



SAARTHI • सारथी

करियर मार्गदर्शन पोर्टल • Career Guidance Portal

"सही मार्गदर्शन, उज्ज्वल भविष्य।"

करियर शीट • CAREER SHEET

साइटोलॉजिस्ट

Cytologists study the structure, function, division and pathology of cells. Cytotechnologists examine cell samples under a microscope to help detect cancer and other diseases at an early stage.



Scan for everything on this career

Salary, exams, colleges, the routes in and the steps after — all on the portal.

career.gsssjethantri.in/#/career/cytologist

राजकीय उच्च माध्यमिक विद्यालय, जेठन्तरी

Govt. Sr. Sec. School, Jethantri • ब्लॉक समदड़ी • बालोतरा (Block Samdari • Balotra)

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सुशील कुमार शर्मा

प्रधानाचार्य, रा.उ.मा.वि. जेठन्तरी • मास्टर ट्रेनर
Principal, GSSS Jethantri • Master Trainer



श्री चेनाराम चौधरी

प्रधानाचार्य, डाइट बाड़मेर
Principal, DIET Barmer



श्रीमती संघमित्रा

वरिष्ठ व्याख्याता, डाइट बाड़मेर (सहयोग)
Sr. Lecturer, DIET Barmer (Support)



भरत चौधरी

अभिकल्पना व विकास • व्याख्याता (इतिहास)
Designed & developed • Lecturer (History)

विशेष धन्यवाद • SPECIAL THANKS



सुरेन्द्र सिंह राठौड़

व्याख्याता (इतिहास) • रा.उ.मा.वि. कानाना



सुरेश कुमार सैन

व्याख्याता (भूगोल) • रा.उ.मा.वि. रामसीन मूंगड़ा



वनिता कुमारी

व्याख्याता (इतिहास) • रा.उ.मा.वि. रामसीन मूंगड़ा



कमलेश चौधरी

व्याख्याता (राजनीति विज्ञान) • रा.उ.मा.वि. टापरा

करियर मार्गदर्शन कार्यशाला, डाइट बाड़मेर (14-17 जुलाई 2026) में विकसित व लोकार्पित
Developed & unveiled at the Career Guidance Workshop, DIET Barmer (14-17 July 2026)

यह एक स्वतंत्र परियोजना है, जो सरकार की आधिकारिक करियर-मार्गदर्शन सामग्री पर आधारित है। • An independent project based on the Government's official career-guidance content.

1 About this career

Cytologists study the structure, function, division and pathology of cells. Cytotechnologists examine cell samples under a microscope to help detect cancer and other diseases at an early stage.

2 At a glance

Stream	Science (Biology)
Minimum qualification	B.Sc/M.Sc/PhD Life Science
Avg Starting Salary	₹3–5 LPA
Key Sector	Pathology & research

3 What you need

INTERESTS

- Interest in biology and the study of cells
- A habit of paying attention to fine detail
- Enjoy analysing problems and samples

ABILITIES

- Keen observation and precision
- Patience and concentration
- Scientific and analytical thinking

KEY SKILLS

- Microscopy and slide preparation
- Cytogenetics and chromosome analysis
- Staining techniques
- Cell biology and histology
- Lab safety and sample handling
- Report writing and documentation

4 How to get there

- 1 Complete Class 10+2 Science (Physics, Chemistry, Biology).

- 2 Pursue B.Sc in Biology/Life Science or a related subject (3–4 years).
- 3 Do an M.Sc (Zoology/Botany/Genetics/Life Science) to specialise.
- 4 Gain experience via internships in pathology labs or hospitals.
- 5 Clear CSIR-NET and pursue a PhD for research/teaching.
- 6 Start your career as a Cytotechnologist or Research Assistant.

