PATHFINDER

EXPLORING ROADMAP AFTER SCIENCE GRADUATION

AS COMPILED BY

SCIENCE SOCIETY

OF

GURU GORAKHNATH JI GOVERNMENT COLLEGE, HISAR

Editorial Team

1. Dr. Meera
Assistant Professor
Department of Chemistry

2. Dr. Sushma
Assistant Professor
Department of Chemistry

3. Dr. Poonam Sangwan
Assistant Professor
Department of Chemistry

4. Mr. Kulwant
Assistant Professor
Department of Physics

5. Dr. Sarita
Extension Lecturer
Department of Physics

6. Dr. Bulkesh
Extension Lecturer
Department of Physics

Data Compilation Team

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Department of Botany

3. Dr. Mukesh
Extension Lecturer
Department of Biotech

4. Ms. Pariti
Assistant Professor
Department of Mathematics

5. Dr. Shweta
Assistant Professor
Department of Computer Science

6. Ms. Poonam Narwal
Assistant Professor
Department of Computer Science

7. Mr. Amit Saini
Extension Lecturer
Department of Chemistry

8. Mr. Manjeet Malik
Extension Lecturer
Department of Chemistry

9. Dr. Richa Rani
Extension Lecturer
Department of Mathematics

10. Dr. Kirti Nanda
Extension Lecturer
Department of Physics

Message From Principal

Dear Students,

It gives me immense pleasure to present this booklet, specially curated to guide and support our science students in navigating the diverse opportunities that lie ahead after graduation. In today's rapidly evolving world, the field of science opens up countless avenues—not only in higher studies and research, but also in industry, innovation, and public service.

This booklet is designed to raise awareness about career pathways, postgraduate education, and scholarship options available to you. Whether you aspire to become a researcher, pursue a professional course, work in cutting-edge industries, or explore interdisciplinary fields, the right information at the right time can make all the difference.

I urge each of you to explore this resource thoroughly and make informed decisions about your future. Remember, your journey is unique, and with passion, perseverance, and proper guidance, you can achieve remarkable success.

Wishing you all the very best in your academic and professional endeavors.

Dr. Vivek Saini

Principal
G.G.J. Govt. College, Hisar

Science Society (President)
Smt. Savita Rani

Science Society (Secretary)
Dr. Veenu Mehta

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1.1 Higher Studies Opportunities after B.Sc Physical Sciences

Various Disciplines offered in M.Sc Programmes after B.Sc Physical Science

Physics	Chemistry	Mathematics	Computer Science
RadioPhysics	Analytical Chemistry	Pure Mathematics	M.Sc Comp. Sci.
Geophysics	Bio – Chemistry	Applied Mathematics	MCA
Astrophysics	Computational Chemistry	Statistics and Probability	MBA
Biophysics	Post Graduate Diploma in Industrial Chemistry	Atmospheric Sciences/Meteorology	
Instrumentation	Post Graduate Diploma in Technical and Analytical Chemistry	Climate Science/Physical Oceonography	
Electronics	M.Phil in Chemistry (General)		
Geology			
Remote Sensing/GIS			
Atmospheric Sciences/Meteorology			
Climate Science/Physical Oceonography			

1.2 *Opportunities For Higher Studies In Life Sciences*

M.Sc. Programs in Different Disciplines of Life Sciences
Eligibility: Bachelor in Life Sciences

Zoology (as one subject at UG Level)	Biotechnology (as one subject at UG Level)
Biochemistry	Agricultural Biotechnology & Plant Biotechnology
Bioinformatics	Biochemistry
Biophysics	Bioinformatics
Cellulose and paper technology	Bioinformatics
Clinical embryology	Biomedical Science
Ecology	Biophysics
Environmental management	Biotechnology
Environmental Science	Cell and Molecular Biology
Evolutionary Biology	Clinical Research
Fisheries	Computational Biology
Food and Technology	Dairy Technology
Forestry	Environmental Biotechnology & Pharmaceutical Biotechnology
Genetics	Food Technology
Marine Biology	Forensic Science
Microbiology	Human Genetics
Molecular Biology	Immunology
Nuclear Medicine Technology	Industrial Biotechnology
Reproductive biology	Medical Biotechnology
Wildlife Biology	Microbiology
Wildlife Biology	Molecular Biology and Genetic Engineering
Zoology	Nanotechnology
	Neuroscience

Postgraduate Degree Courses in Chemistry

- M.Sc. in Agricultural Chemistry
- M.Sc. in Medical Chemistry
- M.Sc. in Industrial Chemistry
- M.Sc. in Computational Chemistry
- M.Sc. in Pharmaceuticals & Chemical Engineering
- M.Sc. in Food Science & Technology
- M.Sc. in Nano-technology

Postgraduate Degree Courses in Chemistry

- M.Sc. in Polymer Science & Technology
- M.Sc. in Chemistry
- M.Sc. in Biochemistry
- M.Sc. in Forensic Science
- M.Sc. in Pharmaceutical Chemistry
- M.Sc. in Analytical Chemisty
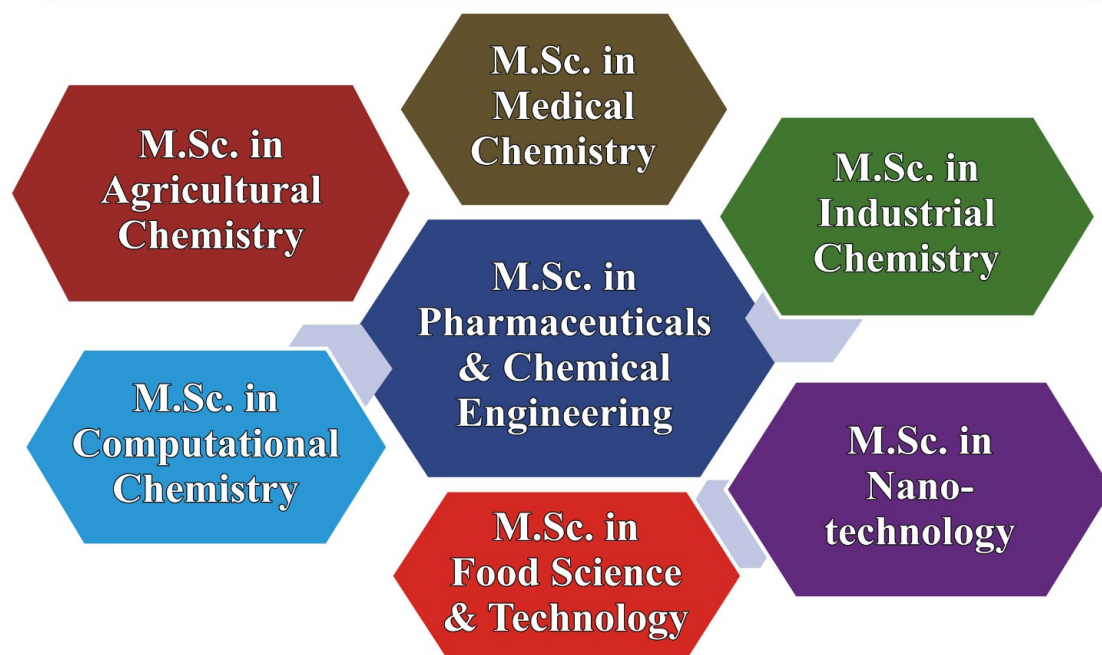- M.Sc. in Environmental Chemistry

