

# 26<sup>th</sup> MEETING OF ACADEMIC COUNCIL MINUTES



Sher-e-Kashmir  
University of Agricultural Sciences & Technology of Jammu  
Chatha, Jammu-180009 (J&K)



# 26<sup>th</sup>

## ACADEMIC COUNCIL MEETING

# MINUTES



***Sher-e-Kashmir***  
***University of Agricultural Sciences & Technology of Jammu***  
***Chatha, Jammu -180009***

### Minutes of 26<sup>th</sup> Academic Council Meeting

The 26<sup>th</sup> meeting of the Academic Council of SKUAST-Jammu was held on January 23, 2025, under the chairmanship of Hon'ble Vice-Chancellor, Prof. B.N. Tripathi. The meeting was attended by statutory officers of the University, Heads of Divisions, nominated members, and an expert member. A detailed list of participants is provided in **Annexure-I**.

In his opening remarks, Prof. Tripathi emphasized the pivotal role of efficient delivery systems in teaching, research, and extension, highlighting their direct impact on educational quality and the University's overall ranking. He underscored the necessity of adopting innovative teaching methodologies and integrating modern pedagogical approaches to address contemporary educational challenges. By combining these advancements with traditional strengths, he stressed, the University could significantly enhance the overall quality of education. Following his address, Dr. Anil Kumar, Member Secretary and Registrar, SKUAST-J, presented the agenda items for discussion.

#### **Agenda Item No. AC (26) 01 : Confirmation of minutes of 25<sup>th</sup> Meeting of Academic Council**

The Member Secretary informed the house that the minutes of the 25<sup>th</sup> Academic Council meeting, held on May 1, 2024, had been circulated to all members vide no AUJ/Acad/2024-25/F-08/2537-86, dated July 8, 2024. As no comments or objections were received from any members, the following resolution was adopted:

***"Resolved that the minutes of the 25<sup>th</sup> meeting of the Academic Council, as circulated vide AUJ/Acad/2024-25/F-08/2537-86, dated July 8, 2024, were confirmed (Annexure-II)."***

#### **Agenda Item No. AC (26) 02 : Engagement of Professor of Practice and Adjunct Faculty.**

The Member Secretary informed the house that a committee had been constituted under Order No. AUJ/Acad/F-08/23-24/11289-297, dated March 27, 2024. Based on the committee's recommendations and with the approval of the competent authority, guidelines for the engagement of "Professor of Practice" and the nomination of "Adjunct Faculty" were notified via Order No. AUJ/Est./G-687/24-25/9748-9827, dated October 31, 2024.

The National Education Policy 2020 (NEP-2020) seeks to transform higher education by emphasizing skill-based learning aligned with the evolving demands of industry and the economy. The Hon'ble Vice-Chancellor informed the house that the University had recently engaged two Professors of Practice under the Industry-Funded Category to strengthen industry-academia collaboration and provide students with exposure to an industrial environment. The appointed faculty members are:

- **Dr. Gulshan Singh Rana** – Head of Market Development and Commercial, Lead Commercial Capability & Community, Bayer Crop Science
- **Mr. Satinder Singh Nandra** – Vice-President, Technical & Supply Chain, Kandhari Beverages Pvt. Ltd., Jammu

This initiative aims to bridge the gap between academic learning and industry practices, enhancing students' practical knowledge and employability.

The Hon'ble members of the Academic Council unanimously adopted the following resolution:

***"Resolved that:***

- ***The action taken regarding the engagement of Professors of Practice and Adjunct Faculty, as per guidelines notified via Order No. AUJ/Est./G-687/24-25/9748-9827 dated October 31, 2024, is hereby ratified.***
- ***The engagement of two Professors of Practice in the University, namely Dr. Gulshan Singh Rana and Mr. Satinder Singh Nandra, is confirmed and recommended to the Board of Management (BoM) for appraisal (Annexure-III)."***

**Agenda Item No. AC (26) 03**

**: Admission to UG and PG programmes for academic session 2024-25.**

The Member Secretary informed the house that the University conducted admissions for various undergraduate and postgraduate programs for the academic session 2024-25 through SKUAST-J CET-2024, as per Notification No. 48(Acad.) of 2024, dated May 9, 2024. The admissions under the ICAR quota were conducted through ICAR counseling, while the VCI quota was filled through nominations via VCI counseling. Besides this, three foreign students were also admitted to the supernumerary seats under the ICCR fellowship programs.

The Hon'ble members of the Academic Council unanimously adopted the following resolution:

***"Resolved that the admissions granted in various UG and PG programs for the first semester of the academic session 2024-25 are hereby approved."***

**Agenda Item No. AC (26) 04**

**: Inclusion of B.Sc. (Hons.) Horticulture/Forestry/B.Tech. Biotechnology as an Eligibility Qualification for M.Sc. in Genetics and Plant Breeding.**

The Dean, Faculty of Agriculture, proposed revising the eligibility criteria for admission to the PG program in Genetics and Plant Breeding to align with ICAR guidelines. In response, the Director of Research suggested implementing similar revisions for the disciplines of Entomology and Plant Pathology.

The Hon'ble members of the Academic Council unanimously adopted the following resolution:

***"Resolved that the revised eligibility qualifications for admission to the M.Sc. (Ag.) programs in Genetics and Plant Breeding, Entomology, and Plant Pathology are hereby adopted as follows:***

- ***B.Sc. Ag. / Horti. / Forestry or B.Sc. (Hons.) Agriculture / Horticulture / Forestry / B.Tech. (Biotechnology)."***



**Agenda Item No. AC (26) 05 : Accreditation of Teachers /Scientists to Faculty**

The Member Secretary informed the house that accreditation had been granted to the following teachers, as per Memorandum No. AUJ/DE/2023-24/F-94/3201-3202, dated October 21, 2024::

S.No.	Name of Scientist	Division/Station
1.	Dr. Rakesh Kumar, Associate Professor	Division of Floriculture and Landscaping
2.	Dr. Puja Rattan, Associate Professor	Division of Vegetable Science

The Hon'ble members of the Academic Council unanimously adopted the following resolution:

***"Resolved that the accreditation of faculty members, as granted vide Memorandum no. AUJ/DE/2023-24/F-94/3201-3202, dated October 21, 2024, is hereby ratified."***

**Agenda Item No. AC (26) 06 : Permission for engaging 01 (one) no. of contractual Teachers / faculty on academic arrangement basis in the discipline of Agricultural Economics.**

The Head of Agricultural Economics requested the house to grant permission for the engagement of one (1) contractual teacher/faculty on an academic arrangement basis to meet the teaching requirements in the discipline of Agricultural Economics. The Hon'ble members of the Academic Council unanimously adopted the following resolution:

***"Resolved that permission is granted for the engagement of one (1) contractual teacher/faculty on an academic arrangement basis in the discipline of Agricultural Economics."***

**Agenda Item No. AC (26) 07 : Nomenclature of Diploma course in Agriculture to be renamed as DIPLOMA IN AGRICULTURE (ONE YEAR)**

The Dean, Faculty of Agriculture, proposed renaming the **Diploma in Agriculture** offered by the Faculty to **Diploma in Agriculture (One Year)**. The rationale behind this proposal is to prevent duplication and ambiguity, as the University plans to introduce a two-year diploma program for students exiting after two years from the **B.Sc. (Hons.) Agriculture** program under NEP-2020.

The Hon'ble members of the Academic Council unanimously adopted the following resolution:

***"Resolved that***

- Nomenclature of Diploma course in Agriculture be renamed as DIPLOMA IN AGRICULTURE (ONE YEAR).***

- ***Nomenclature of Diploma course in Horticulture be renamed as DIPLOMA IN HORTICULTURE (ONE YEAR)***

**Agenda Item No. AC (26) 08 : Permission to appear in the final missed examination during ensuing year (Diploma course in Agriculture) and maximum duration of the course to be extended upto three years.**

The Dean, Faculty of Agriculture proposed that the permission be granted to the aspirants of diploma courses in agriculture to appear in the final missed examination during ensuing year and maximum duration of the course to be extended up to three years.

The Honorable Members of the Academic Council has adopted the following resolution:

***"Resolved that the permission to appear in the final missed examination during ensuing year (Diploma course in Agriculture) and maximum duration of the course is extended up to two years".***

**Agenda Item No. AC (26) 09 : Revision of Educational Tour Fee from ₹4125/- to ₹10,000/-**

The Member Secretary informed the house that the **Educational Tour fee** would be increased to **Rs. 10,000/-** and charged in split installments before the commencement of the **7th semester**, in addition to the regular semester fee. Ms. Sughanda Khajuria, the student representative, suggested that the revised fee structure should apply only to students enrolling from the **academic session 2025-26** onwards.

The Hon'ble members of the Academic Council unanimously adopted the following resolution:

***"Resolved that the Educational Tour fee for undergraduate students shall be enhanced to Rs. 10,000/-, effective from the academic session 2025-26."***

**Agenda Item No. AC (26)10 : Functioning of AMS (Academic Management System) in Hybrid mode for B.V.Sc. & A.H degree programme.**

The Director of Education informed the house that registration cards for PG and Ph.D. students would be filled manually. After reviewing the functionality of the Academic Management System (AMS), the Hon'ble Vice-Chancellor directed that One Computer programmer be attached with the Joint Registrar's office to enhance and streamline the AMS for efficient operations.

**Agenda Item No. AC (26)11 : Implementation of Veterinary Council of India, Regulations in toto including Annexure- I of Chapter VI.**

The Member Secretary informed the house that the XIII<sup>th</sup> meeting of Faculty of Veterinary Sciences & Animal Husbandry had recommended implementation of NPA in favour of teaching staff of F.V.Sc. & A.H. SKUAST-Jammu.

The Honorable Members of the Academic Council has adopted the following resolution:

***"Resolved that implementation of NPA in favour of teaching staff of F.V.Sc. & A.H. SKUAST-Jammu was approved and further recommended to BoM for deliberation and approval."***

**Agenda Item No. AC (26)12 : Voluntary Teaching Assistantship**

The Member Secretary informed the house that the Board of Studies, Faculty of Agriculture, in its XX<sup>th</sup> meeting recommended that Ph.D. students, upon completion of their coursework allowed to take up voluntary teaching assistantships, with a certificate of teaching to be provided to those students.

The Honorable Members of the Academic Council has adopted the following resolution:

***"Resolved that Ph.D. students after completion of their course work be allowed for voluntary teaching assistantship and certificate of teaching shall be given to such students by Dean of Concerned faculty."***

**Agenda Item No. AC (26)13 : Modified courses for Diploma in Agriculture (One Year)**

The Member Secretary informed the house that the XX<sup>th</sup> meeting of Board of Studies, Faculty of Agriculture had recommended the modification in courses for One year Diploma in Agriculture as:

Modified courses for two terms

**1st term or common Basic Courses (14 credit)**

Introductory Agronomy

Soil and Fertilizers

Insect pests and Diseases of Agricultural Crops

Mushroom cultivation and Spawn production

**2nd term or Elective courses(15-credit hrs.)**

Seed Production

Extension Approaches in Agriculture

Apiculture

Concepts of Organic and Natural Farming

Marketing and Value addition in Agriculture

Introductory Farm Machinery

The Honorable Members of the Academic Council has adopted the following resolution:

***“Resolved that the modified courses for the Diploma in Agriculture (One-Year) as outlined above, are approved for implementation.”***

**Agenda Item No. AC (26)14 : Eligibility Criteria for Admission to Master's Degree Programmes in Agriculture.**

Dean, FoA, proposed that the eligibility criteria for admission to Master's degree programmes in Agriculture offered through the SKUAST-J CET(PG) needs to be revised as under:

- 4-year (10+2+4) or 6-year (10+6) undergraduate degree in Agriculture as essential requirement for admission to the Master's degree programmes in Agriculture.
- Candidates who have completed a 3-year Bachelor's degree programme are not eligible for admission.

The Honorable Members of the Academic Council has adopted the following resolution:

***“Resolved that***

- ***a 4-year (10+2+4) or 6-year (10+6) undergraduate degree in Agriculture shall be the essential requirement for admission to Master's degree programmes in Agriculture. However, candidates who have completed a 3-year Bachelor's degree programme are eligible for admission only in Sericulture discipline in Faculty of Agriculture”***

**Agenda Item No. AC (26)15 : Introduction of French and Sanskrit Courses as per NEP 2020. (Compulsory- Non Credit)**

The Member Secretary proposed the introduction of French and Sanskrit as compulsory non-credit courses for students at the university The courses will be structured as follows:

**1. French Language Courses:**

- French Proficiency Course-I FPC-507 (1+0)
- French Proficiency Course-II FPC-508 (1+0)

**2. Sanskrit Language Courses:**

- Sanskrit Proficiency Course-I SPC-509 (1+0)
- Sanskrit Proficiency Course-II SPC-510 (1+0)

The Hon'ble Members of the Academic Council has adopted the following resolution:

***"Resolved that French and Sanskrit courses (Compulsory-noncredit) as outlined above, be introduced in the university curriculum as per NEP 2020, with the detailed syllabi provided in Annexure-IV."***

**Agenda Item No. AC (26)16 : Ratification of the Guidelines for Masters and Ph.D. Sandwich/Bilateral programmes and students nominated for Research work by other Universities/Institutions.**

The Member Secretary informed the house that the "Guidelines for Master's and Ph.D. Sandwich/Bilateral Programs and Students Nominated for Research Work by Other Universities/Institutions" were issued vide Memorandum No. AUJ/DE/24-25/F-252/1275-88, dated July 23, 2024.

The Hon'ble members of the Academic Council unanimously adopted the following resolution.

***"Resolved that the "Guidelines for Masters and Ph.D. Sandwich/Bilateral Programmes and Students Nominated for Research Work by Other Universities/Institutions" as issued in the aforementioned memorandum was ratified (Annexure- V)."***

**Agenda Item No. AC (26)17 : Online Thesis Viva Voce of Masters and Ph.D. Thesis and online oral Comprehensive Examinations of Ph.D. students**

The Member Secretary informed the house that the online Viva Voce examination for PG and Ph.D. students of the University will commence in the second semester of the academic year 2024-25 (i.e., February 2, 2025). The Hon'ble Vice-Chancellor directed that the modalities and guidelines for conducting the online Viva Voce examinations be formulated.

The Hon'ble members of the Academic Council unanimously adopted the following resolution:

***"Resolved that:***

- Thesis Viva Voce for Master's and Ph.D. students shall be conducted through online mode.***
- The Oral Comprehensive Examinations for Ph.D. students shall also be conducted through online mode.***
- The Director of Education shall frame the modalities and guidelines for conducting online Viva Voce examinations for PG/Ph.D. students."***
- The same shall be come into effect from 2<sup>nd</sup> semester of Academic year 2024-25, w.e.f. 03-02-2025".***



**Agenda Item No. AC (26)18**

**: Institution of M.Tech. Biotechnology from academic session 2025-26**

The Director, Institute of Biotechnology proposed the introduction of a postgraduate degree program, M.Tech. (Biotechnology), starting from the academic session 2025-26. Recognizing the growing need to redefine postgraduate education to meet emerging market demands and specialized job opportunities at both national and international levels, the introduction of the M.Tech. (Biotechnology) programme has become a necessity. The Institute possesses adequate academic and research infrastructure to support the requirements of this new degree programme.

