

# SCHOOL OF BIOTECHNOLOGY (SBT)

SHER-E-KASHMIR UNIVERSITY OF AGRICULTURAL SCIENCES & TECHNOLOGY OF JAMMU CHATHA -180009 JAMMU (J&K)



DR. B.N. TRIPATHI Vice Chancellor

Biotechnology is an emerging discipline and has vast potential. There is a great progress in biotechnology related research since last few decades. The outcome of biotechnology in agriculture, health, industry and environment is promising, as evident from the developed countries, which have adopted

and accepted biotechnology as a tool for bio- resource improvement. There is a great need to focus on biotechnological approaches for improvement of human welfare. Since the technology is changing at faster pace and in order to provide solutions to existing problems it is must to be technologically sound. The recent advances made in high through-put genotyping, next generation sequencing and functional genomics aspects are evident; and adopting these tools in research does not only authenticate the results but also makes our job easier. Keeping in view the growing demand, Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu, has opened School of Biotechnology (SBT), which undertakes various degree programmes in the discipline of Biotechnology. The programmes aim to equip the students for a career in biotechnology and allied research areas. I extend my best wishes to all the aspirants who are interested in pursuing research and education in biotechnology.



Dr. R. K. Salgotra Coordinator, SBT

School of Biotechnology, a constituent unit of Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu (SKUAST-J) has taken an initiative to start undergraduate and post-graduate degree programme to produce quality manpower with extensive knowledge, advanced technical knowhow and outstanding academic potential in the subject. The biotechnology degree

programmes will also focus in providing high throughput technological interventions to resolve problems related to agriculture and allied fields. I am sure that you will find School in Biotechnology, SKUAST-J as an institute of excellence in the field of Biotechnology.

#### About SKUAST - Jammu

Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu came into existence on 20th September, 1999 following the amendment in Sher-e-Kashmir University of Agricultural Sciences and Technology Act, 1982 through the State Legislature. The establishment of SKUAST of Jammu has in its background aspirations,





# Information Brochure

# School of Biotechnology Supported by

**DST-FIST & DBT P.G. Programme** 

- · B. Tech. Biotechnology
- · M.Sc. Ag. Molecular Biology & Biotechnology
- Ph.D. Ag. Molecular Biology & Biotechnology

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commitment and missionary zeal to cater the needs of Jammu division for the region specific advances through education, research and extension. With the generous and constant patronage of Chancellor and Pro-Chancellor; Central & State Governments and Indian Council of Agricultural Research, New Delhi; the University is marching ahead for increasing agricultural production and productivity with overall economic enhancement of farmers of Jammu division. SKUAST-J is a multi-campus university with headquarter located at Chatha, Jammu. Since its inception, the University has grown with rapid pace in terms of infrastructure and human resource. The campus at Chatha comprises of modern main faculty buildings of Faculty of Agriculture and Faculty of Basic Sciences, housing 13 Divisions, 1 School, Administrative Block, Conference Hall, Central Library, Student Centre, Farmers' Hostel, Students Hostels, Residential Quarters and Shopping Complex. The faculty of Agriculture at Chatha has 231.2 ha land. Faculty of Veterinary Sciences & Animal Husbandry at R. S. Pura has 33.6 ha land holding. The faculty comprises of 17 Divisions with full fledged Academic Block, modern Veterinary Clinical Complex, Class Room cum Examination Complex, Library and Hostels for boys and girls to cater the needs of faculty and students undergoing various degree programmes in animal science disciplines. There are eight research stations/sub-stations and six KVKs in the university which are located in different agro-climatic zones of Jammu region of the state for catering the location-specific needs of the farming community. The total land holding (including research stations/sub-stations and KVKs) of the university is 455.65 ha. The University pursues high standard research through research projects funded by various central and state agencies.

### Mission

The Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu aspires to become a leading agriculture University in India with the mandate of serving the people of Jammu division, the State and the Nation.

#### **Mandate**

- Advancement of education in Agriculture, Animal Husbandry, Veterinary Sciences and other allied sectors.
- Conduct basic, strategic and applied research in agriculture and allied sectors.
- Dissemination of knowledge and technology to the farming community.
- © Collaborate with National and International organisations for enhancing the knowledge, expertise and excellence for the well being of the people of Jammu and Kashmir in particular and the country in general.