1.2 *Opportunities For Higher Studies In Life Sciences*

M.Sc. Programs in Different Disciplines of Life Sciences
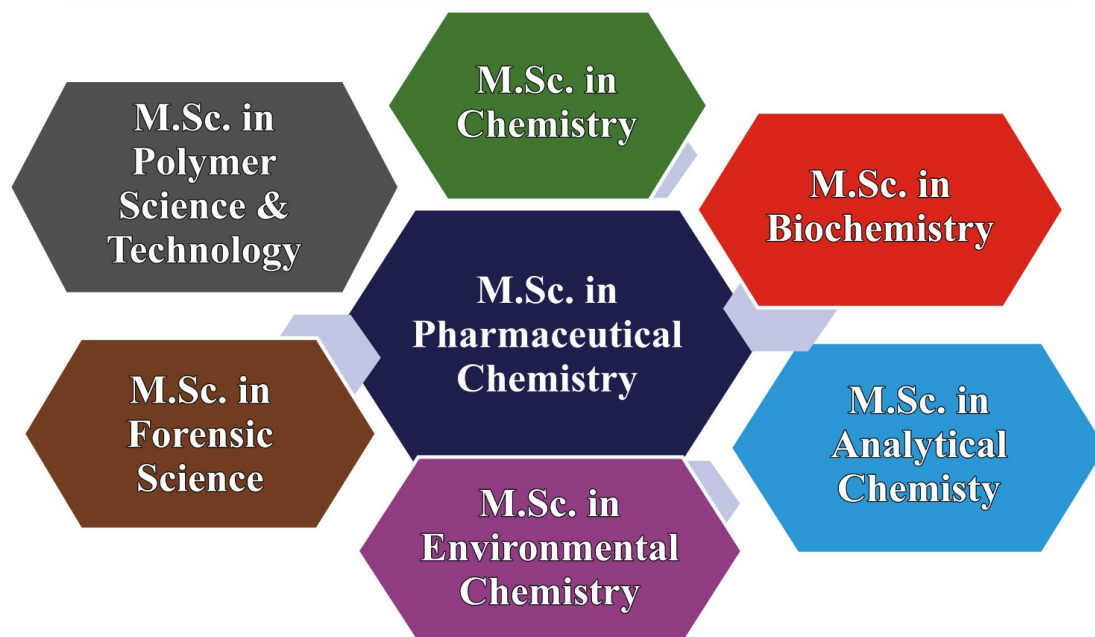**Eligibility: Bachelor in Life Sciences**

Botany (as one subject at UG Level)	Chemistry (as one subject at UG Level)
Agronomy	Analytical Chemistry
Biochemistry	Chemistry
Bioinformatics	Industrial Chemistry
Biotechnology	Pharmaceutical Chemistry
Botany	
Environmental Science	
Food Science and Technology	
Forensic Science	
Forestry	
Genetics	
Horticulture	
Microbiology	
Molecular Biology	
Plant Biotechnology	
Plant Breeding	
Plant pathology	
Plant physiology	
Vegetable Science	

1.3 Courses Offered After Life Sciences

Medical Field	National Dairy Research Institute (NDRI)	Forest Research Institute, Dehradun
Anatomy	Animal Genetics and Breeding	Environment management
Biochemistry	Animal Reproduction	Forestry
Medical Biophysics	Dairy Microbiology	Wildlife sciences
Medical biotechnology	Dairy technology	Wood science
Neuroscience	Dairy Chemistry	
Nuclear Medicine Technology	Dairy engineering	
Perfusion Technology	Livestock production and management	
Pharmacology		
Physiology		
Respiratory Care		
Transfusion Medicine		

1.4   Opportunities For Higher Studies In Other Disciplines

Eligibility: Bachelor in Life Sciences

Management	Social Sciences and Humanities
MBA	MA
Finance	English
Human Resource	Hindi
Information Technology	History
Marketing management	Political Science
Retail management	Psychology
	Public Administration
	Sociology

1.4   Opportunities For Further Studies In Education

BACHELOR IN EDUCATION (B.Ed.)

- **Eligibility:**   Graduation
- **Admission Process:**

    Entrance Examination: Conducted by various state-level universities

    Merit-Based: Some institutions admit students based on their undergraduate marks
- **Duration:** 2-year full-time course
- **Fee Structure:** Government Colleges: **₹10,000 to ₹40,000 per year.**
                Private Colleges: **₹50,000 to ₹1,00,000 per year**.

1.5   Top 10 Certificates and short term courses after B.Sc Computer Science

Course	Website Link	Cost
Data Science Professional Certificate	https://www.coursera.org/specializations/data-science-foundations	Free
Google IT Support Professional Certificate	https://www.coursera.org/professional-certificates/google-it-support	Free
Full Stack Web Development	https://www.freecodecamp.org/news/learn-web-development-free-full-stack-developer-courses-for-beginners/	Free
AWS Certified Solutions Architect – Associate	https://aws.amazon.com/training/	₹13,168.39
Certified Ethical Hacker (CEH)	https://www.eccouncil.org	₹83,399.79 (Exam Voucher)
Machine Learning	https://www.coursera.org/specializations/machine-learning-introduction	Free to audit ₹6,935.35 for certificate
SQL for Data Science	https://www.coursera.org/learn/sql-data-science	Free to audit ₹4301.67 for certificate
Python for Everybody Specialization	https://www.coursera.org/specializations/python	Free
Cyber Security	https://nielit.gov.in/haridwar/content/online-courses	₹6,000
PC Hardware & Networking	https://nielit.gov.in/haridwar/content/online-courses	₹4,000