The detailed Course Catalogue is provided in (Annexure- VI).

The Hon'ble Members of the Academic Council has adopted the following resolution:

***"Resolved that:***

- ***The M.Tech. Biotechnology degree shall be offered by the Institute of Biotechnology from academic session 2025-26 with Minimum Duration of 4 Semesters (2 Years)***
- ***Proposed Intake Capacity: 10 Students per academic year (Self-financed; INR 1,10,000.00 per year)***
- ***Eligibility: The candidates must hold a minimum 4-year undergraduate degree in one of the following disciplines:***  
***B.Tech. Biotechnology/B.Sc. Biotechnology/B.Sc. (Hons.)***  
***Biotechnology/B.Sc. (Hons.) Agriculture/B.Sc. (Hons.)***  
***Horticulture/B.Sc. (Hons.) Biology***
- ***Admission Procedure: Admissions to the M.Tech. (Biotechnology) programme will be based on Merit in the entrance exam conducted by the University (SKUAST-J CET)."***

**Agenda Item No. AC (26)19**

**: Ratification for the Adoption of ICAR Sixth Deans' Committee Report**

The Member Secretary informed the house that the University has already adopted the recommendations for implementing the ICAR Sixth Deans' Committee Report starting from the academic year 2024-25, as per Memorandum No. AUJ/DE/24-25/F-231/2848-2913, dated October 10, 2024. The Director, Institute of Biotechnology proposed that the eligibility criteria for admission to the B.Tech Biotechnology program should be retained in its earlier, broader format to ensure greater inclusivity and opportunities for students.

The Hon'ble Members of the Academic Council has adopted the following resolution:

**"Resolved that:**

- i. The adoption of the ICAR Sixth Deans' Committee Report for restructuring of undergraduate programmes offered by the university except B.V.Sc. & A.H as modified vide Memorandum No. AUJ/DE/24-25/F-231/2848-2913 dated 10/10/2024, effective from the academic year 2024-25, is hereby ratified.**
- ii. The eligibility and mode of admission for entry into the UG programmes shall be as per SKUAST-J, norms**

S.No	Programme	Eligibility
01.	B.Sc. (Hons) Agriculture	10+2) with PCB/PCM/PCBM/ or Agriculture (P, C, M and A are Physics, Chemistry, Mathematics and Agriculture, respectively)
02.	B.Sc.(Hons.) Horticulture	
03	B. Tech. Biotechnology	
04	B. Tech. Dairy Technology	
05.	B: Tech. Agricultural Engineering	10+2) with PCM or A (P, C, M are Physics, Chemistry, Mathematics or Agriculture )

**Agenda Item No. AC (26)20 : Inclusion of Horticulture as Major Subject Group in SKUAST-Jammu Entrance Examination (CET-PG) for admission to various master degree programmes.**

The Dean, Horticulture & Forestry proposed that the University conduct a Common Entrance Test (CET) for admissions to postgraduate programs under the following eight Major Subject Groups. With the first batch of B.Sc. (Hons.) Horticulture graduating in the academic session 2024-25, there is a need to include Horticulture as a Major Subject Group in the CET starting from the academic session 2025-26. The house directed that the matter be deliberated in the PG Board of Studies before being presented to the Academic Council.

**Agenda Item No. AC (26)21 : Inclusion of B.Sc. (Hons.) Horticulture degree in eligibility for admission to various PG courses.**

The Chairman directed that the matter must be deliberated in PG board of Studies before presenting in the Academic Council. The agenda shall be discussed with concerned Heads of Divisions, Dean and Director Education on case to case basis

Agenda Item No. AC (26)22

: To route the synopsis of Ph. D degree programme for external evaluation through concerned Dean of the faculty.

The Hon'ble Members of the Academic Council has adopted the following resolution:

***"Resolved that the synopsis of Ph. D degree programme for external evaluation be routed through concerned Dean of the faculty to Director Education"***

Agenda Item No. AC (26)23

: Syllabus for Course No.VPE 613 (Research Methodology and Publication Ethics in VPE) 2+0

The Hon'ble Members of the Academic Council has adopted the following resolution:

***"Resolved that Syllabus for Course No.VPE- 613 (Research Methodology and Publication Ethics in (VPE- 2+0) was approved."***

Agenda Item No. AC (26)24

: Robes / regalia for University Convocation.

Director Education proposed that the following Robes / regalia for University Convocation:

S. No.	Designation/Faculty	Description	Waistcoat Colour	Muffler/Stole Colour
1	Chief Guest, Chancellor, Pro-Chancellor, Vice-Chancellor, VVIPs, Honoris Causa Registrar (if on dais)	White full sleeves Kurta and Pajama. Kurta with Nehru collar (Male)	Bottle green Jacket (cloth terry wool)	Maroon with golden borders and University logo and saffron turban (Dogri style) for front row on the Dias.
2	University Council & Board of Management Members	White full sleeves Kurta and Pajama. Kurta with Nehru collar	Bottle green Jacket (cloth terry wool)	Yellow with green borders and University logo
3	Academic Council Members	White full sleeves Kurta and Pajama. Kurta with Nehru collar	Bottle green Jacket (cloth terry wool)	Red with silver borders and University logo

	Students of all faculties	White full sleeves Kurta pajama with Nehru collar (Boys) White Kurta and Pants for (Girls)	-	<ul style="list-style-type: none"> <li>➤ Light blue with University logo with one stripe for UG.</li> <li>➤ Navy blue with University logo and two strips for PG.</li> <li>➤ Royal blue with University logo and three strips for Ph.D.</li> </ul>
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The Hon'ble Members of the Academic Council has adopted the following resolution:

***"Resolved that the proposed Robes / regalia for University Convocation for degree recipients/ students are approved".***

**Agenda Item No. AC (26)25 : Dress code for students of the University**

The Hon'ble Members of the Academic Council has adopted the following resolution:

***"Resolved that the dress code for all the students admitted in the university shall be Blazer of Navy Blue colour with university logo during the University Functions".***

**Agenda Item No. AC (26)26 : Initiation of Masters in Urban Horticulture.**

Dean, Horticulture and Forestry proposed Initiation of Masters in Urban Horticulture. The Chairman directed that the matter must be deliberated in PG board of Studies before presenting in the Academic Council.

**Agenda Item No. AC (26) 27 : Hike in Remuneration of Contractual Teachers (Assistant Professors) engaged in SKUAST-J on Academic Arrangement basis**

The matter has been deferred for working-out the detail DPR and Financial implication w.r.t other University by concerned Dean in consultation with the Comptroller, SKUAST-Jammu.

**Agenda Item No. AC (26) 28**

**: Provision of two posts of Assistant Professors one each in the disciplines of Bioinformatics and Nano-Technology.**

The Director, Institute of Biotechnology proposed the creation of two Assistant Professor positions, one in Nano-Technology and the other in Bioinformatics, to support undergraduate and postgraduate teaching as well as associated research activities.

The Hon'ble members of the Academic Council unanimously adopted the following resolution:

***"Resolved that:***

- Two Assistant Professor positions (one in Nano-Technology and one in Bioinformatics) be created in the Institute of Biotechnology.***
- The matter shall be placed before the Board of Management (BoM) for approval of the said positions."***

**Agenda Item No. AC (26) 29**

**: Holding of 9th Convocation of SKUAST-Jammu and award of Degrees therein.**

The Hon'ble Members of the Academic Council has adopted the following resolution:

***"Resolved that the degrees be awarded to the pass-outs in various programs of the University as specified in Annexure-VII in the 9<sup>th</sup> convocation of the University and subsequently be presented during the upcoming Board of Management Meeting."***

**Agenda Item No. AC (26) 30**

**: Award of Certificates of Merit & Gold Medals during the 9th Convocation.**

The Hon'ble Members of the Academic Council has adopted the following resolution:

**Resolve that**

- i. Award the certificates of Merit to the deserving pass outs in PG programmes M.Sc.(Ag.) /Basic Science/ Horticulture and Forestry/ Agri. Engineering/ M.V.Sc. & Ph.D. (Agri.)/(Vety.)/Basic Science/ Horticulture and Forestry/ Agri. Engineering having secured an OGPA of 8.5 and above on the 10.00 point scale in the 9<sup>th</sup> Convocation of the University, as detailed in Annexure-VIII.***



- ii. ***Resolved that award Gold Medals to postgraduate students achieving the highest OGPA in M.Sc. (Ag.), Basic Science, Horticulture and Forestry, Agricultural Engineering, and M.V.Sc. programs, as outlined in Annexure-IX.***
- iii. ***Resolve that award the Professor Arun Gupta Memorial Gold Medal to topper of the M.Sc. Programme in the discipline of Vegetable Science, for outstanding achievement in the field of Vegetable Science as detailed in Annexure-IX.***
- iv. ***Award Gold Medals to the students having demonstrated exceptional merit and met all the requirements in accordance with Chapter 7, Clause 7.2.1 (a) of RRI, 2020 of SKUAST-Jammu, in B.Sc.(Hons.)Agriculture/B.V.Sc. & A.H., and B.Sc. (Hons.) Biotechnology programmes as detailed in Annexure-IX.***

**Agenda Item No. AC (26) 31 : Inclusion of Mathematics course for students having Biology (PCB) at 10+2.**

The Hon'ble Members of the Academic Council has adopted the following resolution:

***"Resolved that the Basic Mathematics course (MATH-112, 2+0 credit hours, (Annexure-X) be included as a compulsory course for students admitted to the B.Tech. (Dairy Technology) program with a PCB background at the 10+2 level."***

**Agenda Item No. AC (26) 32 : Upgradation of Faculty of Basic Sciences into Faculty of Basic Sciences & Humanities.**

The Dean, Faculty of Basic Sciences has submitted a proposal to strengthen and re-designate the Faculty as the "Faculty of Basic Sciences and Humanities." The National Education Policy (NEP-2020) envisions establishing departments in disciplines such as Languages, Mathematics, Statistics, Pure and Applied Sciences, Sociology, and other related subjects to foster a multidisciplinary and stimulating educational environment in higher education institutions.

The Hon'ble Members of the Academic Council has adopted the following resolution:

***"Resolved that the upgradation of the existing Faculty of Basic Sciences to the Faculty of Basic Sciences and Humanities was approved as detailed in Annexure XI and recommended to the Board of Management (BoM) for further deliberations."***

Agenda Item No. AC (26)33

: Regulating of admission to B.V.Sc & A.H degree programme by a Veterinary College through a centralized counselling system.

The matter has been dropped

Agenda Item No. AC (26) 34

: Modification of course No. RAW& AIA-421 and RAW& AIA-423 (Agro-Industrial Attachment &FPOs Activities) in order to fulfill the minimum requirement of one month course duration of RAW& AIA- 423.

Head Division of Agricultural Extension Education proposed the modification of course No. RAW& AIA-421 and RAW& AIA-423 (Agro-Industrial Attachment &FPOs Activities) in order to fulfill the minimum requirement of one month course duration of RAW& AIA- 423.

The Hon'ble Members of the Academic Council has adopted the following resolution:

***"Resolved that***

- *that the credit hours of course No. RAW& AIA-421 are decreased from 0+ 14 to 0+ 12. Hence, the credits hours of Unit attachment in Univ./College/KVK/Research Station Attachment is decreased from 0+ 5 to 0+ 3.*
- *that credit hours of RAW& AIA-423 (Agro-Industrial Attachment &FPOs) shall be increased from 0+ 3 to 0+ 5 in order to fulfill the minimum requirement of one month course duration of Industrial Attachment of RAW& AIA-423 interns.*
- *these modifications in the credit hours of aforementioned courses shall be applicable only to the undergraduate students who are studying syllabus of 5<sup>th</sup> Dean's Committee Report."*

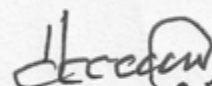
Supplementary agenda Item No. AC (26) : Induction of NCC Courses for Biotechnology,  
01 Horticulture, Agriculture, Agricultural Engineering and  
Dairy Technology

The Hon'ble Members of the Academic Council has adopted the following resolution:

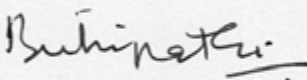
***"Resolved that:***

- a) *Include a 01-credit hour NCC course in the second and third years (third to sixth semesters) for UG programs in Biotechnology, Horticulture, Agriculture, Agricultural Engineering and Dairy Technology.*
- b) *Introduce a 01-credit hour NCC course as an option during the first four years of the B.V.Sc. & A.H. degree program.*
- c) *Students may choose between NCC and NSS based on their interests and career goals.*

The Meeting ended with Vote of Thanks



Registrar  
Member Secretary



Approved  
Hon'ble Vice-Chancellor

# **Annexure-I**



**Sher-e-Kashmir  
University of Agricultural Sciences & Technology of  
Jammu**

**LIST OF PARTICIPANTS-26<sup>th</sup> MEETING OF  
ACADEMIC COUNCIL**

1.	Prof. B. N. Tripathi Hon'ble Vice-Chancellor	Ex-Officio Chairman
2.	Dr. Anil Kumar Registrar and Dean FoA	Member Secretary
3.	Dr. Rajinder Peshin Director Education and Controller of Examination	Member
4.	Dr. Sushil Kumar Gupta Director Remsearch	Member
5.	Dr. Amrish Vaid Director Extension	Member
6.	Dr. Sanjay Khar Director Planning & Monitoring	Member
7.	Sh. Madan Lal Comptroller	Member
8.	Dr. Rajesh Katoch Dean, F.V.Sc. & A.H., R.S.Pura	Member
9.	Dr. S.E.H.Rizvi Dean FBSc	Member
10.	Dr. Vikas Tandon Dean FoH&F	Member
11.	Dr. Sudhakar Dwivedi Dean Student Welfare	Member
12.	Dr. J. S. Soodan, Dean, FoDT	Member
13.	Dr. Susheel Sharma, Dean, FoAE	Member
14.	Prof. R.K. Samotra, I/c University Librarian	Member
15.	Dr. R.K. Salgotra, Director, Institute of Biotechnology,	Member
16.	Dr. Sandeep Kumar Sawhney, Soil Science, SKUAST-Kashmir	Expert Member
17.	Dr. A.P. Singh Prof & Head, Division of Agronomy	Member
18.	Dr. Pawan K. Sharma Prof & Head, Division of Agricultural Economics and ABM	Member



