### 1. Message from the HODs desk and HOD's Profile pic



Mrs Roonal Pritam Kataria HOD, Assistant Professor

I am pleased to welcome you to the Department of Microbiology, where students and faculty are involved in exciting educational and research activities. The department have a good combination of experienced and young, enthusiastic faculty. All the faculty members are very active bringing the latest knowledge to their lectures and practical classes.

We provide a unique opportunity to students to obtain a valuable education in a relevant field that connects with multiple scientific disciplines. The B.Sc in Microbiology degree program at Jai Hind College allows students to gain an Introduction to the field of Microbiology and to explore many of the more specific areas.

Microbiology is a branch of biological sciences in which identification and characterization of microorganisms and their interactions with the surrounding environment are studied. The scope of Microbiology is huge because of the involvement of microbiology in various fields such as Genetics, Molecular Biology, Biochemistry, Biotechnology, Ecology, Immunology, Medical, Epidemiology, Pharmacy, Veterinary Science, Food sciences, Agriculture, Industrial Microbiology. Our alumni have made significant contributions to some of these areas while working in academia, industry or government research facilities.

Our students are involved not only in regular class activities, but also in research work conducted under the guidance of a faculty member of our department. We encourage them to take up research in diverse arena of Microbiology and get their work published in reputed journals. The department encourages both teachers and students to participate in seminars and conferences at national and international levels and the intercollegiate events. These outcomes are in line with our institutional goal of providing experiential and self-guided learning.

For the holistic development of our students, we organize activities such as guest lectures, workshops, alumni- interactions, parent- teacher meetings, summer trainings, field trips and industrial visits. Through our CSR activities we believe in sensitizing students and giving back to the society as responsible citizens. We provide mentoring to students participating in Microbiolympiad and various other entrances for future admissions. Students at the undergraduate level receive the training they need to excel in their post graduate careers as well as in their professional careers as microbiologists.

I invite you to explore our website to learn more about the opportunities in our Department, and please feel free to contact any of us with questions that you may have.

### 2. <u>ABOUT THE DEPARTMENT:</u>

The Department was established in the year 1981, since then it has provided Quality Education in terms of both, Teaching & Research, to many students who were curious to learn about the World of Microbiology. The Department is recognized under the 'STAR College Scheme' by Govt. of India (GOI)'s Department of Biotechnology (DBT). This has further encouraged the Department's mission of delivering excellent education, laying a strong foundation of Microbiology and inculcating a research culture. This is fortified through - the excellent academic track-record of students, an exceptional list of achievements in curricular & co-curricular activities and a number of students passing out from our Department have completed their 'Masters' and 'Doctorate' degree.

### **OTHER ACTIVITIES**

- Science Awareness Programme: This activity is conducted to promote science amongst school students. SY students give insights to the school students on the subject of Microbiology and also provide basic hands on experiments in Microbiology.
- **Outreach Activity:** Microbiological and Chemical Water analysis of the drinking water of neighbouring societies undertaken by S.Y.B.Sc students. This CSR activity helps in inculcating social relevance of the topics studied and apply their knowledge for a social cause
- **Biocomposting of kitchen waste:** This activity helps the student in spreading awareness about waste segregation in their homes and societies. To carry out biocomposting of their kitchen waste at home or in their communities on a larger scale.

### **ACADEMIC SYNERGIES**

The unique teaching methodologies undertaken by the Department to provide wholesome education are as follows:

- ICT based methods in teaching and learning (Google classrooms, Google drives, Edmodo, presentations, etc.) along with conventional yet effective 'chalk & talk' methods
- **Independent Research Opportunity**: The students are encouraged to take up small research projects (part of their curriculum), some of which have won awards at various intra & inter collegiate events
- **Innovative and interactive pedagogy:** Flip classroom, problem & case-study based approach.
- Additional Academic Activity: With the advent of Autonomy, the Department has undertaken various value-added Certificate Courses which helps the students to develop skill sets and also gain credits e.g. Bio-composting and Clinical Research.
- **Co-curricular and Extra-curricular activities:** Students are encouraged to participate in Xplore exhibition, Aavishkar Research Convention and various other intra as well as inter-collegiate events for fun-learning and honing the soft skills.
- **Mentorship:** Alumni interactive sessions, remedial coaching, parent- teacher meetings.

### 3. DEPARTMENT PROFILE

NAME	DESIGNATION	QUALIFICATI	SPECIALIZATIO N	E-MAIL ID
		UN	IN	

1.	Dr Ashok Wadia	<b>Principal</b> , Associate Professor	M. Phil, PhD.	Biochemistry	wadia.ashok@ jaihindcollege. edu.in
2	Ms. Roonal Kataria	HOD, Assistant Professor	M. Sc , NET qualified.	Genetics, Molecular Biology, Bioinformatics	roonal.kataria @jaihindcolleg e.edu.in
3.	Dr. Shuchita Deepak	Assistant Professor	PhD.	Medical Microbiology and Immunology	shuchita.deepa k@jaihindcolle ge.edu.in
4.	Ms. Candida Silveira	Assistant Professor	M. Sc , SET qualified.	Industrial Microbiology	candida.silveir a@jaihindcolle ge.edu.in