CHAPTER 2: ENTRANCE EXAMS AND PG INSTITUTES

2.1 Central Level Entrance Exams after B.Sc Life Science/Physical Science

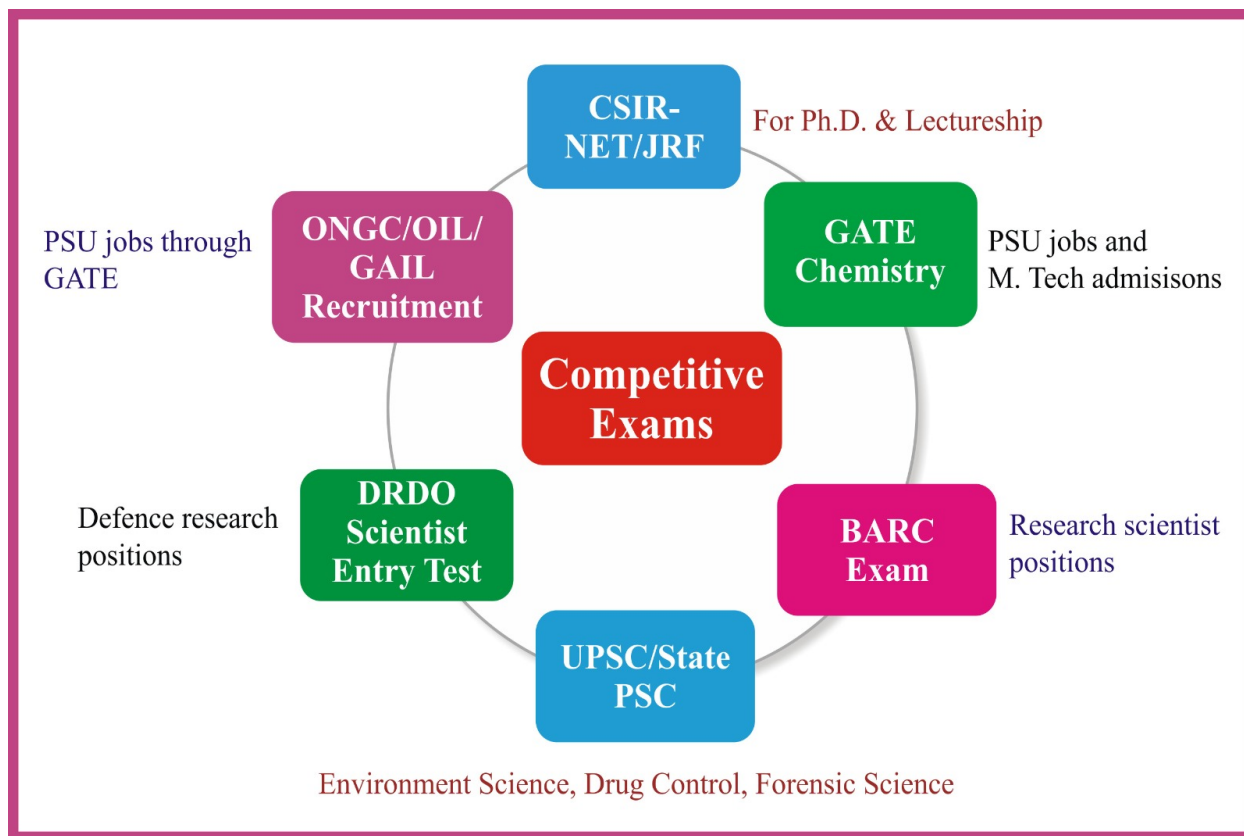| NAME OF EXAM	SUBJECT COVERED	INSTITUTIONS	ELIGIBILITY CRITERIA
JAM - Joint Admission Test for M.Sc.	Physics, Chemistry, Mathematics, Biotechnology, etc	IITs, IISc, NITs, and several other institutions accept JAM scores for admission to their M.Sc. programs	Candidates must have a Bachelor's degree with at least 55% marks for General/OBC-NCL category and 50% marks for SC/ST/PwD category.
JEST - Joint Entrance Screening Test	Physics, Theoretical Computer Science, etc	Institutions like IISERs, NISER, HBNI, and several others accept JEST scores	Candidates should have a Bachelor's degree in Physics, Mathematics, or a related field for Integrated Ph.D. programs
IAI - Institute of Actuaries of India Entrance Exam	Actuarial Science, Mathematics, Statistics, Economics, etc	Many universities and private institutions in India that offer M.Sc. in Actuarial Science and related programs	Candidates must have a Bachelor's degree in any discipline, preferably with Mathematics.
CSIR-UGC NET for JRF (Junior Research Fellowship)	Life Sciences, Earth Sciences, Chemical Sciences, Mathematical Sciences, Physical Sciences, etc.	Various central universities, IITs, IISc, and research institutes.	**General:** Must have a Master's degree in Science with at least 55% marks. **SC/ST/OBC/PwD:** Must have a Master's degree with at least 50% marks.
GATE - Graduate Aptitude Test in Engineering	Physics, Chemistry, Mathematics, Engineering, and Technology-based fields	IISc, IITs, NITs, and other reputed institutions in India for M.Sc. and integrated M.Sc.-Ph.D. programs	Candidates must have a Bachelor's degree in Engineering/Technology or a Master's degree in any relevant science field
AIIMS M.Sc. Entrance Exam	General knowledge, English	AIIMS New Delhi and its other branches in India.	A Bachelor's degree in relevant fields such as Life Sciences, Medicine, Pharmacy, or Nursing.

	comprehension, Biology, Chemistry, Physics		Candidates must have at least 60% marks for General/OBC category and 50% marks for SC/ST candidates.
CUET-PG (Common University Entrance Test for Postgraduate Courses)	Various subjects based on the M.Sc. specialization (e.g., Physics, Chemistry, Life Sciences, etc.)	Central universities across India, including JNU, Delhi University, DTU and others.	Candidates must have a Bachelor's degree from a recognized university with the relevant subject combination.
NEST (National Entrance Screening Test)	Biology, Chemistry, Mathematics, and Physics	National Institute of Science Education and Research (NISER), Bhubaneswar, and the University of Mumbai's Department of Atomic Energy Centre for Excellence in Basic Sciences (UM-DAE CEBS), Mumbai	55% in B.Sc
Indian Statistical Institute Admission Test	Mathematics, Quantitative Economics, Computer Science, and other subjects related to Statistics	Indian Statistical Institute	55% in B.Sc
Homi Bhabha National Institute Entrance Test	Nuclear Science, Engineering, Physics, etc	Homi Bhabha National Institute	Candidates must have a Bachelor's degree in a relevant science or engineering discipline with at least 60% marks
INAT	Astrophysics and Astronomy	IUCAA-NCRA Pune Campus	55% in B.Sc

2.2 *PG Institute and their corresponding University-Level M.Sc. Entrance Exams after B.Sc Life Science/ Physical Science*

ELIGIBILITY CRITERIA: Candidates must have a Bachelor's degree in a relevant discipline with at least 50% marks

INSTITUTIONS	NAME OF EXAM	SUBJECTS
Jawaharlal Nehru University (JNU), New Delhi.	JNUEEE	Life Sciences, Physics, Chemistry, Environmental Science, etc.
University of Delhi (DU) and its affiliated colleges	DUET - Delhi University Entrance Test	Physics, Chemistry, Life Sciences, Mathematics, Environmental Science, etc.
Banaras Hindu University (BHU).	BHU PET - Banaras Hindu University Postgraduate Entrance Test	Physics, Chemistry, Life Sciences, Mathematics, etc
Tata Institute of Fundamental Research (TIFR), Mumbai.	TIFR GS - Tata Institute of Fundamental Research Graduate School Entrance Exam	Physics, Mathematics, Biology, and related fields.
University of Hyderabad	University of Hyderabad Entrance Exam	Life Sciences, Physics, Chemistry, Mathematics etc.
Aligarh Muslim University (AMU).	AMU - Aligarh Muslim University Entrance Exam	Physics, Chemistry, Life Sciences, Mathematics, etc
Symbiosis International University and affiliated institutions	SET - Symbiosis Entrance Test	Physics, Chemistry, Life Sciences, Biotechnology, etc
Manipal Academy of Higher Education (MAHE) and its affiliated colleges	MET - Manipal Entrance Test	Physics, Chemistry, Mathematics, Biology, etc
Amrita Vishwa Vidyapeetham (Amrita University).	AEEE - Amrita Engineering Entrance Exam (for M.Sc. Programs)	Physics, Chemistry, Life Sciences, Mathematics, etc.
VIT University and affiliated institutions	VITMEE - VIT Masters Entrance Exam	Physics, Chemistry, Life Sciences, Mathematics, etc
SRM Institute of Science and Technology	SRMJEE-PG - SRM Joint Entrance Examination for	Physics, Chemistry, Biotechnology, Life

	Postgraduate	Sciences, etc.
Lovely Professional University (LPU).	LPU NEST - Lovely Professional University National Entrance and Scholarship Test	Physics, Chemistry, Life Sciences, Mathematics, etc.
Punjab University and its affiliated colleges.	PU-CET-PG - Punjab University Common Entrance Test for Postgraduate Courses	Physics, Chemistry, Life Sciences, Mathematics, etc
BITS campuses in Pilani, Goa, and Hyderabad (75% in BSc).	BITSAT (BITS Admission Test)	B.Sc

Higher Education Entrance Examinations

IIT JAM (Joint Admission Test for M.Sc.)- Admission to IITs, NITs, IISc	CIET-PG- For M.Sc. admission in central universities	TIFR GS - For research programs in TIFR	AIIMS/BHU /DU Entrance - For M.Sc.