19.	Dr. Vinod Gupta Prof & Head, Division of Agricultural Extension Education	Member
20.	Dr. Tuhina Dey Prof & Head, Division of Plant Breeding and Genetics	Member
21.	Dr. Vishal Gupta Prof & Head, Division of Plant Pathology	Member
22.	Dr. Kamlesh Bali Prof & Head, Division of Sericulture	Member
23.	Dr. R.K. Gupta Prof & Head, Division of Entomology	Member
24.	Dr. Ashok Kumar Prof & Head, Division of Veterinary Clinical Complex	Member
25.	Dr. Asma Khan Prof & Head, Division of Livestock Production Management	Member
26.	Dr. Kamal Sharma Prof & Head, Division of Veterinary Anatomy	Member
27.	Dr. Jonali Devi Prof & Head, Division of Veterinary Physiology and Biochemistry	Member
28.	Dr. R.K. Sharma Prof & Head, Division of Animal Nutrition	Member
29.	Dr. S. R. Upadhyay Prof & Head, Division of Veterinary Animal Husbandry Extension Education	Member
30.	Dr. Arvind Kumar Prof & Head, Division of Livestock Products Technology	Member
31.	Dr. Utsav Sharma Prof & Head, Division of Veterinary Gynecology and Obstetrics	Member
32.	Dr. H.R. Bhardwaj Prof & Head, Division of Veterinary Surgery and Radiology	Member
33.	Dr. Neelesh Sharma Prof & Head, Division of Veterinary Medicine	Member

34.	Dr. N.K. Pankaj Prof & Head, Division of Pharmacology and Toxicology	Member
35.	Dr. Anish Yadav Prof & Head, Division of Veterinary Parasitology	Member
36.	Dr. Pankaj Goswami Prof & Head, Division of Veterinary Pathology	Member
37.	Dr. H,K,Sharma Prof & Head, Division of Veterinary Public Health and Epidemiology	Member
38.	Dr. Dibyendu Prof & Head, Division of Animal Genetics and Breeding	Member
39.	Dr. Ashok Kumar Prof & Head, Division of Livestock Farm Complex	Member
40.	Dr. Sahar Masud Prof & Head, Division of Fisheries	Member
41.	Dr. Moni Gupta Prof & Head, Division of Biochemistry	Member
42.	Dr. Brajeshwar Singh Prof & Head, Division of Microbiology	Member
43.	Dr. Gurdev Chand Prof & Head, Division of Plant Physiology	Member
44.	Dr. J.P. Singh Prof & Head, Division of Farm Machinery and Power Engineering	Member
45.	Dr. R.K. Srivastava Prof & Head, Division of Soil and Water Engineering	Member
46.	Dr. Parshant Bakshi Prof & Head, Div. of Fruit Science and Centre for Organic & Natural Farming	Member
47.	Dr. Sandeep Chopra Prof & Head, Division of Vegetable Science	Member
48.	Dr. Jagmohan Singh Prof & Head, Division of Post-Harvest Management	Member

49.	Dr. R.K. Pandey Prof & Head, Division of Floriculture and Landscaping	Member
50.	Dr. Sandeep Sehgal Prof & Head, Division of Silviculture and Agroforestry	Member
51.	Dr. L.M. Gupta Prof & Head, Division of Forest Products and Utilization	Member
52.	Dr. Sunil Kumar Prof. & Head, Division of Dairy Technology	Member
53.	Dr. Vikas Sharma, Sr. Scientist, Research, RARS, Rajouri.	Member
54.	Dr. Vijay Kumar, Chief. Scientist RHRSS, Raya.	Member
55.	Dr. Ravinder Singh, MRS Udhampur	Member
56.	Dr. Sanjay Guleria, Professor & Head, Div. of Biochemistry,.	Member
57.	Dr. K.K. Sood (Professor) Agroforestry	Member
58.	Dr. Sachin Gupta (Professor ) Plant Pathology	Member
59.	Dr. Shalani Suri (Professor ) Vety. Animal Nutrition	Member
60.	Dr. Meenakshi Gupta (Professor) Agronomy	Member
61.	Dr. Davinder Sharma (Professor) Entomology	Rapporteur
62.	Dr. Rajeev Bharat (Professor) Agronomy	Rapporteur
63.	Ms. Sugandha Khajuria (J-22-D-511-A) Soil Science	Member

# **Annexure-II**

# **25<sup>th</sup>**

## **MEETING OF ACADEMIC COUNCIL**

# **MINUTES**



**Sher-e-Kashmir**  
**University of Agricultural Sciences & Technology of Jammu**  
**Chatha, Jammu-180009 (J&K)**





# 25<sup>th</sup>

## ACADEMIC COUNCIL MEETING

# MINUTES



***Sher-e-Kashmir***  
***University of Agricultural Sciences & Technology of Jammu***  
***Chatha, Jammu -180009***

### Minutes of 25<sup>th</sup> meeting of Academic Council

The 25<sup>th</sup> meeting of the Academic Council was convened under the chairmanship of Dr. B.N. Tripathi, Hon'ble Vice-Chancellor, SKUAST-Jammu, on the 1<sup>st</sup> May 2024, in the Conference Hall, SKUAST-J, Chatha. The list of participants is attached as Annexure-I. The meeting commenced with a warm welcome by Prof. Sushil Kumar Gupta, Registrar, SKUAST-Jammu and Member Secretary, who extended greetings to the Chairman, Directors/Deans, and all members present. In his opening remarks, Dr. B.N. Tripathi, Hon'ble Vice-Chancellor, said that the Academic Council plays an important role in formulation of regulations for governing the academics of the university. He emphasized that the academic curriculum, faculty and students are the important determinants showcasing the excellence of an institute. Dr. Tripathi told that enhancing quality of human resource is a pre-requisite for implementing and upgrading research programmes, developing technologies, evolving institutional arrangements to face challenges and harness opportunities in the agriculture sector. He stressed the need for improvement in academic environment of the University for nurturing competency in the students to face multifarious challenges of life. The need for student exchange programme at the national and international level for preventing inbreeding in education system was also emphasized. The education system should be tailored so as to equip the new graduates with subject competency, self-motivation, positive attitude, agri-business skills, knowledge of computer and information technology, and communication skills. He encouraged a shift towards a more engaging and participatory learning environment, fostering a culture of continuous improvement. He conveyed confidence in the faculty of SKUAST-Jammu, expressing belief in their ability to embrace essential changes for making students so competent that they become brand ambassadors of the University.

The Registrar presented the agenda after seeking permission from the Chairman. The following agenda items were deliberated upon:

**Agenda Item No. AC (25) 1 : Confirmation of minutes of 24<sup>th</sup> Meeting of Academic Council**

The Member Secretary apprised the house that the minutes of the 24<sup>th</sup> meeting of the Academic Council held on 04-12-2023 were circulated among the members vide letter no. AUJ/Acad/ 2023-24/F-08/8373-8422, dated: 08-12-2023 (refer to Annexure-II). All members unanimously agreed to confirm the minutes of the

24<sup>th</sup> Academic Council meeting. Consequently, the House adopted the following resolution:

***"Resolved to the minutes of the 24<sup>th</sup> Academic Council meeting, circulated vide AUJ/Acad/ 2023-24/F-08/8373-8422, dated: 08-12-2023, were confirmed."***

**Agenda Item AC(25) 2 : Dual Degree Programme with Western Sydney University — Australia**

Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu (Union Territory of Jammu & Kashmir- India) has entered in to MoU with Western Sydney University— Australia for offering an opportunity of dual degree for the Undergraduate and Postgraduate students in the following programmes:

- BSc (Hons) Agriculture
- BSc (Hons) Horticulture
- B Tech. (Biotechnology)

The matter was deliberated in length and following resolution was adopted

***"Resolved the Institutionalization of the Dual Degree Programme with Western Sydney University — Australia from academic session 2024-25. with following modalities:***

***Modalities for Undergraduates for Dual Degree programmes:-***

***The Indian Council of Agricultural Research (ICAR) which is the apex Governing Body of the Agriculture Education at the national level has signed MoU with the Western Sydney University equating the Student READY programme (Rural Entrepreneurship Awareness Development Yojana) offered in final year of degree programme in State Agriculture Universities (SAUs) with one-year academic attachment in Western Sydney University. The graduating students under this arrangement will be awarded two undergraduate degrees: one from Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu and another from Western Sydney University-Sydney, Australia. The students obtaining degree from Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu under this arrangement will have entitlement for admission into MSc programmes of all SAUs in India***

*including those offered by Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu. The degree offered by the Western Sydney University; Australia will have equivalence in all leading world universities; organizations / regions where the WSU is recognized for further studies.*

*The dual degrees offered will be as per the following articulations*

Degree	Degree Articulation	
	First Degree from SKUAST- Jammu	Second Degree from WSU- Sydney (Australia)
Agriculture	B.Sc. (Hons) Agriculture	BSc. (Agrifood)
Horticulture	B.Sc. (Hons) Horticulture	BSc. (Agrifood)
Biotechnology	B. Tech. (Biotechnology)	B.Sc. (Biology)

*The students opting for this dual degree arrangement will be attached to Western Sydney University (WSU) in their campus at Sydney (Australia) for complete duration of final year of their degree programme (7th and 8th semester). Western Sydney University, formerly the University of Western Sydney, is an Australian multi-campus public research university in the Greater Western region of Sydney, New South Wales, Australia.*

*The interested students have to meet the expenses of dual degree programmes at their own; however, work permit as per the rules of the Western Sydney University will be provided to the students for partially generating, their living costs. Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu has formulated a Committee for International Study programmes which will provide all the details and assistance to the willing students by the respective Deans, wherein these programmes are proposed to be taken up in the first instance. A representative from Western Sydney University will provide all the logistic supports for furnishing application forms and completing other visa formalities.*

*This dual degree (3+1) will make students eligible for direct admission into the MSc programmes (3+1+1) of Western Sydney University with waiving*

***off of first year enabling them to complete their M.Sc. degree in Western Sydney University in one year. The students will also be entitled for PhD degree in different programmes of the Western Sydney University.***

***Dual Degree Programme, M. Res (Master in Research) and PhD (Doctor of Philosophy) with Western Sydney University — Australia***

***1. M. Res. (Master in Research)***

***Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu shall offering the option of dual degree for the post graduate students as per the following details of the M. Res (Master in Research) programme:-***

***The students under this programme will get two degrees; one Master of Science (MSc and Equivalent-Registered discipline) SKUAST-Jammu and second Master of Research (M. Res.) at WSU- Western Sydney University. The opting students shall have to complete course work at SKUAST-Jammu and the research work will be carried out in Western Sydney University, Sydney (Australia) after approval of Confirmation of Enrolment (COE). There will be two advisors, one from SKUAST-Jammu (India) and second from WSU- Sydney (Australia). The maximum duration at WSU will be for one year. The student will have to submit two M.Sc.; theses one to SKUAST-Jammu-India and second to the WSU-Sydney (Australia).***

***Following provision for tuition fee waiver during attachment with Western Sydney University is also available.***

***A grade of 85% or higher will lead to full tuition fee waiver for 12 months at the WSU***

***A grade of 80% to 84% will have 75% tuition fee waiver at the WSU***

***75% to 79% will have 50% tuition fee waiver at the WSU***

***The interested students have to pay for their study (Except for waived tuition fee as per their OGPA) and stay of Western Sydney University during their dual***

*degree programmes; however, work permit as per the rules of the Western Sydney University will be provided to the students for partially funding their living costs. The students obtaining degree from Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu under this arrangement will have entitlement for admission into PhD programmes at all SAUs in India including those offered by the Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu. The degree offered by the Western Sydney University; Australia will have equivalence in all global leading universities/ organizations/ regions where the WSU is recognized including PhD admission in WSU-Sydney (Australia).*

## **2. PhD (Doctor of Philosophy)**

*Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu shall be offering the option of dual degree for the PhD students as per the following details of the PhD (Doctor of Philosophy).*

*The students opted under this programme will get two degrees; one Doctor of Philosophy (PhD and its equivalent- Registered discipline) in SKUAST-Jammu and second PhD at WSU- Western Sydney University. The opting students have to complete course work at SKUAST-Jammu and the research work will be carried out in Western Sydney University, Sydney (Australia). There will be two advisors, one from SKUAST-Jammu (India) and second from WSU- Sydney (Australia). The student will have to submit two PhD theses one to SKUAST-Jammu-India and second to the WSU- Sydney Australia.*

*Following provision for tuition fee waiver during attachment with Western Sydney University is also available.*

*OGPA of 9.00 or higher or higher will lead to 100% tuition fee waiver for 12 months*

*OGPA of 8.50-9.00 will lead to 75% tuition fee waiver*

*OGPA of 8.00-8.50 will lead to 50% tuition fee waiver*



***The students obtaining degree from Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu under this arrangement will have eligibility for placements /job avenues for all SAUs in India including Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu. The degree offered by the Western Sydney University; Australia will have equivalence in all leading universities/ organizations/ regions for placement/job avenues where the WSU (Australia) is recognized.***

***The interested students have to pay for their study (Except for waived tuition fee as per their OGPA) and stay of Western Sydney University during their dual degree programmes; however, work permit as per the rules of the Western Sydney University will be provided to the students for partially funding their living costs. Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu has formulated a Committee for International Study programmes which will provide all the details and assistance to the willing students. A representative from Western Sydney University will provide all the logistic supports for submission of application forms and other visa formalities.***

***Note: Tution fee waiver shall be applicable as per the terms and conditions of the western Sydney University.***

**Agenda Item No. AC (25) 3 : Ratification of the Amendments in sub clause 4.3.6.4 (b) and 6.13 of RRI 2020 and Amendments to be incorporated under Clause 6.13.1 (a) and 6.13.2 (a)**

Director Education had issued memo no AUJ/DE/2023/F-371/2422-35 dated 5/2/2024, AUJ/DE/2023-24/F-37/2436-46 dated 5.02.2024 and No AUJ/DE/2024-25/F-59/107-15 dated 18-04-2024 for the amendments in sub clause 4.3.6.4 (b) and Clause 6.13 of RRI 2020, respectively and proposed amendments were incorporated under Clause 6.13.1 (a) and 6.13.2 (a) of RRI of 2020 of SKUAST-Jammu. The matter was discussed in detail in house and following resolutions were adopted:

***“Resolved to:***

***“The action taken vide order number AUJ/DE/2023/F-371/2422-35 dated 5/2/2024, AUJ/DE/2023-24/F-37/2436-46 dated 5.02.2024 and***

***AUJ/DE/2024-25/F-59/107-15 dated 18-04-2024 for the amendments in Clause 4.3.6.4 (b) (I to v) and Clause 6.13 of RRI 2020 , respectively has been confirmed***

***Approved the amendments were incorporated under Clause 6.13.1 (a) and 6.13.2 (a)***

***(a) Master Programme:***

***A soft copy of the thesis (pdf format) shall be submitted to Director Education for external evaluation.***

***A scanned copy of the approved synopsis of the student shall also be submitted along with the soft copy of the thesis.***

***The soft copy of the thesis submitted by a student shall be sent to one External Examiner for evaluation who shall be appointed by the Director Education from a panel of at least 3 names recommended by the Dean out of 10-15 recommended by Head of the Division concerned, in consultation with major advisor (PG Form VII).***

***(a) Ph.D. programme:***

***A soft copy of the thesis (pdf format) shall be submitted to Director Education for sending it for external evaluation.***

***A scanned copy of the approved synopsis of the student shall also be submitted along with the soft copy of the thesis.***

***The soft copy of the thesis submitted by a student shall be sent to two External Examiners for evaluation who shall be appointed by the Director Education from a panel of at least 3 names recommended by the Dean out of 10-15 recommended by Head of the Division concerned, in consultation with major advisor (PG Form VII).***

**Agenda Item No. AC (25) 4 : Amendments: Clause 5.18(i): Publication of one research paper by Ph.D. scholar and Clause 8.2: Guidelines for Ph.D. Synopsis, respectively**

Director Education vide no AUJ/DE/2024-25/F-59/121 dated 18-04-2024 proposed the following amendments in Clause 5.18(i) regarding the publication of one research paper by Ph.D. scholars and Clause 8.2 of Chapter 8 of the RRI-2020 regarding guidelines for Ph.D. Synopsis:

**(a) Amendments in Clause 5.18(i) regarding the publication of one research paper by Ph.D. scholars**

Clause 5.18(i) of RRI makes it mandatory for Ph.D. students to publish one research paper before submission of thesis. Clause 5.18(i) is reproduced as under:-

*“A Ph.D. scholar must publish at least one research paper in refereed journal and make two paper presentations in conferences/seminars before submission of the dissertation/thesis for adjudication, and produce evidence for the same in the form of presentation certificates and/or reprints”.*

Ph.D. students publishing the research paper from thesis before submission has resulted in the publishing papers in journals of low repute. It has also been observed that the students submit paper to predatory journal. This is defeating the purpose for which this rule was notified by the UGC and implemented in the University. To discourage this unethical practice, it is proposed that amendment be made in Clause 5.18 (i) as under.