## 4. **PROGRAMME OFFERED:**

SR. NO	PROGRAMME NAME	DEGREE / DIPLOMA / CERTIFICATE	AIDED / SELF-FINANCED
1.	B.Sc. Microbiology	Degree	Aided

## 5. <u>SUPPORTING STAFF:</u>

NAME DESIGNATION

) Weither CH	Mr. Sandesh Korgaonkar	Laboratory Assistant
	Mr. Joobkesh Khatik	Laboratory Attendant
	Mr. Nand Kishore Sonkar	Laboratory Attendant

# 6. STUDENT ACHIEVEMENT FOR 2018-2020

	Student Name	Class	Events	Position
2018-2019	Mandar	T.Y.BSc	Achiever's night, JaiHind College	Felicitated (Meritorious performance: Academics)
	Rahul	T.Y.BSc	Achiever's night, JaiHind College	Felicitated (100% attendance)
	Prajakta	T.Y.BSc	Quiz, Competition S.I.E.S College	1 <sup>st</sup> Prize
	Aishwarya, Disha and Mansi	S.Y.BSc	X'plore, JaiHind College	1 <sup>st</sup> Prize
	Aishwarya Patel	S.Y.BSc		Honourable Sumitomo Scholarship
	Pankti, Rhitam and Tehreem	F.Y.BSc	18 <sup>th</sup> State Level Microbiolympiad, Shirpur	1 <sup>st</sup> Prize
2019-2020	Udeshna, Himani and Mahesheed	T.Y.BSc	14 <sup>th</sup> Inter- Collegiate Aavishkar Research Convention: 2019- 20	Reached the Final Round
	Aishwarya Patel	T.Y.BSc		Honourable Sumitomo Scholarship

 Anoushka	T.Y.BSc		1 <sup>st</sup> Prize
Agarkhed, Udeshna Chakravarty	1.1.DSC	<ul> <li>Product Presentation event in Microbia , at</li> </ul>	1 Prize
		<ul> <li>Debate Competition,</li> </ul>	1 <sup>st</sup> Prize
		Mithibai Collge	1 <sup>st</sup> Prize
		• Treasure Hunt, Mithibai College	2 <sup>nd</sup> Prize
		<ul> <li>Quiz Competition" (The Brain Jam) in Microscope, at K.J.Somaiya College - 2019</li> </ul>	
		• Crime Investigation event, Jai Hind College	2 <sup>nd</sup> Prize
Himani Jain	T.Y.BSc	• Advertisement competition, SIWS College	1 <sup>st</sup> Prize
		• Treasure Hunt, Mithibai college	1 <sup>st</sup> Prize
		<ul> <li>Debate Competition Mithibai College</li> </ul>	1 <sup>st</sup> Runner Up
Samrin Khatri	T.Y.BSc	• Product Presentation event in Microbia, SIWS college	1 <sup>st</sup> Prize
		• R.I.T.E 2020 Mithibai College	1 <sup>st</sup> Prize
		• Debate Competition, Mithibai College	Runner Up

Zainab Shahiwala and Aamena Qureshi	T.Y.BSc	<ul> <li>Debate, (Health fair), KJ somaiya college</li> <li>Bio Imagica,</li> </ul>	1 <sup>st</sup> Prize
		(Health fair), KJ somaiya college	i prize
		• Star event, (Microbia), SIWS College	1 <sup>st</sup> Prize
		• Fast and Furious, (Quiz- Alchemia), St. Xaviers college	2 <sup>nd</sup> Prize
Aishwarya Patel Mansi Shah Disha Patel	T.Y.BSc	Video Making K.C College	2 <sup>nd</sup> Prize
Tabassum, Shivesh and Tamanna	F.Y.BSc	Microbiolympiad (National Level)	3 <sup>rd</sup> Prize
Laraib, Jitendra, Ankita	F.Y.BSc	X'plore Jaihind College	2 <sup>nd</sup> Prize
Tabassum, Shivesh	F.Y.BSc	X'plore Jaihind College	3 <sup>rd</sup> Prize

### 7. Upcoming events: Refer website

8. Video: Refer ppt sent

### 9. Eligibility Requirements:

The student must have passed 10+2 with a minimum of 65% marks in the respective qualifying examination from a recognized educational board. Admission to B.Sc. Microbiology course is based on Merit-list as the seats are limited. The students must have studied Physics, Chemistry and Biology as the mandatory subjects in 10+2 or any other equivalent qualifying examination.

### 10. FAQ

**Do we need Mathematics in 12<sup>th</sup> Class for admission in Microbiology?** No, Mathematics is not a requirement go Microbiology

After B.Sc Microbiology can I do my masters in Biotechnology or Life Sciences? A Microbiology graduate is eligible for Masters programme in Biotechnology or Life Sciences provided you qualify the entrance such as Jawaharlal Nehru University (JNU) or Joint Graduate Entrance Examination for Biology and Interdisciplinary Life Sciences (JGEEBLIS)