2.3 *Institutions in India Accepting CUET-PG (Common University Entrance Test – Postgraduate Scores)*

Universities	Programme Offered
Central University of Haryana	M.Sc. Physics, M.Sc. Chemistry, M.Sc Mathematics, M.Sc. Microbiology, M.Sc. Biochemistry, M.Sc. Nutrition Biology, M.Sc. Biotechnology
Jawaharlal Nehru University (JNU)	M.Sc. Physics, M.Sc. Chemistry, M.Sc Mathematics, M.Sc. Life Sciences, M.Sc. Molecular Medicine, M.Sc. Bioinformatics
University of Hyderabad	M.Sc. Physics, M.Sc. Chemistry, M.Sc Mathematics, M.Sc. Plant Biology & Biotechnology, M.Sc. Microbiology & Immunology, M.Sc. Animal Biology & Biotechnology, M.Sc. Biochemistry
Banaras Hindu University (BHU)	M.Sc. Physics, M.Sc. Chemistry, M.Sc Mathematics, M.Sc. Botany, M.Sc.

	Zoology, M.Sc. Biochemistry, M.Sc. Biotechnology
Aligarh Muslim University (AMU)	M.Sc. Physics, M.Sc. Chemistry, M.Sc Mathematics, M.Sc. Life Sciences, M.Sc. Biotechnology, M.Sc. Microbiology
Pondicherry University	M.Sc. Physics, M.Sc. Chemistry, M.Sc Mathematics, M.Sc. Microbiology, M.Sc. Biochemistry, M.Sc. Bioinformatics, M.Sc. Marine Biology
Tezpur University	M.Sc. Physics, M.Sc. Chemistry, M.Sc Mathematics, M.Sc. Molecular Biology & Biotechnology, M.Sc. Environmental Science, M.Sc. Nanoscience & Technology
Central University of Punjab	M.Sc. Physics, M.Sc. Chemistry, M.Sc Mathematics, M.Sc. Biochemistry, M.Sc. Microbiology, M.Sc. Bioinformatics, M.Sc. Botany, M.Sc. Human Genetics, M.Sc. Molecular Medicine
Central University of Rajasthan	M.Sc. Physics, M.Sc. Chemistry, M.Sc Mathematics, M.Sc. Biochemistry, M.Sc. Biotechnology, M.Sc. Microbiology
Central University of Tamil Nadu	M.Sc. Physics, M.Sc. Chemistry, M.Sc Mathematics, M.Sc. Life Sciences, M.Sc. Microbiology, M.Sc. Applied Psychology

2.3 *Institutions in India Accepting GAT-B (Graduate Aptitude Test – Biotechnology Scores)*

Universities	Programme Offered
Central University of Haryana	M.Sc. Biotechnology
Jawaharlal Nehru University (JNU)	M.Sc. Biotechnology
Banaras Hindu University (BHU)	M.Sc. Biotechnology
Alagappa University, Tamil Nadu	M.Sc. Biotechnology
University of Mysore, Karnataka	M.Sc. Biotechnology
Pondicherry University, Pondicherry	M.Sc. Biotechnology
Tezpur University, Assam	M.Sc. Molecular Biology & Biotechnology
University of Hyderabad, Hyderabad	M.Sc. Biotechnology
G.B. Pant University of Agriculture and Technology, Uttarakhand	M.Sc. Agricultural Biotechnology
Tamil Nadu Agricultural University, Coimbatore	M.Sc. Agricultural Biotechnology
Assam Agricultural University, Jorhat	M.Sc. Agricultural Biotechnology

2.4 Top Institutes and their criteria for admission in M.Sc. Computer Science:-

ELIGIBILITY CRITERIA: B.Sc. in Computer Science or equivalent with a minimum of 50-60% marks

Top 10 Universities	Website link	Entrance Test
IITs include {IIT Delhi IIT Bombay IIT madras }	IITDelhi-https://home.iitd.ac.in IIT Bombay- https://www.iitb.ac.in IIT Madras- https://www.iitm.ac.in	IIT-JAM, GATE
IISc Bangalore	https://iisc.ac.in	CUET-PG, IIT-JAM, GATE
NITs,	https://www.nitt.edu	IIT-JAM, GATE
IIIT Hyderabad	https://www.iiit.ac.in	CAT, CUCET,TISSNET, GATE
IIIT Bangalore	https://www.iiitb.ac.in	IIT-JAM, GATE
University of Delhi	https://www.du.ac.in	CUET-PG test
JNU	https://www.jnu.ac.in/main/	CUET-PG, GATE
BHU	https://www.bhu.ac.in/Site	CUET-PG, GATE
University of Mumbai	https://mu.ac.in	MUCMET/MUCLAT, GATE
Anna University	https://www.annauniv.edu	The Tamil Nadu Common Entrance Test (TANCET)

2.4 Top Institutes and their criteria for admission in MCA (Master in computer application)

Top 10 Universities	Website link	Entrance Test
NITs,	https://www.nitt.edu	NIMCET
IIIT Hyderabad	https://www.iiit.ac.in	PGEE, GATE
Amity University	https://amity.edu	Marit based
VIT	https://viteee.vit.ac.in	VITMEE, GATE
christ university	https://christuniversity.in	MAT, GATE
JNU	https://www.jnu.ac.in/main/	CUET-PG, GATE, NET, JRF
BHU	https://www.bhu.ac.in/Site	CUET-PG, GATE
University of Mumbai	https://mu.ac.in	MUCMET/MUCLAT, GATE
CU University	https://cucet.cuchd.in	CUCET
Parul university	https://paruluniversity.ac.in	KMAT, Karnataka PGCET

2.5 Top Institutes and their criteria for admission in MBA (Master in Business Administration)

Top 10 Universities	Website link	Entrance Test
IIMS	https://www.iima.ac.in	CAT
IITS	https://home.iitd.ac.in	CAT
VIT	https://viteee.vit.ac.in	CAT, MAT, XAT
JNU	https://www.jnu.ac.in/main/	CAT
BHU	https://www.bhu.ac.in/Site	CAT, CUET-PG
CHANDIGARH University	https://cucet.cuchd.in	CUCET
Amity University	https://amity.edu	CAT, MAT, XAT, CMAT
Christ university	https://christuniversity.in	CAT, MAT, CMAT
University of Mumbai	https://mu.ac.in	CAT, MAT XAT, ATMA
Parul university	https://paruluniversity.ac.in	CAT, MARIT BASED