*“A Ph.D. student must have published/submitted one research paper from his/her thesis work to NAAS rated /UGC listed /Scopus Indexed /Impact Factor journal (Clarivate Analytics) before the submission of thesis for external evaluation, and produce evidence of published/accepted/under review of the research paper submitted. The journal should be preferably with NAAS rating > 6.0 and not be in the UGC list of predatory journals. Besides, students should have made two paper presentations in conferences/seminars before submission of the dissertation/thesis for adjudication, and produce evidence for the same in the form of presentation certificates.”*

**(b) Amendments in Clause 8.2 of Chapter 8 of the RRI-2020 regarding guidelines for Ph.D. Synopsis:**

- i) Ph.D. student shall submit the synopsis of his/her research (PG Form-III) after delivering synopsis seminar in his/her Division. The synopsis seminar of Ph.D. students shall not be organized later than four weeks of the second semester.
- ii) The student shall submit the synopsis (hard and soft copy) along with certificate of synopsis seminar through Major Advisor & Head of the Division to the Director Education for external evaluation of the synopsis by the external expert, not below the rank of Professor with minimum 5 years as Professor or equivalent.
- iii) After receiving the comments from external expert, the advisor shall ensure incorporation of the suggestions/comments after due deliberations in the advisory committee of the student.
- iv) Thereafter, the student shall submit the final synopsis to Director Education for approval. A check list of changes incorporated as suggested by the external expert or rebuttal shall be submitted with final synopsis through Major Advisor and Head of the Division to Director Education.

Date of submission of synopsis by the Major Advisor to the Head, shall be considered date of synopsis submission. The student shall not submit his/her thesis earlier than two years of the synopsis submission date.

**Note:-** Proposed: An honorarium of Rs. 1000/- synopsis to external expert for synopsis evaluation.

The matter was discussed in detail in house and following resolutions were adopted:

***"Resolved to the amendments made to***

- (i) Clause 5.18 (i) regarding the publication of one research paper by Ph.D. scholars as:***

***"A Ph.D. student must have published/submitted one research paper from his/her thesis work to NAAS rated /UGC listed /Scopus Indexed /Impact Factor journal (Clarivate Analytics) before the submission of thesis for external evaluation, and produce evidence of published/accepted/under review of the research paper submitted. The journal should be preferably with NAAS rating > 6.0 and not be in the UGC list of predatory journals. Besides, students should have made two paper presentations in conferences/seminars before submission of the dissertation/thesis for adjudication, and produce evidence for the same in the form of presentation certificates."***

- (ii) Clause 8.2 regarding guidelines for Ph.D. Synopsis and are adopted:***

***Ph.D. student shall submit the synopsis of his/her research (PG Form-III) after delivering synopsis seminar in his/her Division. The synopsis seminar of Ph.D. students shall not be organized later than four weeks of the second semester.***

***The student shall submit the synopsis (hard and soft copy) along with certificate of synopsis seminar through Major Advisor & Head of the Division to the Director Education for external evaluation of the synopsis by the external expert, not below the rank of Professor with minimum 5 years as Professor or equivalent.***

***After receiving the comments from external expert, the advisor shall ensure incorporation of the suggestions/comments after due deliberations in the advisory committee of the student.***

***Thereafter, the student shall submit the final synopsis to Director Education for approval. A check list of changes incorporated as suggested by the external expert or rebuttal shall be submitted with final synopsis through Major Advisor and Head of the Division to Director Education.***

***Date of submission of synopsis by the Major Advisor to the Head, shall be considered date of synopsis submission. The student shall not submit his/her thesis earlier than two years of the synopsis submission date.***

***Note:- Proposed: An honorarium of Rs. 1000/- synopsis to external expert for synopsis evaluation.***

***These amendments will come into effect from academic Session 2024-25.”***

**Agenda Item No. AC (25) 5 : Admission to UG, PG, Ph.D programme for academic session 2023-24.**

The Member Secretary informed the house that the University conducted admissions for various UG, PG, and Ph.D. programs for the academic session 2022-23 through SKUAST-J CET-2023. Additionally, the University granted admission to candidates nominated by VCI/ICAR for various programs. After detailed discussion, the following resolution was adopted:

***“Resolved to the admissions granted to different UG, PG, and Ph.D. programs through SKUAST-J CET for the academic session 2023-24 are approved.”***

**Agenda Item No. AC (25) 6 : Enhancement of fee and intake capacity for admission to Undergraduate, Postgraduate, and Doctoral Programs for academic session 2024-25**

The Director of Education proposed the enhancement of intake capacity for admissions to Undergraduate, Postgraduate, and Doctoral Programs, along with the fee structure for the academic session 2024-25. To improve teaching and facilities within the Faculty of Veterinary Sciences and Animal Husbandry, the University plans to increase the number of seats under the NRI/NRIs sponsored quota by twelve (12) for the B.V.Sc. & A.H. programs. This expansion aims to enrich educational offerings and strengthen the University's financial position through the revenue generated from these additional seats.

The Director of Education also recommended a 10 percent increase in fees. Additionally, amendments have been made to the Jammu and Kashmir Reservation Rules, 2005, as per S.O. 176 dated 15-03-2024. In accordance with the regulations outlined in S.O. 176, the details of seats in each category have been calculated.

The Chairman remarked that the University should prepare a mechanism for the enrollment of Foreign Adjunct Faculty.

After detailed deliberations, the following resolution was adopted:

***Resolved to:***

- i. The University adopted the revised fee structure for the academic session 2024-25 as per annexure-ii.***
- ii. The University adopted S.O. 176 dated 15-03-2024 in Jammu and Kashmir Reservation Rules, 2005, and accordingly the seats matrix for academic session 2024-25 was modified as annexure iii.***
- iii. 10% increase in intake capacity of PG subject to availability of candidates and availability of teaching faculty.***
- iv. University to develop guidelines for Foreign Adjunct Faculty.***

**Agenda Item No. AC (25) 7 : Amendments of sub clause (f) under clause 6.2 for Make-up examination , Under clause 6.5.1.1 of RRI 2020 (sub-clauses a-f) sub-clause (c) for Supplementary examination, clause 5.16.1.1 (b) of RRI 2020 of SKUAST of Jammu regarding allotment of major advisors for Masters and Doctoral students and others**

Dean FoA vide no AUJ/Dean-FoA/24-25/F-155/324 dated 19/4/2024 submitted the following agenda items for discussion:

- A.** Amendment insub clause (f) under clause 6.2 as mentioned in point number-ii regarding Make-up examination

**For UG students:**

Normally, no make-up examination shall be allowed in lieu of the missed examinations. However, Dean may consider to allow make up examination only for missed Mid-Term examination under the following exceptional circumstances. i.e. Student's own hospitalization on account of serious illness.

It was resolved that:

***“A student shall be allowed to appear in the mid-term examinations within 15 days of the conduct of the examination on account of health issues subject to production of medical certificate (illness & fitness) from Medical Officer of the University (SKUAST-J) /Medical Officer of the Govt. Hospital countersigned by Block Medical Officer/Chief Medical Officer”.***



- B.** Permission to appear in the end term examination for missed end term examination for UG students in line with the provision of makeup examination of PG students notified in the notification no. 10 (Acad.) of 2024 dated 16/01/2024

Proposed that UG students may be allowed to appear in the end term examination for missed end term examination in line with the provision of makeup examination of PG students notified in the notification no. 10 (Acad.) of 2024 dated 16/01/2024.

***“Resolved to the provision of make-up examination of PG students notified in the notification no. 10 (Acad.) of 2024 dated 16/01/2024 was adopted”***

- C.** Display of marks obtained in the failed course.

***“Resolved that marks obtained in the failed course should be reflected in the semester report of the student”***

- D.** Marks obtained after rechecking of the end-term examination answer sheet.

***“Resolved to the word rechecking as written under clause 6.10 a & b of RRI-2020 should be replaced with recounting and marks obtained by a student both before and after recounting of the end-term answer sheets shall be communicated to the student in person and columns reflecting the changes may be incorporated in the revised result proforma”.***

- E.** Increase in the time duration of mid-term examination of UG courses from 1 hour to 1:30 hours

***“Resolved to the duration of the mid-term examination for undergraduate courses be extended from 1 hour to 1 hour and 30 minutes.”***

- F.** Centralized PG End term Examination

***“Resolved to the Deans of respective faculties shall issue date sheet with information to Controller of Examinations. The Exams shall be conducted by the concerned course instructor”***

- G.** Issuance of ID card to UG students

***“Resolved to the Dean of the Faculty concerned shall issue ID cards to the students of the respective faculty”***

- H. Permission to engage two (02) number of contractual teachers for teaching UG level courses with funds allocated to concern Deans.

***“Resolved to the teaching assistants be engaged as per BSMA regulations for teaching purpose and concerned Deans of the different faculties be allotted the budget for the same.”***

- I. Allocation of faculty teachers as course instructors from constituent units offering the course where subject matter specialists are available.

***“Resolved to the course GPBR 211 (Fundamentals of Plant Breeding) will be merged for the Faculty of Agriculture and the Institute of Biotechnology and will be offered in the same semester. Furthermore, the course GPBR 212 (Breeding Field Crops), offered by the Institute of Biotechnology, will be taught by instructors from both the Plant Breeding and Genetics (PBG) and the Institute of Biotechnology.”***

- J. Inclusion of UG courses of Nematology in the catalogue of Division of Plant Pathology in the similar pattern of PG courses as per BSMA

***“Resolved to include UG courses of Nematology in the course catalogue of Division of Plant Pathology however teachers from Entomology Division shall continue to teach the courses of Nematology”***

- K. Ceiling of the number of failed subjects should be waived off for undertaking supplementary examination

***“Resolved to number of subjects for taking up supplementary examination should be kept as such (two subjects), but the ceiling of the number of failed subjects should be waived off.”***

- L. Amendment in clause 5.16.1.1(b) of RRI 2020 of SKUAST of Jammu regarding allotment of major advisors for Masters and Doctoral students.

***“Resolved to include all the faculty members of the subject concerned irrespective of their place of posting (AICRPs/ Research Stations/ Other constituent units) in the roster for allotment of PG students and allotment of major advisors for PG/PhD be made accordingly, rest of the clause for allotment of major advisors will remain same”***

**Agenda Item No. AC (25) 8 : Modification in the pre-requisite for taking up Experiential Learning Programme (ELP), modification in rule no 4.3.5.1a & b of RRI, Engagement of Ph.D. students as teaching Assistant, Profit sharing in Experiential Learning Units and others**

- a. Modification in the pre-requisite for taking up Experiential Learning Programme (ELP).

Dean, Faculty of Horticulture and Forestry proposed that the students of B. Sc. (Hons.) Horticulture undergoing ELP may be allowed to register for maximum two courses in which they have failed but must have completed requisite percentage of attendance in those courses.

***“Resolved that a student for taking up Experiential Learning Programme (ELP) shall be allowed to register for a maximum two courses in which they have failed but must have completed requisite percentage of attendance in these courses and same be followed in other streams/courses.”***

- b. Addition of extra course irrespective of credit hours (for modification in rule no 4.3.5.1a & b of RRI)

***“Resolved to***

- i. The student on good standing i.e. OGPA-5.5 may be allowed to register extra course over and above the maximum prescribed limit for a semester on the recommendation of advisor and approved by Dean concerned. Further Director Education is empowered to allow one more extra course irrespective of credit hours beyond Deans allotment and extraordinary cases may be forwarded to Vice Chancellor for consideration, if any.***
- ii. Increase the maximum credit limit in a semester from 25 to 27 for under graduate programme.”***

- c. Shifting of Experiential Learning Programme (ELP) from 8th to 7th Semester and Rural Horticulture Work Experience (RHWE) from 7th to 8th semester for B. Sc. (Hons.) Horticulture.

***“Resolved that for B.Sc. (Hons.) Horticulture degree programme, Experiential Learning Programme (ELP) and Rural Horticulture Work Experience (RHWE) be offered in 7th Semester and 8th semester, respectively.”***

**d. Profit sharing in Experiential Learning Units:**

***“Resolved to the profit-sharing model, similar to that of the Faculty of Agriculture (FoA) at SKUAST-J, will be adopted. The profit generated by Horticulture students will be deposited into the account of Dean, Faculty of Horticulture and Forestry (FoH&F). Additionally, existing Horticulture students may continue under the Faculty of Agriculture for their profit sharing.”***

**e. Engagement of Ph.D. students as teaching Assistant**

***“Resolved that the Ph.D. students may be allowed to work as Teaching Assistant for UG courses but without any financial assistance except HADP scholarship. At the time of award of degree to the Ph.D. student, HoD will give experience certificate endorsed by Dean to add to his teaching experience.”***

**Agenda Item No. AC (25) 9 : Revision of qualification at graduate level for M.Sc. in Agriculture (Agril. Statistics) degree Programme**

The Dean Basic Sciences proposed to revise the requisite qualification at graduate level for M.Sc. in Agriculture (Agril. Statistics) degree Programme

***“Resolved to revised qualification at graduate level for admission in M.Sc. Agriculture (Agril. Statistics) degree Programme as proposed as one of the subject i.e., B.Sc. with (Statistics/ Mathematics /Computer application/IT) /B.Sc. (Hons) Agriculture/B.Sc. (Hons) Horticulture/ B.Sc. (Forestry) /B.Tech Biotechnology was adopted.”***

**Agenda Item No. AC (25) 10 : Proposal for amendment in the MBA( ABM) Programme Curriculum**

A proposal was received from Head, Division of ABM, and endorsed by the Dean, FoA and Director Education, wherein it has been submitted that under (BSMA) for Social Sciences (ABM), 70 credits have been allocated for the MBA (ABM) program, as given here under

1. Major Courses: 20 credits
2. Minor Courses: 08 credits

3. Supporting Courses: 06 credits
4. Common Courses: 05 credits
5. Seminar: 01 credit
6. Thesis/Research: 30 credits consists of
  - a. Summer Internship: 10 credits (6 credits for preparatory courses + 4 credits for summer internship)
  - b. Research: 20 credits (10 credits for preparatory courses + 10 credits for project work)

According to the Head of the concerned division, it has been found that the research component of 30 credits consisted of 16 credits for preparatory courses, 04 credits for summer internship, and only 10 credits for project work as mentioned above at S.No. 6. This has created the problem whether to treat courses under research components as credit or non-credit courses. Because of this confusion it has been proposed by the Head ABM to adopt the procedure of grading the courses under research components in lines of Y.S. Parmar University of Horticulture and Forestry, Solan (H.P.).