# **About School of Biotechnology**

The School of Biotechnology, an integral part of Sher-e-

Kashmir University of Agricultural Sciences and Technology of Jammu (SKUAST-J) came into existence in 2010 on selfsustainable basis with the sole aim to generate quality manpower with extensive knowledge, advanced technical know-how and outstanding academic potential in the subject. The School of Biotechnology is offering B.Tech, M.Sc. and Ph.D. degree programmes to aspirants and admissions are made on the entrance based merit in all the degree programmes except Ph.D. Programme. The courses have been designed in such a way so as to provide ideal learning opportunities and hands-on practicals to the students to become qualified and skilled professionals in order to meet the needs of the growing industry. The course curriculum includes courses from biotechnology and allied fields like plant, animal and biotechnology. The course curriculum also includes nano-biotechnology and bioinformatics courses to keep the students abreast with the latest technological know-how.

#### Mandates

- Basic, strategic and applied research for growth of agriculture and allied fields.
- Post-graduate teaching & research and development of human resource.
- 3. Developing and strengthening collaborative linkages with national/international organizations in mutual areas of interest in research and teaching.
- To serve as a centre for academic excellence in the area of Post-Graduate education in Biotechnology.
- To provide national leadership in Biotechnological research through the development of new concepts and technologies.

## **Objectives**

- To produce quality manpower with extensive knowledge, advanced technical know-how and outstanding academic potential in the subject.
- To provide high throughput technological interventions to resolve problems related to agriculture and allied fields.

# **Degree Programmes Offered**

The School of Biotechnology is offering following degree programmes to the aspiring students of the School of Biotechnology.

A. Bachelors' Degree
Programme (B.Tech): Four year
degree programme to be
completed in VIII semesters.
Semester wise layout of the
courses offered for B.Tech
Biotechnology are:



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Research	<b>Scholars</b>	in Lab.
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Semes	Semester-l Research Scholars in Lab.				
S.No.	Course No.	Course Title	Cr hrs		
1.	AEXT 113	Human Ethics	1(1+0)		
2.	AGRON 113	Crop Production Technology	3(2+1)		
3.	BIO 112/	Basic Botany/	3(2+1)		
	MATH 112	Basic Mathematics I	3(3+0)		
4.	BIO 113	Biodiversity and its Conservation	2(2+0)		
5.	<b>BIOT 111</b>	Cell Biology	2(2+0)		
6.	BIOT 112	Basic Genetics	3(2+1)		
7.	<b>BIOT 113</b>	Introduction to Biotechnology	3(2+1)		
8.	FOR 112	Environmental Studies and			
		Disaster Management	3(2+1)		
9.	FST 111	Food Science and Processing	2(1+1)		
10.	COCA 111	NSS	1(0+1)***		
	Total		15+7 (22) +1 NC=23		

Semester-II	Se	m	es	te	r-l	I
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Semes	CONTRACTOR OF THE PARTY OF THE		
S.No.	Course No.	Course Title	Cr hrs
1.	AEXT 122	Communication Skills and	
		Personality Development	2(1+1)
2.	BIO 121/	Basic Zoology	3(2+1)/
	MATH 121	Basic Mathematics II	3(3+0)
3.	BIOT 121	Plant Tissue Culture	3(2+1)
4.	BIOT 122	Molecular Biology	3(2+1)
5.	<b>BIOT 123</b>	Recombinant DNA Technology	3(2+1)
6.	*FRTS 121/	Production technologies for	
		Horticultural Crops	3(2+1)/
	**VAN 101	Anatomy and Physiology of Livestock	3(3+0)
7.	MICRO 121	Microbiology	3(2+1)
8.	STAT 121	Basic Statistics	2(1+1)
9.	COCA 121	NSS	1(0+1)##
	Total		15+7(22)+
			1 NC=23
			1 NC=23

Semes	ter-III		
S.No.	Course No.	Course Title	Cr hrs
1.	BIOT 212	Classical and Molecular Cytogenetics	3(2+1)
2.	*GPBR 211/	Fundamentals of Plant Breeding/	
	**AGB 212	Introduction to Animal Breeding	3(2+1)
3.	*GPBR 212/	Breeding of Field Crops/	
	**VPE 211	Animal Health Care	3(2+1)
4.	LPM 211	Livestock Production and Management	3(2+1)
5.	<b>MATH 211</b>	Biomathematics	3(2+1)
6.	*PATH 211/	Fundamentals of Crop Protection/	
	**LPT 211	Livestock Product Technology	3(2+1)
7.	PPHY 212	Plant Physiology	3(2+1)
8.	STAT 212	Information and Communication	
		Technology	2(1+1)
9.	COCA 211	NSS	1(0+1)##
	Ť	otal	15+8(23)+ 1 NC=24