2.6   Top Institutes in India and Haryana

IN INDIA	IN HARYANA
➢ Indian Institute of Science (IISc), Bangalore	➢ Kurukshetra University, Kurukshetra
➢ Jawaharlal Nehru University (JNU), New Delhi	➢ Maharshi Dayanand University, Rohtak
➢ Banaras Hindu University (BHU), Varanasi	➢ Guru Jambheshwar University of Science and Technology, Hisar
➢ University of Delhi, New Delhi	➢ Chaudhary Charan Singh Haryana Agricultural University, Hisar
➢ University of Hyderabad, Hyderabad	➢ Pandit Bhagwat Dayal Sharma University of Health Sciences, Rohtak
➢ Tata Institute of Fundamental Research (TIFR), Mumbai	➢ Deenbandhu Chhotu Ram University of Science and Technology, Murthal
➢ All India Institute of Medical Sciences (AIIMS), New Delhi	➢ Central University of Haryana, Mahendragarh
➢ National Institute of Technology (NIT), Tiruchirappalli	➢ Bhagat Phool Singh Mahila Vishwavidyalaya, Sonipat
➢ Jadavpur University, Kolkata	➢ YMCA University of Science and Technology, Faridabad
➢ Anna University, Chennai	➢ Chaudhary Devi Lal University, Sirsa
➢ University of Calcutta, Kolkata	
➢ Panjab University, Chandigarh	
➢ Aligarh Muslim University (AMU), Aligarh	
➢ University of Mumbai, Mumbai	
➢ Savitribai Phule Pune University, Pune	
➢ Osmania University, Hyderabad	
➢ University of Madras, Chennai	
➢ Amrita Vishwa Vidyapeetham, Coimbatore	
➢ Birla Institute of Technology and Science (BITS), Pilani	
➢ Vellore Institute of Technology (VIT), Vellore	

CHAPTER 3: COACHING INSTITUTES

3.1 Top Institutes for GATE, NET, and JAM Coaching (Online and Offline) after B.Sc. Life Science

Name	Location	Course duration	Fee structure	Official website
Pathfinder Academy	New Delhi.	**6 months to 1 year**.	Approximately **₹35,000 to ₹55,000**, depending on the program.	www.pathfinderacademy.in
Elite Academy	Mumbai	**6 months to 1 year**.	Around **₹30,000 to ₹50,000** varying by course.	www.eliteacademy.in
VPM Classes	Jodhpur, Rajasthan.	**6 months to 1 year**.	Approximately **₹25,000 to ₹45,000**, depending on the program.	www.vpmclasses.com
Biotecnika	Bengaluru, Pune, Noida, Chennai, and online platforms	Varies from **3 months (short-term courses)** to **1 year**	Ranges from **₹30,000 to ₹60,000**, based on the course and mode (online/offline)	www.biotecnika.org
Made Easy	New Delhi, Bhopal, Hyderabad, Noida, Lucknow, Indore	**6 months to 1 year** depending on the program.	Approximately **₹50,000 to ₹80,000** varying by course and	www.madeeasy.in

	Bhubaneswar, Jaipur Pune.		location.	
Gate Forum	Hyderabad, Pune, New Delhi, Bengaluru Chennai, Kolkata	**4 months (crash courses)** to **1 year.**	Between **₹40,000 to ₹70,000**, depending on the course type and location.	www.gateforum.com
The Gate Academy	Bengaluru, Hyderabad, Pune, Kolkata, Bhubaneswar.	**6 months to 1 year**	Approximately **₹45,000 to ₹75,000**, varying by program and centre.	www.thegateacademy.com
Career Endeavour	New Delhi	**6 months to 1 year**	Around **₹40,000 to ₹60,000** depending on the course.	www.careerendeavour.com

3.2 Top Coaching Institutes for Preparation of NET, JAM after B.Sc Physical Science

Name	Subjects	Mode	Course duration	Fee structure	Official website
Career Endeavour, New Delhi	Physics, Chemistry, Maths	Online and Offline	Generally, 6 months to 1 year	Around ₹40,000 to ₹60,000, depending on the course	https://careerendeavour.com/
BYJU's, Many branches across India	Physics, Chemistry, Maths	Online and Offline	Generally, 6 months to 1 year	Approximately ₹20,000 to ₹40,000, depending on the program	https://byjus.com/
Physics Wallah **Kota, Rajasthan**	Physics, Chemistry, Maths	Online and Offline	Generally, 6 months to 1 year	Approximately ₹4,000 to ₹16,000, depending on the program	https://www.pw.live/
VedPrep Academy **New Delhi, Pune**	Physics, Chemistry, Maths,	Online and Offline	Generally, 6 months to 1 year	Approximately ₹3,000 to ₹40,000, depending on the program	https://vedprep.com/
Biotecnika **Bengaluru, Pune, Noida, Chennai**	Chemistry	Online and Offline	Generally, 3 months (short-term courses) to 1 year	₹30,000 to ₹60,000, based on the course and mode	https://www.biotecnika.org/
MIM (Mohan Institute of Mathematics), Chandigarh	Maths	Online and Offline	Generally, 6 months to 1 year	Approximately ₹4,000 to ₹8,000, depending on the program	https://onlinemim.com/
Anand Mathematic	Maths	Online and	Generally, 6 months to 1	Approximately ₹30,000 to	https://anandinstitut

s (π'AIM), New Delhi		Offline	year	₹40,000, depending on the program	e.org/
DIPS Academy, New Delhi	Maths	Online and Offline	Generally, 6 months to 1 year	Approximately ₹10,000 to ₹50,000, depending on the program	https://www.dipsacademy.com/
Gajendra Purohit	Maths	Online	Generally, 6 months to 1 year	Approximately ₹2,000 to ₹8,000, depending on the program	https://gajendrapurohit.in/
S. N. Bose Physics Learning Center **Bangalore, Karnataka**	Physics	Online and Offline	Generally, 6 months to 1 year	Approximately ₹7,000 to ₹40,000, depending on the program	https://snboseplc.com/
Scitech Study , Chandigarh, delhi	Physics, chemistry, computer science, life science	Online and Offline		15500 to 37500 depending upon mode	https://www.scitechstudy.com

3.3 Top 10 Coaching Institutes for Entrance Exams (GATE, JAM, NET, etc.) after B.Sc Computer Science.

Top Coaching Institutes	Website Link	Avrage Fees
Made Easy	https://www.madeeasy.in	> ₹90,000
GATE Forum	https://www.gateforum.com	₹40,000 - ₹70,000
ACE *Engineering Academy*	https://www.aceenggacademy.com	35,000 to 75,000
Career Endeavour	https://www.careerendeavour.com	₹40,000 - ₹60,000
Biotecnika	https://www.biotecnIka.org	₹30,000 - ₹60,000
Pathfinder Academy	https://www.pathfinderacademy.in	₹35,000 - ₹55,000
Elite Academy	https://www.eliteacademy.in	₹30,000 - ₹50,000
VPM Classes	https://www.vpmclasses.com	₹25,000 - ₹45,000
Gate Academy	https://www.gateacademy.co.in	₹35,000 - ₹60,000