MAIN EXAMS

- CSIR-UGC NET (Life Science – JRF/Lectureship)
- GAT-B / DBT-JRF (Biotechnology)
- ICMR JRF (medical research)
- University M.Sc entrance exams

5 Where to study

GOVERNMENT INSTITUTES

- University of Rajasthan — Jaipur, Rajasthan (<https://www.uniraj.ac.in/>)
- Mohanlal Sukhadia University — Udaipur, Rajasthan
- Central University of Rajasthan — Ajmer, Rajasthan
- Jai Narain Vyas University — Jodhpur, Rajasthan
- Miranda House, University of Delhi — New Delhi
- University of Calcutta (Cell & Chromosome Research) — Kolkata, West Bengal

PRIVATE INSTITUTES

- St. Xavier's College — Mumbai, Maharashtra
- Amity University — Jaipur, Rajasthan
- Manipal Academy of Higher Education — Manipal, Karnataka

ONLINE

- IGNOU (जीव विज्ञान कार्यक्रम) — Distance learning (India)
- SWAYAM / NPTEL (सेल बायोलॉजी) — Online (India)

FEES

About ₹10,000–₹50,000/year in government institutes; ₹50,000–₹1.5 lakh/year in private ones. (2026 estimate; varies by institute)

SCHOLARSHIPS

- National Scholarship Portal (NSP) (<https://scholarships.gov.in/>)

- Rajasthan CM Higher Education Scholarship (<https://hte.rajasthan.gov.in/>)
- CSIR-UGC JRF/NET Fellowship (<https://csirnet.nta.ac.in/>)
- INSPIRE Scholarship (DST) (<https://online-inspire.gov.in/>)

6 What the work is like

WHERE YOU WORK

Pathology labs, hospitals, colleges and universities, research laboratories, biotech and pharma companies.

WORK CULTURE

Mostly lab-based work; 5–6 days a week, 9–10 hours a day. Some local travel and shifts possible; opportunities also exist for persons with disabilities.

WHO HIRES

- Dr. Lal PathLabs
- All India Institute of Medical Sciences (AIIMS)
- CSIR research laboratories
- SRL Diagnostics
- Tata Memorial Centre
- Universities and medical colleges

DEMAND (2026)

With rising early screening for cancer and disease, the diagnostics and pathology sector is growing fast, creating steady demand for trained cytotechnologists and cell biologists.

7 Career growth

- 1 Trainee Cytotechnologist / Research Assistant
- 2 Cytologist / Cytotechnologist
- 3 Senior Cytologist
- 4 Lead Researcher / Lab Head

EARNINGS

Starting	₹3-5 लाख/वर्ष
Mid level	₹5-9 लाख/वर्ष
Senior level	₹9-15 लाख/वर्ष+

Salary depends on institute, qualification (M.Sc/PhD) and experience; higher in research and private diagnostic chains.

8 The good parts · The challenges

The good parts

- Meaningful contribution to early disease detection
- Opportunities in both research and diagnostics
- Stable, lab-based career

The challenges

- Repetitive and concentration-intensive work
- M.Sc/PhD needed for higher roles
- Care needed around samples and chemicals

9 Real-life journeys

Prof. Arun Kumar Sharma

Eminent Cytogeneticist, Founding Coordinator – UGC Centre for Cell & Chromosome Research (University of Calcutta), Padma Bhushan

Prof. Arun Kumar Sharma was a pioneering scientist in cell and chromosome research at the University of Calcutta. He developed new techniques for studying chromosomes and did deep research on plant and human cells. He received the Shanti Swarup Bhatnagar Prize and the Padma Bhushan.

Wikipedia · https://en.wikipedia.org/wiki/Arun_Kumar_Sharma

Dr. Archana Sharma

Pioneering Indian woman Cytogeneticist & Cell Biologist, Padma Bhushan

Dr. Archana Sharma was one of India's foremost women cytogeneticists, doing remarkable research on chromosomes, cell biology and cytotoxicology at the University of Calcutta. She mentored hundreds of research students and received the Shanti Swarup Bhatnagar Prize and the Padma Bhushan, showing that women too can reach the top in science.

Wikipedia · [https://en.wikipedia.org/wiki/Archana_Sharma_\(botanist\)](https://en.wikipedia.org/wiki/Archana_Sharma_(botanist))

10 If this route does not work out

One exam or one attempt does not close the door. The same subjects also open these routes — entry is usually easier, and you can return to this field later.

- Ecologist
- Space Scientist
- Seismologist

11 Sources & further reading

1. Rajasthan Career Guidance – Cytologist — <https://cg.rajasthan.gov.in/careerguidance/>
2. University of Calcutta – Cell & Chromosome Research — <https://www.caluniv.ac.in/>
3. CSIR-UGC NET (Life Science) — <https://csirnet.nta.ac.in/>
4. National Scholarship Portal — <https://scholarships.gov.in/>



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