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Semes	ter-IV		
S.No.	Course No.	Course Title	Cr hrs
1.	AECO 222	Entrepreneurship Development and	
		Business Management	2(1+1)
2.	AECO 223	Economics and Marketing	3(2+1)
3.	BICM 221	General Biochemistry	4(3+1)
4.	BINF 221	Introductory Bioinformatics	3(2+1)
5.	BIO 221	Biophysics	3(2+1)
6.	BIOT 221	Plant Genetic Transformation	3(2+1)
7.	BIOT 222	Fundamentals Electronics and	
		Instrumentation in Biotechnology	2(1+1)
8.	MICRO 221	Microbial Genetics	3(2+1)
9.	COCA 221	NSS	1(0+1)##
		Total	15+8 (23)
			+1 NC=24
Camac	tor V		

Semes	ster-V		
S.No.	Course No.	Course Title	Cr hrs
1.	AGB 311	Animal Biotechnology	4(3+1)
2.	BICM 311	Enzymology and Enzyme Technologies	3(2+1)
3.	BIOT 311	Molecular Genetics	2(2+0)
4.	BIOT 312	Nanobiotechnology	2(2+0)
5.	<b>BIOT 313</b>	Molecular Marker Technology	2(2+0)
6.	BIOT 314	Genomics and Proteomics	3(3+0)
7.	<b>BIOT 315</b>	IPR, Biosafety and Bioethics	2(2+0)
8.	STAT 311	Agricultural Informatics	3(2+1)
9.	VMC 311	Immunology <b>Total</b>	3(2+1) <b>20+4=24</b>

#### Samastar-VI

Semes	ster-vi		
S.No.	Course No.	Course Title	Cr hrs
1.	BINF 321	Computational Biology	3(2+1)
2.	STAT 322	Biostatistics	3(2+1)
3.	Optional/	Electives (4): Only one to be chosen	
Elective Courses (6)		(each with six courses)	18
		Plant Biotechnology	12+6
		Animal Biotechnology	13+5
		Microbial & Environ. Biotechnology	14+4
		Bioinformatics	11+7
		Total	24

Semester-VII		
Course No.	Module*	Cr hrs
BIOT 411	Plant Biotechnology	20(0+20)
Student READY - In-house	2. Animal Biotechnology	
Skill Development Modules	<ol><li>Microbial and Environment</li></ol>	tal
	Biotechnology	
	4. Bioinformatics	
	*To opt only one module as p	er
	the chosen elective	
	Educational Tour	2**
	Total	20+2NC =22

#### Semester-VIII

(	Course No.	Course Title	Cr hrs
I	BIOT 421	Student READY - Project Formulation, Execution and Presentation	10(0+10)
1	BIOT 422	Student READY - Entrepreneurial Development in Biotechnology (- On-campus/Off Campus)	10(0+10)
		Total	0+20 =20

Eligibility: 10+2 with PCB/PCM/PCBM/Agriculture with Science subjects or equivalent Courses marked \*are optional to the package of Animal Science courses marked as \*\*
Courses marked \*\* are optional to the package of Agriculture Courses marked as \*
# Remedial/Deficiency Course; ##NC: Non Gradial Course





**B. Masters' Degree Programme (M.Sc.)**: This is a two-year degree programme to be completed in IV semesters. The layout of the major courses offered for M.Sc. Biotechnology is given below:

S. No.	Course No	o. Course Title	Credits
1	MBB -501	Principles of Biotechnology	3+0
2	MBB -502		3+0
3	MBB -503		3+0
4	MBB -504	Techniques in Molecular Biology I*	0+3
5	MBB -505	Omics and System Biology*	2+1
6	MBB- 506	Plant Genetics Engineering	3+0
7	MBB -507	Techniques in Molecular Biology II	0+3
8	MBB -508	Introduction to Bioinformatics	2+1
9	MBB -509	Plant Tissue Culture	2+1
10	MBB -510	Microbial and Industrial Biotechnology	2+1
11	MBB -511	Molecular Plant Breeding	2+1
12	MBB -512	IPR, Biosafety and Bioethics	2+0
13	MBB -513	Immunology and Molecular Diagnostics	3+0
14	MBB -514	Nano-Biotechnology	2+1
15	MBB -515	Environmental Biotechnology	3+0
16	MBB -516	Bio-entrepreneurship#	1+0
17	MBB-517	Stress Biology and Genomics#	2+0
18	MBB-518	Gene Regulation#	2+0
19	MBB-591	Master's Seminar	1+0
20	MBB-599	Master's Research	0+30

<sup>\*</sup> Core Courses # New Courses

**Minor courses**: (8 credits - from one of the related disciplines) Biochemistry, Genetics and Plant Breeding, Microbiology, Plant Physiology, Plant Pathology, Entomology, Bioinformatics, Plant Genetic Resources.