CHAPTER 4: SCHOLARSHIPS

4.1   Main Scholarships after B.Sc Life Sciences In India And Haryana

Scholarship Type	Eligibility Criteria	Selection Process	Financial Support	Official Website
DURING M.Sc.				
INSPIRE Scholarship (Innovation in Science Pursuit for Inspired Research)	Top 1% rank in B.Sc examinations. Pursuing undergraduate or integrated postgraduate courses in natural and basic sciences. Age limit: 17-22 years.	Merit Based	Annual scholarship of ₹80,000.	INSPIRE Program
ICAR Junior Research Fellowship (JRF) (Indian Council of Agricultural Reseaech)	Bachelor's degree in a relevant field from a recognized university. Minimum age of 19 years	ICAR Entrance Examination (AIEEA-PG)	A monthly stipend of ₹12,640. An annual contingency grant of ₹6,000	Based on merit and is subject to the candidate securing admission in a recognized Agricultural University.
DURING Ph.D.				
CSIR-UGC Junior Research Fellowship (JRF)	M.Sc. or equivalent degree with a minimum of 55% marks for General and OBC candidates; 50% for SC/ST candidates, Age limit: Up to 28 years (relaxable for reserved	CSIR-UGC NET exam.	₹31,000 per month for the first two years. ₹35,000 per month for the subsequent three years. Annual contingency grant of ₹20,000.	CSIR-HRDG

Scholarship Type	Eligibility Criteria	Selection Process	Financial Support	Official Website
categories).				
DBT-Junior Research Fellowship (DBT-JRF) (Department of Biotechnology)	M.Sc./M.Tech./M.V.Sc. in Biotechnology or related areas with a minimum of 60% marks. Age limit: Up to 28 years (relaxable for reserved categories).	Biotechnology Eligibility Test (BET).	₹31,000 per month for the first two years. ₹35,000 per month for the subsequent three years. House Rent Allowance	DBT-JRF Program
ICMR Junior Research Fellowship (ICMR-JRF) (Indian Council of Medical Research)	M.Sc./M.A. or equivalent degree with a minimum of 55% marks for General and OBC candidates; 50% for SC/ST candidates. Age limit: Up to 28 years (relaxable for reserved categories).	ICMR-JRF entrance examination.	₹31,000 per month for the first two years. ₹35,000 per month for the subsequent three years. Annual contingency grant of ₹20,000.	ICMR JRF
ICAR Senior Research Fellowship (SRF) (Indian Council of Agricultural Research)	Master's degree in a relevant field with a minimum of 55% marks (50% for SC/ST/PH candidates). Generally up to 30 years, with relaxations for reserved categories.	ICAR SRF (PGS) examination.	A monthly stipend (amount subject to ICAR's prevailing norms). An annual contingency grant for research-related expenses.	The fellowship is tenable at ICAR institutes and State Agricultural Universities

Scholarship Type	Eligibility Criteria	Selection Process	Financial Support	Official Website
		DURING POST DOCTRATE		
Scholarship Type	**Eligibility Criteria**	**Selection Process**	**Financial Support**	**Official Website**
ICAR Post-Doctoral Fellowship (ICAR-PDF) (Indian Council of Agricultural Research)	Ph.D. degree in the relevant subject with high-quality research work and publications. Not more than 35 years (relaxable for reserved categories).	Selection is based on the evaluation of the research proposal and the candidate's academic credentials	A monthly fellowship of ₹75,000. A contingency grant of ₹3,00,000 per year.	The fellowship is tenable at ICAR institutes 1. National Scholarship for post graduate studies offered by UGC 2. PM Scholarship 3. Single Girl child PG Scholarship

4.2   Main Scholarships After B.Sc Physical Sciences In India And Haryana

S. No.	Name of scholarship	Scholarship amount	Eligibility	When to apply& Application mode
			DURING M.Sc	
1	**INSPIRE (Innovation in science pursuit for inspired research) Programme**	INR 80,000 annually (Higher Studies)	Candidates are eligible to apply for the INSPIRE programme if they have opted to study Natural and Basic sciences at the BSc or MSc level are eligible for the SHE Scholarship.	September/October; Online on the official website of INSPIRE Programme

2	**Narotam Sekhsaria Scholarship Programme**	Maximum INR 20 lakhs	Aspirants meet the eligibility criteria for this scholarship if they are- Indian nationals residing in the country Below 30 years of age Final year graduation student or have completed graduation from a recognised university	Between January to March; Online on the [official website of Narotam Sekhsaria Scholarship Programme](#)
3	**HDFC Educational Crisis Scholarship Support (ECSS)**	10,000 to INR 25,000 per annum	Eligibility: Aspirants who are pursuing a Diploma, Graduation Degree or post-graduation degree and whose annual family income is equal to or less than INR 3,00,000 are eligible to apply for this scholarship.	April to July; By Post/Online on the [official website of HDFC Educational Crisis Scholarship Support ECSS](#)
4	**Indira Gandhi Scholarship for Single Girl Child**	INR 36,200 per month	Any girl who is the only girl/twin daughter/fraternal daughter of a family and has secured admission in a full-time (regular) master's degree programme from a recognised university/college is eligible to apply for this scholarship. The age limit for this scholarship is 30 years.	Around August; Online on the [official website of UGC's Post-Graduate Indira Gandhi Scholarship for Single Girl Child for PG Programmes](#).

5.	Post-Graduate Merit Scholarship for University Rank Holders	INR 3,100 per month for the duration of two years.	**Eligibility:** Rank holders of each university at UG level are eligible to apply for this scholarship.	May to August; Online on the official website of UGC's Post-Graduate Merit Scholarship for University Rank Holders for PG Programmes
6.	**Promotion of science education (POSE)**	4000 per month for 3 years and one time mentorship grant of INR 12000.	Students must enrolled in B Sc programme and selection is based on merit of previous class.	September to December ; Online https://dst.highereduhry.ac.in/Student_POSE.aspx

DURING RESEARCH

1.	**Dr K S Krishnan Research Associateship (KSKRA)**	INR 26,000 per month as a stipend. The duration of this scholarship is two years.	Candidates who possess a Master's or PhD degree in Science or Engineering meet the eligibility criteria. The upper age limit to apply for this scholarship is 32 years.	November to February; Online at the website www.daebrns.gov.in
2.	**Women Scientist Scheme (WOS-A)**	For PhD holders or equivalent candidates the maximum amount granted is INR 30 lakh. For M.Sc or equivalent the maximum grant amount is	Women candidates who are pursuing an **MSc** or PhD are eligible to apply for this scheme. The official website informs that "the minimum age limit under WOS-A is 27 years and maximum age for MSc or equivalent category is 35 years and for PhD and equivalent category is 57	All through the year; By post and Online on the official website of the Women Scientists Scheme

