qualified for the JRF are also eligible for the lectureship.

A certain number of JRFs are awarded each year by CSIR-UGC to the candidates who qualify in the joint entrance examination conducted by CSIR-UGC. The CSIR Fellowships are tenable in Universities/IITs/Post-Graduate Colleges/Government Research Establishments including those of CSIR, R&D establishments of recognized public or private sector, industrial firms and other recognized institutions however, the candidates qualifying for Lectureship-NET will be eligible for recruitment as lecturer as well as for JRF-fellowship in a Scheme/Project, if otherwise suitable as per the eligibility criteria of that Scheme/Project.

However, they will not be eligible for Regular JRF-NET Fellowship. They will be eligible to pursue PhD program with or without any fellowship other than JRF-NET.

CSIR LABS IN INDIA

- ▶ Advanced Materials and Processes Research Institute (AMPRI), Bhopal
- ▶ Central Building Research Institute, Roorkee
- ▶ Centre for Cellular & Molecular Biology, Hyderabad
- ▶ Central Drug Research Institute, Lucknow
- ▶ Central Electrochemical Research Institute, Karaikudi
- ▶ Central Electronics Engineering Research Institute, Pilani
- ▶ Central Institute of Mining and Fuel Research, Dhanbad (CFRI Campus)
- ▶ Central Food Technological Research Institute, Mysore
- ▶ Central Glass & Ceramic Research Institute, Kolkata
- ▶ Central Institute of Medicinal & Aromatic Plants, Lucknow
- ▶ Central Leather Research Institute, Chennai
- ▶ Central Mechanical Engineering Research Institute, Durgapur
- ▶ CSIR Centre for Mathematical Modelling & Computer Simulation, Bangalore
- ▶ Central Institute of Mining and Fuel Research, Dhanbad (CMRI Campus)
- ▶ Central Road Research Institute, New Delhi
- ▶ Central Scientific Instruments Organisation, Chandigarh
- ▶ CSIR Madras Complex, Chennai
- ▶ Central Salt & Marine Chemicals Research Institute, Bhavnagar
- ▶ Institute of Genomics and Integrative Biology, Delhi
- ▶ Institute of Himalayan Bioresource Technology, Palampur
- ▶ Indian Institute of Chemical Biology, Kolkata
- ▶ Indian Institute of Chemical Technology, Hyderabad
- ▶ Indian Institute of Petroleum, DehraDun
- ▶ Indian Institute of Integrative Medicine (IIIM), Jammu
- ▶ Indian Institute of Toxicology Research, Lucknow
- ▶ Institute of Microbial Technology, Chandigarh
- ▶ Institute of Minerals and Materials Technology (IMMT), Bhubaneswar
- ▶ National Aerospace Laboratories, Bangalore
- ▶ National Botanical Research Institute, Lucknow
- ▶ National Chemical Laboratory, Pune
- ▶ CSIR Unit for Research and Development of Information Products, Pune
- ▶ National Environmental Engineering Research Institute, Nagpur
- ▶ National Geophysical Research Institute, Hyderabad
- ▶ National Institute for Interdisciplinary Science & Technology, Thiruvananthapuram
- ▶ National Institute of Oceanography, Goa
- ▶ National Institute of Science Communication And Information Resources, New Delhi
- ▶ National Institute of Science, Technology And Development Studies, New Delhi
- ▶ National Metallurgical Laboratory, Jamshedpur
- ▶ National Physical Laboratory, New Delhi
- ▶ North - East Institute of Science and Technology, Jorhat
- ▶ Structural Engineering Research Centre, Chennai

Leading Research Institutes of India where one can apply after qualifying JRF

IISc. Bangalore

IIT-Bombay

IIT-Delhi

IIT-Kharagpur

IIT-Roorkee

ICGEB, New Delhi

Institute of Genomics and Integrative Biology

IARI

Central Drug Research Institute

ACBR, Delhi University:

Delhi University South Campus:

NCPGR, New Delhi

Institute of Virology

National Chemical Laboratory

Central Food Technological Research Institute

Cancer Research Institute

Biotech Consortium India Limited (BCIL)

Birla Institute of Scientific Research (BISR)

Central Institute of Agricultural Engineering

Indian Institute of Science, Bangalore

All India Institute of Medical Sciences, New Delhi,
INDIA

Jawaharlal Nehru University

National Chemical Laboratory - Your Partner from
Concept to Market

Central Food Technological Research Institute, Mysore

Website of Bose Institute, Kolkata

Tata Memorial Centre

Biotech Consortium India Limited

Birla Institute of Scientific Research

Central Institute of Agricultural Engineering

Central Institute of Medicinal and Aromatic Plants
(CIMAP)