Basic Supporting courses: (6 credits - from these disciplines) Biochemistry, Microbiology, Genetics and Plant Breeding, Statistics, Bioinformatics, Computer Applications

Eligibility: B.Sc./B.Sc. (Hons.) Biotechnology

**C. Doctoral Degree Programme (Ph.D.)**: This is a three degree programme which is completed in VI semesters. The layout of the major courses offered for Ph.D. Biotechnology is given below:

S.No.	Course No	o. Course Title	Credits
1	MBB-601	Plant Molecular Biology*	3+0
2	MBB-602	Plant Genome Engineering*	3+0
3	MBB-603	Plant Omics and Molecular Breeding	3+0
4	MBB-604	Commercial Plant Tissue Culture	2+0
5	MBB-605	Plant Microbe Interaction#	2+0
6	MBB-606	RNA Biology#	1+0
7	MBB-607	Plant Harmone and Signaling#	2+0
8	MBB-608	Computational and Statistical tools	
	1	in Biotechnology#	2+1
9	MBB-691	Doctoral Seminar I	1+0
10	MBB-692	Doctoral Seminar II	1+0
11	MBB-699	Doctoral Research	0+75
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<sup>\*</sup> Core Courses # New Courses

**Minor courses:** (8 credits - from one of the related disciplines) Biochemistry, Genetics and Plant Breeding, Microbiology, Plant Physiology, Plant Pathology, Entomology, Bioinformatics, Plant Genetic Resources.



### Research Scholars in Lab.

Basic Supporting courses: (6 credits - from these disciplines) Biochemistry, Microbiology, Genetics and Plant Breeding, Statistics, Bioinformatics, Computer Applications

Eligibility: M.Sc.Biotechnology/M.Sc.Biosciences

#### **FEE STRUCTURE**

Degree Programme	Fee Structure (per year)	
B.Tech.	Rs. 1,00,000/-	
M.Sc.	Rs. 1,00,000/-	
Ph.D.	Rs. 90,000/-	

#### **FACULTY**

In order to impart and undertake quality teaching and research, the School of Biotechnology has extremely competent faculty comprising of core and adjunct faculty.

#### **CORE FACULTY**

The core faculty is actively involved in the teaching and research of students of the School of Biotechnology. The research interests of the core faculty members are given below:-

#### Dr. R. K. Salgotra

Professor & Coordinator

Area of specialization: Plant Genetics and Molecular Biology

Research Interests: Plant genomics and integration of genomic tools in crop improvement. Molecular breeding for development of crop varieties resistance to biotic and abiotic stresses

#### Dr. A.K. Singh

Professor

**Area of specialization:** Molocular Biotechnology and Plant Tissue Culture

Research Interest: Standardization of micropropagation protocols for important horticultural crops. Use of molecular markers for the improvement of important agronomic and quality traits in crop plants

#### Dr. Manmohan Sharma

Professor

**Area of specialization:** Molecular Biotechnology and Plant Tissue Culture

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### Innovative Learning with Smart Classroom

Research Interests: Understanding genetics of agronomic traits of rice and brassica. Development of crop varieties using genomic tools. Development of tissue culture protocols for generation of quality planting material and crop improvement.

## Dr. Gyanendra Kumar Rai

Associate Professor

Area of specialization: Plant Biochemistry and Molecular Biology Research Interests: Abiotic stress tolerance mechanism. Improvement of quality traits.

#### **Dr. Narinder Panotra**

Assistant Professor

**Area of specialization:** Crop Production and Nutrient Management **Research Interests:** Biochemical analysis of important crops and improvement of nutrient use efficiency. Plant tissue culture.

#### Dr. Susheel Sharma

Assistant Professor

Area of specialization: Genomics and Moleciular Breeding
Research Interests: Genomic assisted breeding for traits of
horticultural importance in vegetable crops.