		INR 20 lakh. The amount is awarded for a maximum duration of three years.	years".	
3.	**IGCAR (Indira Gandhi Centre for Atomic Research) JRF**	INR 16000 per month	Aspirants need to be Indian nationals and should be less than 28 years of age. Further, candidates should have secured at least 60 per cent aggregate marks at the UG/PG level.	May to June; Offline and Online on the official website of IGCAR.
4.	**SHYAMA PRASAD MUKHERJEE FELLOWSHIP**	Rs.36000/- + HRA per month during the first two years of the fellowship and a Contingency grant of Rs.70000/- p.a. May be raised to Rs.42000/- + HRA per month from third year onwards on the basis of assessment through interview	A maximum of 10 SPM Fellowships each in Chemical Sciences and Life Sciences, and 5 each in Earth, Mathematical, Physical and Engineering Sciences will be awarded through interview mode from NET held in December 2014.Candidates in ratio of 1:3 will be called for interview in each subject.	https://www.csirhrdg.res.in /old_website/ spm.html

INTERNSHIPS

1.	**AcSIR Dr APJ Abdul Kalam**	INR 25,000 during	1st year M.Sc	**December to January**

		programme with travel allowance INR 5,000. The amount is paid to aspirants after they complete their training programme and submit their project report to the Lab Coordinator.	students (students must have scored minimum first class in their pre degree semesters.)	**Online on the [official website of AcSIR](#).**
Summer Training Programme				
2.	**Mathematics Training and Talent Search Programme (MTTS)**	The programme is free of cost wherein aspirants are offered travel allowance, certificates and cash prizes.	To promote independent thinking in mathematics and to provide a platform for the talented students so that they can interact with their peers and experts in the field.	October to December; **By Post and Online on the [official website of the Mathematics Training and Talent Search Programme (MTTS)](#)**

4.3 Scholarships, Internships and Startups after B.Sc Computer Science

Scholarships	Internships	Freelancing & Startups (after B.Sc Computer Science)
• UGC NET / JRF (MSC)	• IIT Summer Internship Programs	• Web & App Development
• Facebook AI Research (FAIR) Fellowship	• NASA Research Internships (for advanced AI/ML & space computing research)	• AI/ML Consulting
• Google Women Techmakers Scholarship	• Cybersecurity & AI Research Internships at DRDO & ISRO	• Cybersecurity & Digital Forensics
• AICTE GATE Scholarships	• TCS, Infosys, Wipro Summer Internships	• Blockchain Development & Cryptocurrency Trading
• INSPIRE Scholarship	• Microsoft Research Internships	• Game & AR/VR Development
• PM Scholarship Scheme	• Google Summer of Code (GSoC)	• Cloud Solutions & Automation

CHAPTER 5: JOB ROLES

5.1 Jobs Offered After B.Sc Physical Sciences (Government Sectors)

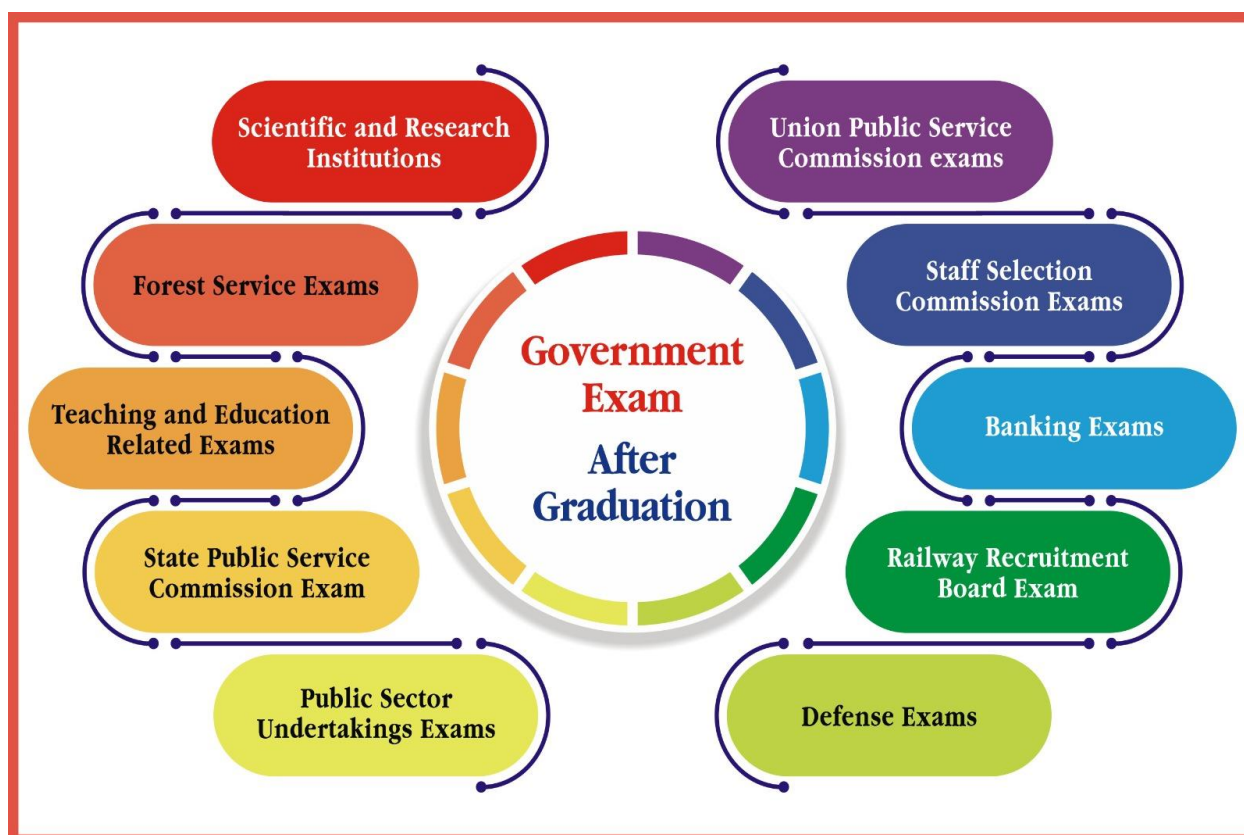| Job Role	Recruiting Agencies	Average Salary
Scientist, Technical Assistant, IT Officer, IARI-Laboratory Assistant	DRDO; **DRDO:** https://www.drdo.gov.in (Job section) (Career section)	₹6 to ₹15 LPA.
Scientist/Engineer 'SC', Technician, Research Associate, Research Scientist.	ISRO; **ISRO:** https://www.isro.gov.in	₹6 to ₹15 LPA.
Network Engineer,	NIC; https://www.nic.in (Recruitment)	₹6 to ₹25 LPA.
Cyber Security Analyst	NIELIT; https://www.nielit.gov.in	₹6 to ₹15 LPA.
System Administrator	CERT-In,	₹6 to ₹15 LPA.
Civil Services, Indian Engineering Services (IES), Indian Information Service, IAS, IPS, IRS	UPSC; https://www.upsc.gov.in	₹6 to ₹25 LPA.
IT Officer, Bank PO, Bank Clerk (IBPS, SBI, RBI, NABARD)	Banking Sector; IBPS (https://www.ibps.in), SBI (https://sbi.co.in/careers)	₹6 to ₹20 LPA.
CGL, CHSL (IT & Data Entry Roles)	SSC	₹6 to ₹15 LPA.
Technical & IT Officer Roles, Armed Forces(AFCAT, CDSE, Coast Guard(only interview)	**NDA**	₹6 to ₹15 LPA.
Lab Technician	Apollo Homecare	INR 4 LPA
Radiologist	AIIMS	INR 6 LPA
Lab Supervisor, (NTPC, JE, RPF SI, etc)	Western Railway	INR 3 LPA
Statistician	Indian Institute of Research	INR 4.5 LPA

Job Role	Recruiting Agencies	Average Salary
Radiologist	Medical Schools and Hospitals	INR 6 LPA
Scientific/Technical Officer	BARC; https://www.barc.gov.in/careers/	Level 10 – 56,100/-
Scientific Assistant, Non-Ministerial, Scientific & Technical Post	National Institute if Electronics and Information Technology (NIELIT), New Delhi	Pay Level 6 (Rs. 35400-112400)
Project Scientist, Training Co-ordinator, Project Associate	Indian Institute of Tropical Meteorology (IITM), Pune	Rs. 57,700 – 75,000
Scientist-C	IUAC, Delhi	Rs. 56,100 -17,75,000
Geophysicists, AEE	ONGC; https://ongcindia.com/web/eng/career/recruitment-notice	₹6 to ₹25 LPA.