More so, the Head, ABM has also proposed that one-time exemption on similar lines for the previous batches of MBA (ABM) 2022-23 and 2023-24 may be granted for previous two batches which has been recommended by the Dean, FoA. After detailed deliberations, it was resolved:

- i. ***“Resolved to the procedure of grading the courses under research components in lines of Y.S. Parmar University of Horticulture and Forestry, Solan (H.P) (Annexure- iv) be adopted.***
- ii. ***One-time exemption on similar lines for the previous batches of MBA (ABM) 2022-23 and 2023-24 be granted.”***

**Agenda Item No. AC (25) 11 : Aggressive practical training for undergraduates, Intensive research exposure and Establishment of collaborative learning space in the university**

I/c Counseling & Placement Cell vide no. AUJ/Placement cell/ 24-25/F-2/10 dated 25-04-2025 submitted the following issues for deliberation and discussion.

- a) **Aggressive practical training for undergraduates:**
- b) **Intensive research exposure to undergraduate students.**
- c) **Establishment of collaborative learning space in the university**

***“Resolved to:***

***Conduct aggressive practical training for undergraduates.***

***Give intensive research exposure to undergraduate students.***

***Establish collaborative learning space in the university was approved.”***

**Agenda Item No. AC (25) 12 : Revision of Academic Robes/Academic Regalia of Convocation, SKUAST-Jammu**

Registrar informed the house that the university has recently introduced new undergraduate, postgraduate, and doctoral programs. As the first batch of graduates from these programs is set to be conferred degree in the forthcoming convocation, it has become imperative for SKUAST-Jammu to revisit and revise its academic robes and regalia. After detailed deliberations, it was resolved:

***“Resolved to frame a committee for finalizing the Academic Robes/Regalia for the Convocation.”***

**Agenda Item No. AC (25) 13 : Any other agenda with the permission of Chair**

- a. **Modification of the course content of BSS-311 (Elementary Statistics & Computer Education) offered to students of B.Sc. (Hons.) Horticulture degree programme.**

***“Resolved that the changes as suggested by Professor & Head, Division of Statistics and Computer Sciences may be adopted The modified course content is enclosed as Annexure-v.***

The meeting ended with vote of Thanks



**Registrar  
Member Secretary**



**Hon'ble Vice-Chancellor**





# Annexure-I



**Annexure-I**

# ACADEMIC COUNCIL

**Date: 1<sup>st</sup> of May, 2024**
**Venue: Conference Hall**
**SKUAST-Jammu, Chatha**

## Participants Record

1.	Prof. B.N. Tripathi, Hon'ble Vice-Chancellor	Ex-Officio Chairman
2.	Dr. Rajinder Peshin Director Education/HoD, AEE	Member
3.	Dr. Sushil Kumar Gupta Registrar/Director Research	Member Secretary/Member
4.	Prof. Amrish Vaid Director Extension	Member
5.	Dr. Sanjay Khar Director Planning and Monitoring /HoD, FMPE	Member
6.	Dr. Anil Kumar Dean, FoA, Chatha	Member
7.	Dr. Rajesh Katoch Dean, F.V.Sc. & A.H., R.S. Pura	Member
8.	Dr. Sudhakar Diwvedi Dean, Student Welfare	Member
9.	Dr. J.S. Soodan Dean, FoDT	Member
10.	Dr. Sushil Sharma Dean, FoAE	Member
11.	Dr. Vikas Tandon Dean, FoH&F	Member
12.	Dr. S.E.H. Rizvi Dean, F.B.Sc.	Member
13.	Dr. R.K. Samnotra I/c University Librarian	Member
14.	Dr. M.S. Bhadwal Controller of Examination	Member
15.	Dr. R.K. Salgotra Director, Institute of Biotechnology	Member
16.	Dr. Jyoti Kachroo, Professor Head, Division of Agricultural Economics and ABM	Member
17.	Dr. Tuhina Dey, Professor, Head, Division of Plant Breeding and Genetics	Member
18.	Dr. Vikas Sharma, Professor, Head, Division of Soil Science and Agril. Chemistry	Member
19.	Prof. S.K. Singh Head, Division of Plant Pathology	Member

20.	Dr. Neelesh Sharma Head, Division of Veterinary Microbiology and Immunology	Member
21.	Dr. Asma Khan Head,, Division of Livestock Production Management	Member
22.	Dr. Shalini Suri Head, Division of Veterinary Anatomy	Member
23.	Dr. Jonali Devi Head, Division of Veterinary Physiology and Biochemistry	Member
24.	Dr. Ankur Rastogi Head, Division of Animal Nutrition	Member
25.	Dr. Kamal Sarma Head, Division of Veterinary Animal Husbandry Extension Education	Member
26.	Dr. Sunil Kumar Head, Division of Live Products Technology	Member
27.	Dr. Utsav Sharma, Head, Division of Veterinary Gynaecology and Obstetrics	Member
28.	Dr. H.R. Bhardwaj Head, Division of Veterinary Surgery	Member
29.	Dr. Rajiv Singh Head, Division of Veterinary Medicine	Member
30.	Dr. Nirap Kishore Head, Division of Pharmacology and Toxicology	Member
31.	Dr. Pankaj Goswami Head, Division of Veterinary Pathology	Member
32.	Dr. Asraf Malik Head, Division of Public Health & Epidemiology	Member
33.	Dr. Anish Yadav Head, Division of Animal Genetics and Breeding	Member
34.	Dr. Manish Kumar Sharma Head, Division of Statistics and Computer Science	Member
35.	Dr. Sahar Masud Head, Division of Fisheries	Member
36.	Dr. Sanjay Guleria Head, Division of Biochemistry	Member
37.	Dr. Brajeshwar Singh Head, Division of Microbiology	Member
38.	Dr. Gurdev Chand Head, Division of Plant Physiology	Member
39.	Dr. R.K. Srivastava Head, Division of Soil and Water Engineering	Member
40.	Dr. J.P. Singh Head, Division of Processing and Food Engineering	Member
41.	Dr. Prashant Bakshi Head, Division of Fruit Science	Member

42.	Dr. Jagmohan Singh Head, Division of Post-Harvest Management	Member
43.	Dr. R.K. Pandey Head, Division of Floriculture and Landscaping	Member
44.	Dr. Sandeep Sehgal Head, Division of Silviculture and Agroforestry	Member
45.	Dr. Lalit Mohan Gupta Head, Division of Forest Products and Utilization	Member
46.	Dr. A.P. Singh Sr. Scientist, ACRA, Dhiansar	Member
47.	Dr. Neeraj Kotwal Senior Scientist, RHRS, Bhadarwah	Member
48.	Dr. Parveen Singh Incharge, MBRSS, Poonch	Member
49.	Dr. Ravinder Singh Sudan MRS, Udhampur.	Member
50.	Dr. Anil Kumar Singh Professor, Institute of Biotechnology	Member
51.	Dr. Amit Jasrotia Professor, Division of Fruit Science	Rapporteur
52.	Dr. Nawab Nashiruddullah Professor, Division of Veterinary Pathology	Member
53.	Sakshi Sharma Ph.D. Plant Pathology ( Student Representative)	Member



# Annexure-II



**Annexure-II**

## FEE STRUCTURE FOR UNDERGRADUATE/POSTGRADUATE PROGRAMMES

**(a) At the time of 1<sup>st</sup> admission: for Undergraduate / Postgraduate / Ph.D. Programmes**

S.No.	Particulars	Semester wise fee (Rs.)		
		Undergraduate Programmes B.Sc. (Hons) Agriculture B.Sc.(Hons.) Horticulture B.Tech. Dairy Technology B.Tech. Biotechnology B.Tech. Agricultural Engineering	Postgraduate Programmes	Ph.D. Programme
A.				
1.	Admission fee	6875	8250	11000
2.	University Registration fee	4125	6875	8250
3.	Cauton/Security Money for Library (refundable)	4125	4125	4125
4.	College Laboratory Development charges	688	1375	1375
5.	Semester Registration fee	688	1100	1375
6.	Tuition fee	2750	5500	6875
7.	Examination fee	1375	1375	1375
8.	Extra-Curricular Activities fee	688	688	688
9.	Medical Examination fee	275	275	275
10.	Magazine fund (per annum)	275	275	275
11.	Identity card	138	138	138
12.	Placement and counselling fund	138	0	0
13.	Educational Tour	4125	0	0
14.	Alumni Fee	550	550	550
Total (A)		26815	30526	36301
B. Hostel Charges				
1.	Hostel Charges (Room rent) Per Semester			
i.	Single Seater	4813	4813	4813
ii.	Dormitory	3438	3438	3438
iii.	NRI Rooms	6875	6875	6875
2.	Hostel Security (refundable) for fresh admission	5500	5500	5500
3.	Mess security in case of Hostel inmates for fresh admission (refundable)	5500	5500	5500
4.	Hostel maintenance fund per Semester	688	688	688
5.	Utensils crockery breakage fund	209	209	209
6.	Common Room Fund (Hostellers)	413	413	413
7.	Electricity charges Per semester	2750	2750	2750
8.	Generator charges Per Semester per Students	4125	4125	4125
9.	Mess cum Canteen Charges	13750	13750	13750
(Total 02-09)				
Total B		32935	32935	32935



i.	Single Seater	37748	37748	37748
ii.	Dormitory	36373	36373	36373
iii.	NRI Rooms	39810	39810	39810
<b>Grand Total (A + B)</b>				
i.	Single Seater	64563	68274	74049
ii.	Dormitory	63188	66899	72674
iii.	NRI Rooms	66625	70336	76111

**(b) Recurring Semester Fee (per semester)**

S. No.	Particulars	Undergraduate Programmes B.Sc. (Hons) Agriculture B.Sc.(Hons.) Horticulture B.Tech. Dairy Technology B.Tech. Biotechnology B.Tech. Agricultural Engineering	Postgraduate Programmes	Ph.D Programme
<b>(A)</b>				
1.	Semester Registration fee	688	1100	1375
2.	Tuition fee	4125	8250	11000
3.	Examination fee	1375	1375	1375
4.	Extra-Curricular Activities fee	1375	1650	2063
5.	Medical Examination fund/fee	275	275	275
6.	Magazine fund (per semester)	138	138	138
7.	Amalgamated fund	825	825	825
8.	Library Fee	413	413	413
9.	Infrastructure development fund	688	688	688
10.	Student Welfare Fee	688	688	688
11.	Water Charges	138	138	138
<b>Total (A)</b>		<b>10728</b>	<b>15540</b>	<b>18978</b>
<b>(B)</b>				
Hostel Charges (Room rent)				
1.	i. Single Seater	4813	4813	4813
	ii. Dormitory	3438	3438	3438
	iii. NRI Rooms	6875	6875	6875
2.	Hostel maintenance fund	688	688	688
3.	Utensils crockery breakage fund	209	209	209
4.	Common Room Fund	413	413	413
5.	Electricity charges	2750	2750	2750
6.	Generator charges	4125	4125	4125
7.	Mess cum Canteen Charges	13750	13750	13750
<b>(Total 02-09)</b>				
<b>Total (B)</b>		<b>21935</b>	<b>21935</b>	<b>21935</b>
i.	Single Seater	26748	26748	26748
ii.	Dormitory	25373	25373	25373
iii.	NRI Rooms	28810	28810	28810
<b>G. Total (A+B)</b>				
i.	Single Seater	37476	42288	45726
ii.	Dormitory	36101	40913	44351
iii.	NRI Rooms	39538	44350	47788

**c) Fee structure for self-financing seats in addition to normal fees (per Semester)**

S. No.	Programme	Category	Fees (Rs.)
1.	B.Sc. (Hons) Ag./B.Sc. (Hons) Horti.	NRI/NRI Sponsored /OCI	50,000/-
		Self Financing (UT of J&K and Ladakh domicile seats)/ Ward of serving employee of SKUAST-J	29700/-
2.	B. Tech. Agri. Engineering/ / B. Tech. Dairy Technology	NRI/NRI Sponsored /OCI/ Self Financing (UT of J&K and Ladakh domicile seats)	55,000/-
3.	B.Tech. Biotechnology	Self Financing	55,000/-
4.	M.Sc./MSc (Ag) /MSc (Horti.) MSc (Forestry)/ (MBA) Agri-Business Management/ M.F.Sc./M.V.Sc./M.Tech.	Self financing	55,000/-
5.	M.Sc. Molecular Biology & Biotechnology.	Self Financing	55,000/-
6.	Ph.D. Biotechnology / Microbiology/ Agri- Business Management	Self financing	55,000/-

**B.V.Sc & A.H.:**
**(a) At the time of 1<sup>st</sup> admission for 1<sup>st</sup> year B.V.Sc. & A.H. Programme.**

S.No.	Particulars	Year Wise Fee (Rs.)
<b>A.</b>		
1.	Admission fee	14000
2.	University Registration fee	8500
3.	Caution/Security Money for Library (refundable)	4200
4.	College Laboratory Development charges	1600
5.	Semester Registration fee	1500
6.	Tuition fee	6000
7.	Examination fee	2950
8.	Extra-Curricular Activities fee	1500
9.	Medical Examination fee	300
10.	Magazine fund (per annum)	600
11.	Identity card	300
12.	Placement and counselling fund	200
13.	Educational Tour	7800
14.	Alumni Fee	550
<b>Total= (A)</b>		<b>50000</b>
<b>B. Hostel Charges</b>		
1.	Hostel Charges (Room rent) Per Semester	
i.	Single Seater	4813
ii.	Dormitory	3438
iii.	NRI Rooms	6875
2.	Hostel Security (refundable) for fresh admission	5500
3.	Mess security in case of Hostel inmates for fresh admission (refundable)	5500
4.	Hostel maintenance fund per Semester	688
5.	Utensils crockery breakage fund	209
6.	Common Room Fund (Hostellers)	413
7.	Electricity charges Per semester	2750
8.	Generator charges Per Semester per Students	4125
9.	Mess cum Canteen Charges	13750
<b>(Total 02-09)</b>		

<b>Total= B</b>		<b>32935</b>
i.	Single Seater	<b>37748</b>
ii.	Dormitory	<b>36373</b>
iii.	NRI Rooms	<b>39810</b>
<b>Grand Total (A + B)</b>		
i.	Single Seater	<b>87748</b>
ii.	Dormitory	<b>86373</b>
iii.	NRI Rooms	<b>89810</b>