#### Dr. Ravinder Singh

Assistant Professor

Area of specialization: Molecular Breeding and Plant Genomics.

Research Interests: Deployment of omics tools and resources for structural and functional characterization of genes controlling traits of economic prominence in bread wheat and indian mustard.







**SJBR 118** 

**SJBR 123** 

**SJBR 138** 



S. No.	Genotype Name	Grain Yield/Plot (30 m <sup>2</sup> ) (Kg)	Grain Yield/ha ( q)
	SJBR 118	12.700	42.33
	SJBR 123	12.000	40.00
	SJBR 138	12.550	41.83
Bas	370 (Check)	10.100	33.66

Technologies Developed

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SKUAST JAMMU

#### In-House Faculty

Trained and experienced teaching fraternity from Faculty of Agriculture, Faculty of Veterinary Sciences and Animal Husbandry and Faculty of Basic Sciences.

#### **Guest Faculty**

In order to keep the faculty and students updated with latest developments in the field of Biotechnology and allied sciences, a series of guest lectures by the eminent researchers and academicians is periodically arranged from time to time. The eminent guest faculty includes:-

- Dr. R.K. Varshney, Research Programme Director, ICRISAT, Patancheru, Hyderabad (Telangana)
- Dr. T. R. Sharma, DDG (Crop Sciences), ICAR, New Delhi.
- Dr. P. K. Gupta, Emeritus Professor, CCS University, Meerut.
- Dr. N. K. Singh, National Professor, NRC Plant Biotechnology, IARI Campus, New Delhi.
- Dr. S. S. Gosal, Vice Chancellor, Punjab Agricultural University, Ludhiana.
- Dr. Manoj K. Dhar, Former Vice Chancellor, University of Jammu.
- Dr. P. A. Kumar, Former Director, NRC Plant Biotechnology, IARI Campus, New Delhi.
- Dr. R. Srinivasan, Former Director, NRC Plant Biotechnology, IARI Campus, New Delhi.
- Dr. V. Verma, Former Director and Dean, School of Biotechnology, SMVDU, Katra.
- Dr. Dhananjya Pratap Singh, NBAIM, Mau (U.P.).



Sh. Narendra Singh Tomar (Hon'ble Minister of Agriculture & Farmers Welfare) Visited Rice Lab at SBT





#### **INFRASTRUCTURE**

#### Class Rooms

AC fitted classrooms are well equipped with writing boards, comfortable sitting arrangement, well ventilated windows etc. LCD projectors systems are also available.

#### Laboratories

In order to provide teaching and research in diverse areas of biotechnology, School of Biotechnology has well-equipped laboratories namely Rice Molecular Biology Lab., Plant Tissue Culture Lab., Functional Genomics Lab., Proteomics & Biochemical Lab. and Bioinformatics Lab., besides central facilities such as heavy instrumentation lab. and central lab.

The school of biotechnology has been proposed to upgrade as Institute of Biotechnology. In order to understand teaching and research in all the allied fields of biotechnology, following setups are proposed:

- Molecular Biology and Bioinformatics
- Agricultural Biotechnology
- Animal Biotechnology
- Nanotechnology
- Agricultural Microbiology

#### **NEW DIMENSIONS OF UNIVERSITY CREATIONS**

- Faculty of Basic Sciences
- Faculty of Forestry & Horticulture
- Faculty of Dairy Technology
- Faculty of Agriculture Engineering
- Faculty of Home Sciences
- Faculty of Fisheries

# CURRENT RESEARCH TOPICS OF POST GRADUATE STUDENTS

- Association mapping for key traits in important crops using genotyping by sequencing (GBS) and genome wide association studies (GWAS).
- Gene introgression and pyramiding for various biotic and abiotic stresses in economically important crops.
- Development of genome wide genomic resources for important crops.
- Understanding of molecular biology of important, biotic and abiotic stress related traits in various crops.
- Assessment of genetic diversity in field, vegetable and fruit crops using molecular and biochemical markers.
- Tissue culture of medicinal and aromatic crops.
- Genomic finding in crops



**Technology at Display** 

#### **LIBRARY**

The University has a central library at main campus Chatha and faculty library at R. S. Pura campus. The university library is Wi-Fi enabled, having access to 2900 online journals through CeRA consortium, other open access databases and Internet services. The Central library also has e-Kiosk facility for accessing the database of literature. The university has around 26468 books, 85 periodicals and 550 dissertations. The Central library at Chatha and faculty library at R. S. Pura are equipped with 30 KWA Solar Power back-up. The School is also having the provision of Departmental Library.