5.2 **Jobs Offered After B.Sc Physical Sciences (Private Sectors)**

- **Application Period:** Year-round, with major recruitment cycles in March- June and September-December.

Job Role	Recruiting Dept.	Tentative Salary
➢ Research Scientist, Clinical Research Scientist ➢ Chemical Research Scientist ➢ Pharmacist ➢ Quality Control Manager	TATA, UTC Aerospace, Hindustan Unilever, SanDisk, Microsoft, Motorola, Godrej Aerospace	INR 20,000 to 25,000/- per month
➢ Data Scientist ➢ AI Engineer ➢ Software Developer, Cloud	Google, Microsoft, Amazon, Infosys, TCS, Wipro, IBM, Accenture, HCL, Cognizant, Deloitte	INR 6 LPA to 30 LPA

Architect, Cybersecurity Specialist.	■ **Google Careers:** https://careers.google.com ■ **Microsoft Careers:** https://careers.microsoft.com ■ **Amazon Jobs:** https://www.amazon.jobs ■ **TCS Careers:** https://www.tcs.com/careers ■ **Infosys Careers:** https://www.infosys.com/careers ■ **Accenture Jobs:** https://www.accenture.com/us-en/careers	
Quality Research Analyst	MindForce Research	INR 6 LPA
Consulting Physicist	TCS	INR 3 LPA
Lab Technician	DPEA India	INR 3 LPA

5.3 *Job Opportunity After Life Sciences*

After Graduation	After Post Graduation
Private Sectors	
➢ **Job Roles:** 1. **Quality Control Analyst** 2. **Sales Executive** 3. **Laboratory Technician** ➢ **Eligibility:** B.Sc. degree in a relevant field. ➢ **Recruiting Organizations:** ● Pharmaceutical companies (e.g., Cipla, Biocon) ● Environmental consultancies ● Agricultural firms **Salary Range:** ₹2.5 to ₹4.5 lakhs per annum.	➢ **Job Roles:** 1. **Biotechnologist** 2. **Regulatory Affairs Specialist** 3. **Clinical Research Associate** ➢ **Eligibility:** M.Sc. degree in a relevant discipline. ➢ **Recruiting Organizations:** ● Biotechnology firms ● Pharmaceutical companies ● Clinical research organizations **Salary Range:** ₹4 to ₹7 lakhs per annum.

After Post Graduation	
Ph.D.	**Postdoctoral Research**
Private Sectors	
➢ **Job Roles:** 1. **R&D Manager** 2. **Senior Scientist** 3. **Consultant** ➢ **Eligibility:** Ph.D. with relevant experience. ➢ **Recruiting Organizations:** ● Multinational pharmaceutical companies ● Agricultural research firms ● Biotech startups **Salary Range:** ₹12 to ₹20 lakhs per annum.	➢ **Job Roles:** 1. **Senior Research Scientist** 2. **Principal Investigator** 3. **Scientific Consultant** ➢ **Eligibility:** Ph.D. with postdoctoral experience. ➢ **Recruiting Organizations:** ● Global biotech firms ● Pharmaceutical companies ● Research consultancies **Salary Range:** ₹10 to ₹18 lakhs per annum.

After Graduation	After Post Graduation
Government Sector	
> **Job Roles:** 1. **Laboratory Technician** 2. **Field Assistant** 3. **Technical Assistant** > **Eligibility:** B.Sc. degree in a relevant discipline. > **Recruiting Departments:** ● Indian Council of Agricultural Research (ICAR) ● Council of Scientific and Industrial Research (CSIR) ● State Pollution Control Boards > **Salary Range:** ₹3 to ₹5 lakhs per annum.	> **Job Roles:** 1. **Research Associate** 2. **Scientific Officer** 3. **Biochemist**. > **Eligibility:** M.Sc. degree in a relevant field. > **Recruiting Departments:** ● Defence Research and Development Organisation (DRDO) ● Indian Space Research Organisation (ISRO) ● Department of Biotechnology (DBT) > **Salary Range:** ₹5 to ₹8 lakhs per annum.

After Post Graduation	
Ph.D.	**Postdoctoral Research**
Government Sector	
> **Job Roles:** 1. **Principal Scientist** 2. **University/College Professor** 3. **Project Director** > **Eligibility:** Ph.D. in a relevant discipline. > **Recruiting Departments:** ● Indian Institutes of Technology (IITs) ● Indian Council of Medical Research (ICMR) ● National Institutes under CSIR > **Salary Range:** ₹10 to ₹15 lakhs per annum.	> **Job Roles:** 1. **Postdoctoral Fellow** 2. **Senior Research Scientist** 3. **Research Coordinator** > **Eligibility:** Ph.D. with relevant research experience. > **Recruiting Departments:** ● Indian Institutes of Science Education and Research (IISERs) ● National Chemical Laboratory (NCL) ● Various CSIR institutes > **Salary Range:** ₹7 to ₹12 lakhs per annum.

Government Sector Job Opportunites After Chemistry Degree

- **Scientist & Research Positions -** CSIR, DRDO, ISRO, BARC, ICMR etc.
- **Chemical Analyst -** Pollution Control Boards, Forensic Science Labs

- **Quality Control Officer -** Public Sector Units (PSUs) like ONGC, IOCL, BPCL.
- **Food Inspector -** FSSAI, State Food Depatments

- **Pharmacovigilance Officer -** Regulatory agencies such as CDSCO
- **Drug Inspector -** State/Central Drug Regulatory Authorities

- **Teaching Positions -** Schools (after B.Ed.) & Universities (after NET/Ph.D.)
- **Agricultural Chemist -** ICAR, NABL - certified labs

- **Environment Chemist -** CPCB, State PCB, Ministry of Environment

The Story behind our Inspiration

Sitting Row (Left to Right)

Ms. Poonam Narwal, Mr. Rajkumar, Ms. Kanchesh, Ms. Savita Rani, Dr. Vivek Kumar Saini (Principal), Dr. Veenu Mehta, Dr. Sushma, Dr. Meera

Standing Row (Left to Right)

Mr. Amit Saini, Mr. Kulwant, Dr. Shweta, Dr. Mukesh, Dr. Sweety Monga, Ms. Pariti, Dr. Richa Rani, Dr. Kirti, Dr. Poonam Sangwan, Dr. Manjeet, Dr. Naresh Kumar, Dr. Satinder