**(b) Recurring Semester Fee in rupees (year wise) for B.V.Sc. & A.H Programme.**

S.No.	Particulars	2nd Year	3rd Year	4th Year	5th Year
1.	Semester Registration fee	1375	1375	2063	1375
2.	Tuition fee	31800	31800	47700	31800
3.	Examination fee	2750	2750	4125	2750
4.	Extra-Curricular Activities fee	2750	2750	4125	2750
5.	Medical Examination fund/fee	550	550	825	550
6.	Magazine fund (per semester)	275	275	413	275
7.	Amalgamated fund	1650	1650	2475	1650
8.	Library Fee	825	825	1238	825
9.	Infrastructure development fund	1375	1375	2063	1375
10.	Student Welfare Fee	1375	1375	2063	1375
11.	Water Charges	275	275	413	275
<b>Total =A</b>		<b>45000</b>	<b>45000</b>	<b>67503</b>	<b>45000</b>

<b>(B)</b>	<b>Hostel Charges (Room rent)</b>				
<b>1.</b>	i. Single Seater	9626	9626	14439	9626
	ii. Dormitory	6876	6876	10314	6876
	iii. NRI Rooms	13750	13750	20625	13750
<b>2.</b>	Hostel maintenance fund	1376	1376	2064	1376
<b>3.</b>	Utensils crockery breakage fund	418	418	627	418
<b>4.</b>	Common Room Fund	826	826	1239	826
<b>5.</b>	Electricity charges	5500	5500	8250	5500
<b>6.</b>	Generator charges	8250	8250	12375	8250
<b>7.</b>	Mess cum Canteen Charges	27500	27500	41250	27500
<b>(Total 02-09)</b>					
<b>Total = (B)</b>		<b>43870</b>	<b>43870</b>	<b>65805</b>	<b>43870</b>
<b>i.</b>	Single Seater	<b>53496</b>	<b>53496</b>	<b>80244</b>	<b>53496</b>
<b>ii.</b>	Dormitory	<b>50746</b>	<b>50746</b>	<b>76119</b>	<b>50746</b>
<b>iii.</b>	NRI Rooms	<b>57620</b>	<b>57620</b>	<b>86430</b>	<b>57620</b>
<b>G. Total (A + B)</b>					
<b>i.</b>	Single Seater	<b>98496</b>	<b>98496</b>	<b>147747</b>	<b>98496</b>
<b>ii.</b>	Dormitory	<b>95746</b>	<b>95746</b>	<b>143622</b>	<b>95746</b>
<b>iii.</b>	NRI Rooms	<b>102620</b>	<b>102620</b>	<b>153933</b>	<b>102620</b>

**Fee structure for Self- Financing Seats in Addition to Normal Fees for B.V.Sc. & A.H. (per year)**

S.No.	Programme	Category	Fees (Rs.)
1.	B.V.Sc & AH	NRI/NRI Sponsored /OCI	Rs. 5,00,000
		Self Financing (UT of J&K and Ladakh domicile seats)/Ward of serving employee of SKUAST-J	Rs. 3,00,000

**Other Charges:**

S.No.	Particulars	Proposed Fee after 10% Enhancement (Rs.)*
1.	Migration fee for the students migrating to SKUAST-J	5500
2.	Inter- University Migration Fee	550
3.	Supplementary / Compartment exam fee per paper	660
4.	Re-Checking	550 / course
5.	Registration with late fee for on-roll students (only for maximum of 7 working days from the date of registration)	250/ day
6.	Course addition / withdrawal fee (per course)	250 / per course
7.	Special course fee	300 / per course
8.	Thesis submission fee M.V.Sc. & M.Sc.	1650
9.	Thesis submission fee Ph.D.	2200
10.	Provisional Degree Certificate	350
11.	Duplicate Degree Certificate	2200
12.	Duplicate Migration Certificate	1100
13.	Duplicate Library Card	100
14.	Duplicate Provisional Degree Certificate	1100
15.	Duplicate Semester Report/ Marks Sheet	1100
16.	Duplicate other Certificate	100
17.	Transcript of academic records	550
18.	Duplicate transcript	1100
19.	Degree in absentia with folder	1100
20.	Degree in absentia without folder	550
21.	Re- admission	2200
22.	Fee for verification of certificates ( to be charged from the students at the time of first admission	550
23.	Document Verification fee shall be changed from the Private/ global recruiting agencies except from the Govt. Departments from the academic session 2023-24	1650
24.	Registration fee for B.V.Sc & A.H. students for Undergoing Internship Programme.	6800

**Application Fee for SKUAST – Jammu Common Entrance Test (Non- refundable)**

<b>Undergraduate Programme</b>	<b>Application Fee</b>	<b>Application fee with late fee</b>
OM /Reserved / Self Financing / Wards of SKUAST-J Employees/ In-Service Govt. Nominee categories	Rs. 2000/-	Rs. 3000/-
NRI* / NRI Sponsored /OCI* category	Rs. 8000/-	Rs. 10000/-
Post graduate Programmes	Rs. 2500/-	Rs. 3500

*NRI\*: Non-Resident Indian,*

*OCI\*: Overseas citizen of India*



# Annexure-III



**Annexure-III**
**Summary of Seat Matrix of Undergraduate Degree Programme in different Faculties**

S. No.	Programme	OM 50%	SC (8%)	ST* (20%)		OBC (8%)	ALC/IB (4%)	RBA 10%	PWD (4%)	CDP (3%)	CPF& UT-PP (1%)	SP (2%)	EWS (Up to 10%)	SF - Domicile of UT of J&K and Ladakh	AIB (SF)	NRI/NRI Sponsored/OCI	WUE	GOJK	VCI/ICAR	Grand Total
				(i) (10%)	(ii) (10%)															
1.	B.V.Sc. & A.H.	21	04	04	04	03	02	04	02	01	-	01	04	18	-	20	03	-	13	100
2.	B.Sc. (Hons) Agriculture	35	06	07	07	5	03	07	03	02	01	01	07	19	-	14	03	04	28	145
3.	B.Tech. Biotechnology	-	-	-	-	-	-	-	-	-	-	-	-	-	50	-	-	-	-	50
4.	B.Sc. (Hons) Horticulture	15	03	03	03	02	01	03	01	01	-	01	03	15	-	06	02	04	-	60
5.	B.Tech. (Agril. Engg.)	13	02	03	03	02	01	02	01	01	-	-	02	06	-	04	-	-	-	38
6.	B.Tech. Dairy Technology	12	02	03	02	02	01	02	01	01	-	-	01	05	-	-	-	-	-	30
	<b>Total</b>	<b>96</b>	<b>17</b>	<b>20</b>	<b>19</b>	<b>14</b>	<b>8</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>63</b>	<b>50</b>	<b>44</b>	<b>8</b>	<b>8</b>	<b>41</b>	<b>423</b>



### Summary of Seat matrix Postgraduate Degree Programme (Agriculture and Allied Sciences)

S. No.	Programme	OM 50%	SC (8%)	ST (20%)		RBA (10%)	ALC/IB (4%)	OBC (8%)	CDP (1%)	Horizontal Reservation		EWS (Up to 10%)	SF-Domicile of UT of J&K and Ladakh	AIB (SF)	GOJK	ICAR For 2024-25 (30%)	Grand Total
				(i) (10%)	(ii) (10%)					CPF& UT-PP (1%)	SP (1%)						
1.	M.Sc. (Agri.) Agronomy	04	01	01	01	01	-	-	-	-	-	01	01	01	01	04	15
2.	M.Sc. (Agri.) Agricultural Economics	01	-	01	-	-	-	-	-	-	-	-	01	01	-	03	07
3.	M.Sc. (Agri.) Agricultural Extension Education	02	-	-	01	-	-	-	-	-	-	-	01	01	-	03	08
4.	M.Sc. (Agri.) Entomology	02	-	01	-	01	-	-	-	-	-	-	01	01	-	02	08
5.	M.Sc. (Agri. Genetics & Plant Breeding	02	-	-	01	01	-	-	-	-	-	-	01	01	-	02	08
6.	M.Sc. (Agri.) Plant Pathology	03	01	01	-	-	-	-	-	-	-	-	01	01	01	03	11
7.	M.Sc. (Agri.) Sericulture	01	-	-	-	01	-	-	-	-	-	-	01	-	01	01	05
8.	M.Sc. (Agri.) Soil Science	03	-	01	01	-	-	01	-	-	-	-	01	01	-	03	11
9.	M.Sc. (Agri.) Seed Science and Technology	01	01	01	-	-	-	-	-	-	-	-	-	-	-	-	03
10.	M.Sc. (Agri.) Organic Farming	02	-	01	01	-	-	-	-	-	-	-	01	-	-	-	05
Total		21	03	07	05	04	-	01	-	-	-	01	09	07	03	21	81

As there is smaller fraction in reserved seats, the seats indicated under reserved categories shall be rotated among the categories over the year in accordance with the S.O. 176 of UT J&K, Social welfare Department

### Summary of Seat matrix Postgraduate Degree Programme [M.Sc. (Agri.) Molecular Biology & Biotechnology\*]

S. No.	Programme	OM 50%	SC (8%)	ST (20%)	RBA (10%)	ALC/ IB (4%)	OBC (8%)	CDP (1%)	CPF& UT-PP (1%)	SP (1%)	EWS (Up to 10%)	SF - Domicile of UT of J&K and Ladakh	AIB (SF)	GOJK	ICAR For 2024-25 (30%)	Grand Total
1.	M.Sc. (Agri.) Molecular Biology & Biotechnology*	-	-	(i) (10%) (ii) 10%	-	-	-	-	-	-	-	-	08	-	-	08
	Total	-	-	-	-	-	-	-	-	-	-	-	08	-	-	08

### Summary of Seat matrix Postgraduate Degree Programme in (Horticulture)

Sl. No.	Programme	OM 50%	SC (8%)	ST (20%)	RBA (10%)	ALC/ IB (4%)	OBC (8%)	CDP (1%)	CPF& UT-PP (1%)	SP (1%)	EWS (Up to 10%)	SF - Domicile of UT of J&K and Ladakh	AIB (SF)	GOJK	ICAR For 2024-25 (30%)	Grand Total
1.	M.Sc. (Horti.) Floriculture & Landscaping	01	-	(i) (10%) (ii) 10%	-	-	-	-	-	-	-	01	01	-	02	05
2.	M.Sc. (Horti.) Post Harvest Management	01	-	01	-	-	-	-	-	-	-	01	01	01	02	07
3.	M.Sc. (Horti.) Fruit Science	01	-	-	-	-	-	-	-	-	-	01	01	02	02	07
4.	M.Sc. (Horti.) (Vegetable Sciences)	01	-	-	01	-	-	-	-	-	-	01	01	01	02	07
5.	M.Sc. (Forestry) Silviculture and Agroforestry	01	01	-	01	-	-	-	-	-	-	Nil	01	Nil	01	05
	Total	05	01	01	01	01	-	-	-	-	-	04	05	04	09	31

Summary of Seat matrix Postgraduate Degree Programme in (M.Tech. Agriculture Engineering)

Sl. No.	Programme	OM 50%	SC (8%)	ST (20%)		RBA (10%)	ALC/IB (4%)	OBC (8%)	CDP (1%)	CPF& UT-PP (1%)	SP (1%)	EWS (Up to 10%)	SF - Domicile of UT of J&K and Ladakh	AIB (SF)	GOJK	ICAR For 2024-25 (30%)	Grand Total
				(i) 10%	(ii) 10%												
1.	M. Tech. Farm Machinery & Power Engineering	01	-	01	-	-	-	-	-	-	-	-	01	-	-	01	04
2.	M. Tech Soil & Water Conservation Engineering	01	-	01	-	01	-	-	-	-	-	-	01	-	-	01	05
Total		02	-	02	-	01	-	-	-	-	-	-	02	-	-	02	09

Summary of Seat matrix Postgraduate Degree Programme in Fisheries Science

Sl. No.	Programme	OM 50%	SC (8%)	ST (20%)		RBA (10%)	ALC/IB (4%)	OBC (8%)	CDP (1%)	CPF& UT-PP (1%)	SP (1%)	EWS (Up to 10%)	SF - Domicile of UT of J&K and Ladakh	AIB (SF)	GOJK	ICAR For 2024-25 (30%)	Grand Total
				(i) 10%	(ii) 10%												
1.	Master of Fisheries Science (FRM)	03	01	01	-	01	-	-	-	-	-	-	01	-	-	-	07
Total		03	01	01	-	01	-	-	-	-	-	-	01	-	-	-	07

Summary of Seat matrix Postgraduate Degree Programme in (in Basic Science)

Sl. No.	Programme	OM 50%	SC (8%)	ST (20%)		RBA (10%)	ALC/ IB (4%)	OBC (8%)	CDP (1%)	CPF& UT-PP (1%)	SP (1%)	EWS** (Up to 10%)	SF - Domicile of UT of J&K and Ladakh	AIB (SF)	GOJK	ICAR For 2024-25 (30%)	Grand Total
				(i) (10%)	(ii) (10%)												
1.	M.Sc. (Agri.) Biochemistry	01	-	01	-	-	-	-	-	-	-	-	01	01	-	03	07
2.	M.Sc. (Agri.) Plant Physiology	01	-	-	01	01	-	-	-	-	-	-	01	-	-	02	06
3.	M.Sc. (Agri.) Microbiology	-	-	-	-	-	-	-	-	-	-	-	-	04	-	-	04
4.	M.Sc. (Agri.) Agricultural Statistics	01	-	-	-	-	-	-	-	-	-	-	01	-	-	-	02
	<b>Total</b>	<b>03</b>	<b>-</b>	<b>01</b>	<b>01</b>	<b>01</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>03</b>	<b>05</b>	<b>-</b>	<b>05</b>	<b>19</b>



# Annexure-IV



**Annexure-IV**

**Amendment in the MBA (ABM) Programme Curriculum**

<b>MBA (ABM) Programme Structure</b>	<b>Credits Hrs.</b>
Research (Summer Internship +Research Project)	30 (10+20)
ABM 545 Summer Internship/ Industrial Attachment	4+0
<b>Basic Courses mandatory for Summer Internship</b>	
ABM 539 Communication for Management and Agri Business	3+0
ABM 540 Research Methodology for Agri Business Management	3+0
Research Project	20
<b>Basic courses mandatory for Research Project</b>	10
ABM 541 Computer Applications for Agri Business	3+0
ABM 542 Project Management and Agri Business Entrepreneurship	3+0
ABM 543 Agri Business Environment & Policy	2+0
ABM 544 Agri Business Laws and Ethics	2+0
ABM 599 Project Work	0+10

**Proposed**  
**B.Sc. (Hons.) Horticulture**

Course Name: Elementary Statistics and Computer Application  
Credit Hours: 3(2+1)

Code: BSS-311

**Theory**

Introduction to statistics, limitations of statistics. Basic-concepts: Variable statistics, types and sources of data, classification and tabulation of data, construction of frequency distribution, tables, graphic representation of data, simple, multiple component and percentage, bar diagram, pie diagram, histogram, frequency polygon and frequency curve average and measures of location, mean, median and mode for raw and grouped data. Dispersion: Range, standard deviation, variance, coefficient of variation for raw and grouped data. Probability: Basic concept, additive and multiplicative laws. Normal distribution. Sampling, basic concepts, sampling vs. complete enumeration, parameter and statistic, sampling methods, simple random sampling. Tests of Significance: Basic concepts tests for equality of means and independent and paired tests, chi-square test for application of attributes and test for goodness of fit of Mendalian ratios. Correlation: Scatter diagram, correlation co-efficient and its properties, regression, fitting of simple linear regression. Experimental designs: Basic concepts, completely randomized design, randomized block design, latin square designs, Computer application: Introduction to computers and personal computers, basic concepts, operating system, MS Word features of word processing, creating document and tables and printing of document, MS Excel-concept of electronic spreadsheet, creating, editing, and saving of spreadsheet, inbuilt statistical functions and formula bar, MS Power point-preparation, presentation of slides and slide show, introduction to internet.