### **Computer Lab**

The University is having central computer lab with high speed internet facility. Besides, the School is having the provision of separate computer lab and seminar cum meeting hall.

#### **FACILITIES FOR STUDENT ACTIVITIES:**

- Indoor games like TT, Carom, Ludo, Chess etc.,
- Reading room and a cafeteria.
- Outdoor sports Cricket, Football, Volley Ball, Badminton,
- Athletics etc.
- Gymnasium
- Yoga Centre
- Conference hall for literary/cultural events.

#### **MEDICAL FACILITIES:**

- Medical facilities are available to the students, faculty members and university staff at both the campuses of the university.
- Medicines and clinical laboratory tests are Free for students and boarders.
- Two fully equipped ambulances for shifting of patients.

#### **HOSTEL FACILITIES:**

Separate hostels for boys and girls.

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#### **FIST Sponsored Library**

- Spacious and well furnished dining hall, common room, lawn, courtyard, CTV with cable/ dish connection etc., have also been provided in the hostels.
- Facilities for indoor games like table tennis, chess, ludo and carrom have also been made available.
- SKUAST-J also provides transport facility to non hostlers.

#### STUDENTS' EXPOSURE AND PLACEMENTS:

In an endeavour to improve the capacity building of the students, exposure for taking the students to various institutions of eminence, laboratories and experimental fields is the part of the course curricula. Interaction with eminent scientists from national and international institutes is on the regular basis. The School provides full support to the students in their placements. For this purpose a separate Placement and Counselling Cell is functioning with involvement of the students in this activity through Students' Placement Committee. Career prospect in biotechnology is vast as it caters to the requirements of agriculture, animal husbandry, nutrition and environmental conservation while on the other hand this branch of science also caters the industrial sector such as food and beverages industry, textiles industry, biological products, medicines and pharmaceuticals.

#### PATRONIZING AND SCIENTIFIC ADVISORY BOARD

Dr. B.N. Tripathi	Vice Chancellor	Chairman
Dr. R. Nanda	Director Education	Member
Prof. S.E.H Rizvi	Dean, Faculty of Basic Sciences	Member
Dr. S.K.Gupta	Registrar & Dean, FoHF	Member
Dr. B.C. Sharma	Dean, Faculty of Agriculture	Member
Dr. M.S. Bhadwal	Dean, FVSc. & A.H.	Member
Dr. J.S. Soodan	Dean, Faculty of Dairy Technology	Member
Dr. S. Sharma	Dean, Faculty of Agri. Engineering	Member
Dr. Jyoti Kachroo	DPMO	Member
Prof. A.K. Sharma	University Librarian	Member
Dr. R.K. Salgotra	Coordinator, SBT	Member Sec.











**High Quality Instrumentation Facilities** 













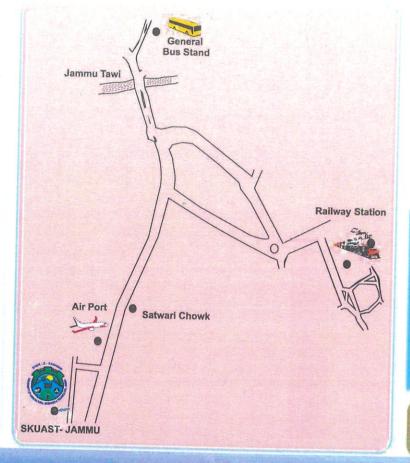
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#### How to Reach Us

From	То	Distance	Time
Jammu: General Bus Stand	SKUAST-J (SBT)	13 KMS	20/30 MIN
Jammu: Railway Station	SKUAST-J (SBT)	14 KMS	20/30 MIN
Jammu: Airport	SKUAST-J (SBT)	06 KMS	15 MIN





Over view of Museum



A view of Central Library

#### Coordinator

School of Biotechnology

Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu, Chatha - 180009, Jammu & Kashmir Office Ph.: 0191-2263713 Mob.: 9419153813

E-mail: schoolofbiotechnology@gmail.com

### Registrar

Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu, Chatha - 180009, Jammu & Kashmir Office Ph.: 0191-2262011

FOR ADMISSION & OTHER DETAILS SUBMISSION OF APPLICATION FORM LOG ON OUR OFFICIAL WEBSITE:

www.skuast.org, www.skuastjadmission.org



# Concept Compliled and Edited by :

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