Centre for Cellular and Molecular Biology (CCMB)

Centre for DNA Fingerprinting and DNA Diagnostics
(CDFD)

Council of Scientific and Industrial Research (CSIR)

Food and Drug Toxicology Research Centre (FDTRC)

Forest Research Institute (FRI)

Genetic Research Centre

Homi Bhabha Centre for Science Education (HBCSE)

Indian Council of Agricultural Research (ICAR)

Indian Council of Medical Research (ICMR)

Indian Institute of Chemical Technology (IICT)

Institute of Microbial Technology (IMTECH)

Institute of Applied Medicine and Research

Institute of Life Sciences

Institute of Microbial Technology (IMTECH)

Jawaharlal Nehru Centre for Advanced Scientific
Research

National Academy of Agricultural Sciences

National Brain Research Centre (NBRC)

National Bureau of Animal Genetic Resources:

National Bureau of Fish Genetic Resources

National Bureau of Plant and Genetic Resource

National Centre for Biological Sciences (NCBS)

National Centre for Laboratory Animal Science
(NCLAS)

National Centre for Plant Genome Research

National Centre of Cell Science (NCCS)

National Dairy Research Institute (NDRI)

National Environmental Engineering research Inst.

OUR STUDENTS ARE INTERNEED/ PLACED @

Akay Flavour's & Aromatics Pvt Ltd., Cochin
Alfanzymes Biotech Pvt Ltd., Belagavi
Ambadi Dairy Products, Thiruvanthapuram
Amroon Foods Pvt Ltd., Barabanki, U.P
Bikanerwala, Delhi
Bioplus Lifesciences Pvt Ltd., Bengaluru
Biocon Pvt.Ltd., Bengaluru
Centre for Processing Food, Bengaluru
Coach Nutrachem India Pvt. Ltd., Bengaluru
Doehler India Pvt Ltd., Pune
Everest Beverages and food Industries, Meerut
Haldiram Snacks Pvt Ltd., Noida, U.P
Hector Beverages Pvt Ltd., Mysuru
Hillgreen Company, Bangalore
Himalaya Drug Company, Bengaluru
Hindustan UniLever Limited (Food Division) Bengaluru
Jagdale Industries, Bengaluru
Jubilant foods Pvt. ltd bangalore
Maiyas Beverages and Food Pvt Ltd., Bengaluru
Mother Dairy, Bengaluru
MTR Foods Pvt Ltd., Bengaluru
Mysore Food Products Ltd., Indore, M.P

Molecular Connections Pvt.Ltd. Bengaluru
Nallara Group of Industries, Kerala
Natural Remedies Pvt Ltd., Bengaluru
Nestle (India) Ltd., Nanjungud, Mysuru
Pelican Biotech & Chemical Labs Pvt Ltd., Alleppey
Paramount Nutrition India Pvt Ltd., Bengaluru
IADFAC Laboratories Pvt Ltd., Bengaluru
Lotus labs Pvt Ltd., Bengaluru
Radiant Research & Services Pvt Ltd., Bengaluru
Rishi Herbal Technologies Pvt Ltd., Bengaluru
Sami Labs Limited, Bengaluru
Sanat Products Ltd., Sikhandarabad, U.P
Srini Food Park Pvt.Ltd., Chittoor, A.P.
Stanes & Company, Coimbatore
Star Hi- Herbs Pvt Ltd., Bengaluru
TÜV SÜD South Asia Bangalorehi
Biogenero Pvt Ltd., Bengaluru
Kottaram Agro foods Pvt. Ltd. Bengaluru
Pronature Pvt Ltd., Bengaluru
Synthite Industries Kollencherry, Kerala
Akshaya Patra Foundation, Bengaluru
Sunil Agro Foods Pvt Ltd.,Bengaluru

ESTD: 1996



PADMASHREE
GROUP OF INSTITUTIONS

Padmashree Campus, No. 149, Kommaghatta, Kengeri
Bangalore- 560060, Karnataka, India

Life sciences and other Bangalore university affiliated courses

Prof. M. Anuradha, email: pimsprincipal@gmail.com. Mobile: 9902863900

Paramedical and Allied health sciences courses

Prof. Rajesh Shenoy, email: pgibangalore@gmail.com. Mobile: 9663571097