**Practical**

Construction of frequency distribution table and its graphical representation, histogram, frequency polygon, frequency curve, bar chart, simple multiple, component and percentage bar charts, pie charts, mean, median and mode for raw and grouped data, coefficient of variation, 't' test for independent will equal and unequal variants, paired 't' test, chi-square test for contingency tables and theoretical ratios, correlation and linear regression. MS Office, Excel, PowerPoint.





# **Annexure-III**



(14)

**Sher-e-Kashmir University of Agricultural  
Sciences and Technology of Jammu**

**University Order No. 350 (Secy.) of 2024**

**Dated: 20.11.2024**

**Sub: Engagement as Professor of Practice at SKUAST Jammu**

**Ref: Letter of Offer of appointment as "Professor of Practice" issued vide No. AUJ/Secy./24-25/F-194/2781-2783 dated 06.11.2024**

Consequent upon the acceptance of the offer of appointment communicated through email dated 19<sup>th</sup> November 2024, **Mr. Gulshan Singh Rana**, Head of Market Development and Commercial Capability, Lead Commercial Capability & Community, Bayer Crop Science, is hereby engaged as *Professor of Practice* under the "Industry-Funded Category", at Sher-e-Kashmir University of Agricultural Sciences and Technology (SKUAST), Jammu.

The initial term of engagement shall be for a period of one year, with extension up to a maximum of three years, subject to a performance evaluation in accordance with the University's assessment procedures. The extension shall be determined based on the expert contributions and the requirements of the Institution.

The duties, responsibilities, and other general conditions for the position of Professor of Practice shall be as contained in the University Notification No. AUJ/Est./G-687/24-25/9748-9827 dated 31.10.2024. The above said engagement shall be without any financial compensation from the University.

Mr. Rana is required to take the assignment within 21 days from the date of issuance of this order otherwise the offer shall stand cancelled *ab initio*.

**By Order**

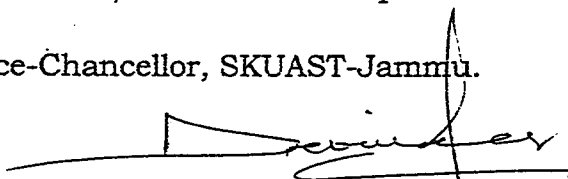
**Sd/-  
Registrar**

**No: AUJ/Secy./24-25/F-194/2842-76**

**Dated.20.11.2024**

Copy for information to:

- All Officers of the University of SKUAST-Jammu.
- All Deans of Faculties/Director, School of Biotechnology.
- Dr. Sanjay Guleria, I/c Counselling and Placement Cell for information
- Concerned \_\_\_\_\_
- All I/c Stations/Sub-Stations/KVKs/AICRPs of SKUAST-Jammu.
- All Joint Registrars/Deputy Registrars/Deputy Comptrollers, SKUAST-Jammu.
- All Asstt. Registrars/Administrative Officers/Assistant Comptrollers /Account Officers, SKUAST-Jammu.
- SVC for kind information of the Hon'ble Vice-Chancellor, SKUAST-Jammu.

  
**(Devinder Sharma) 20/11/2024**  
**Assistant Registrar (Secy.)**

Sher-e-Kashmir University of Agricultural  
Sciences and Technology of Jammu

University Order No 352 (Secy.) of 2024

Dated: 11.12.2024

Sub: Engagement as Professor of Practice at SKUAST Jammu

Ref: Letter of Offer of appointment as "Professor of Practice" issued vide no. AUJ/Secy./24-25/F-194/2902-04 dated 03.12.2024.

Consequent upon the acceptance of the offer of appointment communicated through email dated 3<sup>rd</sup> December 2024, **Mr. Satinder Singh Nandra, Vice President, Technical & Supply Chain, Kandhari Beverages Pvt. Ltd, Jammu**, is hereby engaged as Professor of Practice under the "Industry-Funded Category", at Sher-e-Kashmir University of Agricultural Sciences and Technology (SKUAST), Jammu.

The initial term of engagement shall be for a period of one year, with extension up to a maximum of three years, subject to a performance evaluation in accordance with the University's assessment procedures. The extension shall be determined based on the expert contributions and the requirements of the Institution.

The duties, responsibilities, and other general conditions for the position of Professor of Practice shall be as contained in the University Notification No. AUJ/Est./G-687/24-25/9748-9827 dated 31.10.2024. The above said engagement shall be without any financial compensation from the University.

Mr. **Nandra** is required to take the assignment within 21 days from the date of issuance of this order otherwise the offer shall stand cancelled *ab initio*.

By Order

Sd/-  
Registrar

No: AUJ/Secy./24-25/F-194/2911-2954

Dated. 11.12.2024

Copy for information to:

- All Officers of the University of SKUAST-Jammu.
- All Deans of Faculties/Director, School of Biotechnology.
- Dr. Sanjay Guleria, I/c Counselling and Placement Cell for information
- Mr. Satinder Singh Nandra, Vice President, Technical & Supply Chain, Kandhari Beverages Pvt. Ltd, Jammu.
- All I/c Stations/Sub-Stations/KVKs/AICRPs of SKUAST-Jammu.
- All Joint Registrars/Deputy Registrars/Deputy Comptrollers, SKUAST-Jammu.
- All Asstt. Registrars/Administrative Officers/Assistant Comptrollers /Account Officers, SKUAST-Jammu.
- SVC for kind information of the Hon'ble Vice-Chancellor, SKUAST-Jammu.

  
(Devinder Sharma) 11/12/2024  
Assistant Registrar (Secy.)

# **Annexure-IV**

Syllabus  
Sanskrit Language  
Part-I

## विषयानुक्रमणी

स्तवकः	पाठः	पाठ्यविन्दुः
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### प्रथमः भागः

1. प्रथमः स्तवकः प्रथमा विभक्तिः
  - 1.1 प्रथमः पाठः अजन्तपुंलिङ्गाः शब्दाः
  - 1.2 द्वितीयः पाठः अजन्तस्त्रीलिङ्गाः शब्दाः
  - 1.3 तृतीयः पाठः अजन्तनपुंसकलिङ्गाः शब्दाः
  - 1.4 चतुर्थः पाठः हलन्त-पुंलिङ्गाः शब्दाः
  - 1.5 पञ्चमः पाठः हलन्त-स्त्रीलिङ्गाः शब्दाः
  - 1.6 षष्ठः पाठः हलन्त-नपुंसकलिङ्गाः शब्दाः
2. द्वितीयः स्तवकः
  - 2.1 प्रथमः पाठः द्वितीया विभक्तिः
  - 2.2 द्वितीयः पाठः तृतीया विभक्तिः
  - 2.3 तृतीयः पाठः चतुर्थी विभक्तिः
  - 2.4 चतुर्थः पाठः पञ्चमी विभक्तिः
  - 2.5 पञ्चमः पाठः षष्ठी विभक्तिः
  - 2.6 षष्ठः पाठः सप्तमी विभक्तिः
  - 2.7 सप्तमः पाठः सम्बोधन-प्रथमा
3. तृतीयः स्तवकः
  - 3.1 प्रथमः पाठः सर्वनामशब्दाः
  - 3.2 द्वितीयः पाठः अव्ययानि
  - 3.3 तृतीयः पाठः सप्त विभक्तयः

### द्वितीयः भागः

#### 4. चतुर्थः स्तबकः

- |     |               |   |
|-----|---------------|---|
| 4.1 | प्रथमः पाठः   | आत्मनेपदिनां धातूनां लट्-लकारे प्रयोगाः                                 |
| 4.2 | द्वितीयः पाठः | आत्मनेपदिनां धातूनां लोट्-लकारे प्रयोगाः                                |
| 4.3 | तृतीयः पाठः   | आत्मनेपदिनां धातूनां लृट्-लकारे प्रयोगाः                                |
| 4.4 | चतुर्थः पाठः  | आत्मनेपदिनां धातूनां लङ्-लकारे प्रयोगाः                                 |
| 4.5 | पञ्चमः पाठः   | आत्मनेपदिनां धातूनां लट्-लोट्-लृट्-लङ्-लकारेषु प्रयोगाः                 |
| 4.6 | षष्ठः पाठः    | उपसर्ग-प्रयोगाः   |
| 4.7 | सप्तमः पाठः   | कर्मणि-प्रयोगाः – कर्मणि वर्तमाने लट्<br>कर्मणि भूते लङ्<br>कर्मणि लोट् |

#### 5. पञ्चमः स्तबकः

- |     |               |                          |
|-----|---------------|--------------------------|
| 5.1 | प्रथमः पाठः   | विशेष्य-विशेषणभावः       |
| 5.2 | द्वितीयः पाठः | चित्-चन-प्रयोगाः         |
| 5.3 | तृतीयः पाठः   | सङ्ख्याः                 |
| 5.4 | चतुर्थः पाठः  | पूरणप्रत्ययान्तानि पदानि |

#### 6. षष्ठः स्तबकः

- |     |               |  |
|-----|---------------|--|
| 6.1 | प्रथमः पाठः   | शतृप्रत्ययान्तरूपाणां प्रथमा-प्रयोगाः              |
| 6.2 | द्वितीयः पाठः | शतृप्रत्ययान्तरूपाणां द्वितीया-प्रयोगाः            |
| 6.3 | तृतीयः पाठः   | शतृप्रत्ययान्तरूपाणां तृतीया-प्रयोगाः              |
| 6.4 | चतुर्थः पाठः  | शतृप्रत्ययान्तरूपाणां चतुर्थी-प्रयोगाः             |
| 6.5 | पञ्चमः पाठः   | शतृप्रत्ययान्तरूपाणां पञ्चमी-प्रयोगाः              |
| 6.6 | षष्ठः पाठः    | शतृप्रत्ययान्तरूपाणां षष्ठी-प्रयोगाः               |
| 6.7 | सप्तमः पाठः   | शतृप्रत्ययान्तरूपाणां सप्तमी-प्रयोगाः              |
| 6.8 | अष्टमः पाठः   | शानच्प्रत्ययान्तरूपाणां सर्वासु विभक्तिषु प्रयोगाः |





Syllabus  
Sanskrit Language  
Part-II

**विषयानुक्रमणी**

पाठः	विषयः	पाठ्य बिन्दुः
1. प्रथमः पाठः	‘मम गृहम्’	एषः / एषा / एतत्
2. द्वितीयः पाठः	‘उत्तमः छात्रः’	वर्तमानकाले प्रथमपुरुषः- ति / तः / अन्ति
3. तृतीयः पाठः	‘वयं मिलामः’	अहम् / आवाम् / वयम् त्वम् / युवाम् / यूयम्
4. चतुर्थः पाठः	‘सज्जनौ रामसोमौ’	एतौ / तौ
5. पञ्चमः पाठः	‘वर्षाकालः’	बहुवचनम्
6. षष्ठः पाठः	‘मथुरायात्रा’	भवान् / भवन्तौ / भवन्तः भवती / भवत्यौ / भवत्यः
7. सप्तमः पाठः	‘प्रश्नोत्तराणि’	प्रश्नवाचकाः
8. अष्टमः पाठः	‘मम दिनचर्या’	समयः - घटिकायन्त्रेण
9. नवमः पाठः	‘विवेकयुक्तः मीनः’	अस्-धातुः, वर्तमानकालः
10. दशमः पाठः	‘वयं भारतीयाः’	अस्-धातुः, वर्तमानकाले त्रिषु पुरुषेषु
11. एकादशः पाठः	‘विद्यालयः’	द्वितीया
12. द्वादशः पाठः	‘गीतानि शृणोमि’	शृणोति / ददाति / करोति
13. त्रयोदशः पाठः	‘वस्त्राणि क्रीणामि’	क्रीणाति / जानाति
14. चतुर्दशः पाठः	‘उपदेशः’	लोट् - मध्यम-पुरुषे
15. पञ्चदशः पाठः	‘वीरङ्गना लक्ष्मीबाई’	लङ्-लकारः, भूतकालः
16. षोडशः पाठः	‘ग्रीष्मावकाशः’	लङ्-लकारः, भूतकालः
17. सप्तदशः पाठः	‘कोणार्कः’	क्तवतु-प्रत्ययः
18. अष्टादशः पाठः	‘राणाप्रतापः’	भविष्य-कालः

पाठः	विषयः	पाठ्य बिन्दुः
19. एकोनविंशः पाठः	'महीशूरपुरं प्रति प्रवासः' 'गुरुकुलम्' 'जन्तुशाला' 'काशी' 'आश्रमः' 'संस्कृतभाषा' 'रथयात्रा'	क्त्वा / ल्यप्
20. विंशः पाठः		तुमुन्
21. एकविंशः पाठः		तृतीया-विभक्तिः
22. द्वाविंशः पाठः		चतुर्थी-विभक्तिः
23. त्रयोविंशः पाठः		पञ्चमी-विभक्तिः
24. चतुर्विंशः पाठः		षष्ठी-विभक्तिः
25. पञ्चविंशः पाठः		सप्तमी-विभक्तिः

## **Syllabus**

### **French Languages**

**COURSE NAME: French Proficiency Skill-1    COURSE CODE: FPS-507    CREDIT HRS. 1+0**

#### **C COURSE OBJECTIVES**

*Students will have the opportunity to perfect the skills acquired by introducing to the French language and understanding the basic vocabularies.*

#### **COURSE OUTCOMES**

1. To be able to construct basic French sentences
2. To have the ability to understand the basic French vocabulary
3. To demonstrate a knowledge of French Culture.
4. To compare and contrast cultural practices related to French and other Country.
5. To demonstrate critical thinking and collaborative problem-solving through advanced task-based language activities.

#### **UNIT I: ET VOUS**

**Communication:** Se présenter, demander de se présenter. Donner des informations personnelles, Demander et donner des coordonnées.

**Grammaire:** Les adjectifs de nationalité, Les articles définis (le, la, l', les), Les prépositions devant les noms de villes et de pays, La négation

**Vocabulaire:** Les personnes, les loisirs, les nombres (32 à 69), Les pays et nationalités, L'identité, Les nombres (70 à 100)

**Phonétique:** Prononcer une simple, Les groupes rythmiques et l'accent tonique

**Socioculturel:** Civilisation- Artistes francophones

#### **UNIT II: On va où?**

**Communication:** Demander/Indiquer le chemin, Comprendre un itinéraire, se déplacer en metro ou en bus

**Grammaire:** Les articles définis et indéfinis, Les verbes en -er au présent (continuer), L'adjectif interrogative *quel*, le masculin et le féminin des professions.

**Verbes:** aller, prendre et descendre

**Vocabulaire:** La ville: les voies, les lieux, les monuments, les transports, les professions, les nombres (100 à 1 milliard)

**Phonétique:** L'intonation montante et descendante, La prononciation des verbes en -er au présent (je, tu, il, elle, ils, elles)

**Socioculturel:** Civilisation: Paris, Montréal: deux villes à découvrir

### **UNIT: III Qu'est-ce qu'on mange?**

**Communication:** Comprendre /Donner des horaires d'ouverture, Faire des courses, commander au restaurant, au café

**Grammaire:** Le singulier et le pluriel des noms, Les prepositions de lieu, La quantité non définie (partitifs + un peu de/d', beaucoup de/d'), Le pronom en

**Verbes:** payer, acheter, faire, manger

**Vocabulaire:** Les magasins, la nourriture: les commerces et commerçants, les rayons, les aliments, les quantités, les moyens de paiement, Au restaurant au café: les plats, les boissons, la vaisselle, les points positifs/négatifs

**Phonétique:** Le *e* final non prononcé, le *é* final prononcé, La consonne finale *on* prononcée

**Socioculturel:** Civilisation: Québec (Canada)/France: qu'est-ce que vous mangez?

### **UNIT: IV LES SOLDES. C'EST PARTI!**

**Communication:** Situer un moment dans l'année, Donner une appréciation sur un vêtement, Comprendre une appli pour s'habiller selon la météo, Parler de la météo, Demander/Dire la taille et la pointure, Décrire un objet dire à quoi ça sert, Demander/Dire un prix

**Grammaire:** Le genre et le nombre des adjectifs, La place des adjectifs, Le futur proche et le passé récent, L'adjectif démonstratif

**Verbes:** Venir

**Vocabulaire:** Les vêtements et accessoires, les matières, les couleurs, La météo et les températures, Les objets technologiques, les objets du quotidien, les caractéristiques des objets (forme, taille, poids)

**Phonétique:** L'élision (j', c' l', n', d'), Les liaisons en [z] et en [n]

**Socioculturel:** La marinière, un vêtement à succès

### **UNIT: V C'EST QUOI LE PROGRAMME?**

**Communication:** Parler de ses activités quotidiennes, Demander/Dire l'heure, Proposer une sortie/fixer un rendez-vous, Accepter/Refuser un rendez-vous, Réservez par téléphone

**Grammaire-** Les verbes pronominaux au présent (se préparer, s'occuper), La fréquence (jamais, de temps en temps, souvent, tous les..., tout le temps, toujours), L'impératif (être, avoir, regarder), L'antériorité et la postériorité

**Verbes-** Pouvoir, vouloir

**Vocabulaire:** L'heure, les activités quotidiennes, les tâches ménagères, le temps libre, les sorties, les activités culturelles.

**Phonétiques:** Les sons [i]/[y], Les sons [y]/[u]

**Socioculturel:** Civilisation- On change d'heure!

*Assignments on simple civilisation topics or short descriptive texts about a friend/celebrity.*

1. *Library work - simple texts like the français facile series (100 words) can be read.*
2. *Laboratory – one hour a week may be allotted to listening comprehension activities if there is access to a language laboratory.*
3. *Group activities – role play and educational games can be conducted.*

#### **REFERENCE BOOKS :**

- Maia Gregoire, Odile Thiévenaz - Grammaire progressive du français , Nouvelle edition: Livre intermediaire , LP, 2017.
- Sai Beaucamp Henriques, Victoria Iglesias et Farideh - Lire et écrire en français BELIN EDUCATION, 2017.
- Sylvie poisson quinton - Compréhension écrite niveau 1, French & European Publications Inc, Cle international, 2017.
- Hugues Denisot - Les Petits Loustics, HACHETTE FLE, 2018.

#### **PRESCRIBED BOOKS :**

- **Edito Niveau A1** ,Goyal Publication,
- **Larousse 2012**
- **Librairie Arthème Fayard, 2010**

#### **E-Learning Resources:**

1. <https://www.marseille.fr/>
2. <https://www.cityzeum.com/>

## **COURSE OBJECTIVES**

*Students will have the opportunity to perfect the skills acquired in terms of grammar and sentence structure while increasing their vocabulary through new scenarios of communication.*

## **COURSE OUTCOMES**

- 1. To understand the main idea and some detailed aspects of complex or unfamiliar texts.*
- 2. To show emerging awareness of aesthetic properties of language*
- 3. To recognize the role of cultural knowledge in understanding written texts.*
- 4. To narrate and describe in past, present and future*
- 5. To show an emerging ability to understand complex discourse.*

## **UNIT: I Félicitations !**

**Communication:** Comprendre un arbre généalogique.,Présenter sa famille,Féliciter,addresser un souhait,Décrire le physique et le caractère d'une personne.

**Grammaire:** Les adjectifs possessifs,Le passé composé avec avoir (téléphoner),C'est un(e)-Il/Elle est, Les indicateurs de temps du passé et du futur

**Vocabulaire:** La famille, l'entourage, la situation familiale, les événements de la vie, La description physique et le caractère.

**Phonétique:** Les voyelles nasales [ã]/[ɔ̃], les voyelles nasales [ɑ̃]/[ɛ̃]

**Socioculturel:** Les fêtes en France

## **UNIT: II CHEZ MOI**

**Communication:** Comprendre, un état des lieux simple, se renseigner sur un logement, comprendre un règlement intérieur d'immeuble, exprimer des règles de vie commune, s'excuser dans un message, expliquer un problème domestique/réagir

**Grammaire:** Les pronoms COD (le, la, l' les), les prépositions de lieu (2), l'obligation et l'interdiction (1) (infinitive, impératif), le pronom y

**Vocabulaire:** Le logement: les pièces, les meubles, l'électroménager, l'immeuble, les réparations, les professionnels

**Phonétique:** Les sons [f]/[v], Les sons [b]/[v]

**Socioculturel:** Civilisation- Profession: designers!

### **UNIT: III BONNES VACANCES!**

**Communication:** Comprendre u site de reservation en ligne, exprimer la preference, Hésiter, écrire un mail formel, écrire une carte postale, exprimer des sensations, une émotion positive, exprimer la surprise

**Grammaire:** La comparaison (1): moins/aussi/plus + adjectif +que, Les verbes en -ir au present (choisir, partir), le passé compose (2) avec être, l'imparfait des verbes impersonnels (c'était, il y avait, il faisait)

**Vocabulaire:** Les voyages l'hébergement, le transport, les services, les objets, les sensations, les émotions, à l'aéroport

**Phonétique:** Les sons [wa]/[wɛ], les sons [k]/[g]

**Socioculturel:** Civilisation: Culture voyage **UNIT:**

### **IV PAS DE CHANCE!**

**Communication:** Se plaindre/ plaindre quelqu'un, donner une explication (pourquoi/ parce que), exprimer une émotion negative, comprendre des règles de sécurité routière, demander/dire le poids et la taille, demander/dire comment on se sent

**Grammaire:** Le passé compose (3) (verbes pronominaux; s'amuser), l'obligation et l'interdiction (2) (falloir, devoir), les pronoms COI lui et leur, le conseil

**Vocabulaire:** Les petits problems du quotidien, les émotions negatives, les parties du corps, chez le médecin, chez le pharmacien

**Phonétique:** Les sons [ʃ]/[ʒ], l'enchaînement consonantique

**Socioculturel:** Civilisation: Chance et malchance



## **UNIT: V BEAU TRAVAIL!**

**Communication:** Comprendre un programme d'échange universitaire, décrire une expérience positive, exprimer le but, exprimer le souhait, un projet professionnel, exprimer une capacité, une compétence, comprendre des tâches, professionnelles.

**Grammaire:** La condition (si + present), la durée, la continuation, les pronoms relatifs, qui et que, l'intensité

**Vocabulaire:** L'université, le campus, les personnes, les études, les disciplines.

L'entreprise, la vie professionnelle: les services, les personnes, les conditions de travail, les tâches, les compétences.

**Phonétique:** Prononcer [R], les sons [t]/[d]

**Socioculturel:** Civilisation : Universités 2.0

## **PEDAGOGY**

1. *Assignments on simple civilisation topics or short descriptive texts about a friend/celebrity.*
2. *Library work - simple texts like the français facile series (100 words) can be read.*
3. *Laboratory – one hour a week may be allotted to listening comprehension activities if there is access to a language laboratory.*
4. *Group activities – role play and educational games can be conducted.*

## **REFERENCE BOOKS :**

- Maia Gregoire, Odile Thiévenaz - Grammaire progressive du français, Nouvelle édition: Livre intermédiaire, LP, 2017.
- Sai Beaucamp Henriques, Victoria Iglesias et Farideh - Lire et écrire en français BELIN EDUCATION, 2017.
- Sylvie poisson quinton - Compréhension écrite niveau 1, French & European Publications Inc, Cle international, 2017.
- Hugues Denisot - Les Petits Loustics, HACHETTE FLE, 2018.

## **PRESCRIBED BOOKS :**

- **Edito Niveau A1**, Goyal Publication
- **Larousse 2012**
- **Librairie Arthème Fayard, 2010**

## **E-Learning Resources:**

1. <https://www.marseille.fr/>
2. <https://www.cityzeum.com/>

# **Annexure-V**



**Sher-e-Kashmir**  
**University of Agricultural Sciences and Technology of Jammu**  
**Directorate of Education**

**Prof. Rajinder Peshin**  
**Director Education**

E-mail: [directoreducation@skuastj.org](mailto:directoreducation@skuastj.org)  
[deskuastj@gmail.com](mailto:deskuastj@gmail.com)

**Phone: 0191-2262154**  
**Mobile 7006546144**

**Memorandum**

**Subject: Guidelines for Masters & Ph.D. sandwich/bilateral programmes and students nominated for research work by other universities/institutions.**

As recommended by the Committee constituted vide No: AUJ/DE/2024-25/F-252/1119-22 dated 09-07-2024, and approved by the Competent Authority, the guidelines for sandwich/bilateral programmes and students nominated for research work by other universities/institutions are hereby notified.

**A. The guidelines for Masters & Ph.D. sandwich/bilateral programmes:**

- i) Programme of study/research shall be drawn by the student advisory committee constituted by the parent university with a member from the partner university/institute. Joint Advisory Committee thus constituted should be approved where student has registered for that degree programme.
- ii) The joint advisory committee after its notification will formulate the research programme/synopsis of such students.
- iii) The students shall have to spend minimum residency period of one semester (six month) in case of both masters and Ph.D. programmes in the partner university/institute.
- iv) Residency period at SKUAST-Jammu shall include course/research work or both.
- v) The student shall submit single thesis where he/she has registered for the degree programme.
- vi) Prescribed fee shall have to be paid to the SKUAST-Jammu for the period of student(s) residency at SKUAST-Jammu.
- vii) Each collaborating institute shall issue separate transcripts for respective research/course credit where he/she spent the period, and it is to be reflected in the transcript by the institute/university where the student has registered for that degree programme.

**B. The modalities proposed for allowing the nominated students of Cluster University/ other universities/institutions for conducting research at SKUAST Jammu**

- i. Any student nominated by any institution or university for conducting their research work for one semester at SKUAST-Jammu shall have to pay fee for that semester to this university. Besides, there should be one supervisor from SKUAST of Jammu to oversee the research work.





**Sher-e-Kashmir**  
**University of Agricultural Sciences and Technology of Jammu**  
**Directorate of Education**

**Prof. Rajinder Peshin**  
**Director Education**

E-mail: [directoreducation@skuastj.org](mailto:directoreducation@skuastj.org)  
[deskuastj@gmail.com](mailto:deskuastj@gmail.com)

**Phone: 0191-2262154**  
**Mobile 7006546144**

- C. Additional guidelines proposed under A & B above, the students nominated have to adhere to:**
- Students must follow the Regulations on Resident Instructions (RRI) of SKUAST-Jammu. This includes maintaining academic integrity, attending classes regularly, and fulfilling all academic requirements of the said RRI.
  - Students are expected to uphold the highest standards of discipline and conduct. This includes showing respect to peers, faculty, & staff, and behaving in a manner that reflects positively on the University.
  - Ragging in any form is strictly prohibited. Any student found engaging in ragging will be subject to severe disciplinary action as per the University's anti ragging policy.
  - Students must maintain satisfactory academic progress throughout the programme.

The guidelines come into force with immediate effect, and may be placed before next Academic Council Meeting for ratification.

AUJ/DE/24-25/2425/F-250/1275-88  
23-07-24

*R. Peshin*  
(Rajinder Peshin)  
23.07.2024

**Copy to:-**

- All Directors SKUAST of Jammu for information.
- All Deans of the Faculties of SKUAST-Jammu for information.
- Registrar, SKUAST-Jammu for placing the same in the next Academic Council Meeting for ratification.
- Comptroller, SKUAST-Jammu for information.
- Controller of Examination, SKUAST-Jammu for information.
- Director Institute of Biotechnology, SKUAST-Jammu for information.
- SVC for kind information of the Hon'ble Vice-Chancellor.

# **Annexure-VI**



Sher-e-Kashmir  
University of Agricultural Sciences and Technology of Jammu  
Institute of Biotechnology, Chatha-180009

Dr. R.K. Salgotra  
Director

Joint Registrar (Academics)  
SKUAST-J, Chatha

No. AUJ/IBT/24-25/F-24/3164-65  
Date: 31-12-2024

**Subject: Agenda Item for 26<sup>th</sup> Academic Council Meeting of SKUAST-Jammu**  
Sir,

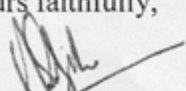
Kindly find enclosed herewith Agenda Item along with detailed curriculum (Annexure-I) regarding "Institutionalization of M.Tech. (Biotechnology) Programme at Institute of Biotechnology, SKUAST-Jammu for deliberations and consideration in 26<sup>th</sup> Meeting of Academic Council of the University.

The curriculum has been designed and recommended by an in-house committee of Institute of Biotechnology constituted vide letter No. AUJ/IBT/24-25/F-17/1390-92, dated 31-07-2024.

Submitted for further needful in the matter, please.

Thanking you,

Yours faithfully,

  
(Director)

Copy:

- Registrar, SKUAST-J, Chatha for kind information

**Sher-e-Kashmir**  
**University of Agricultural Sciences and Technology of Jammu**  
**Institute of Biotechnology**

**Agenda Items for XXVI<sup>th</sup> Meeting of Academic Council pertaining to Institute of Biotechnology**

<b>Agenda I:</b>	Institutionalization of M.Tech. Biotechnology degree Programme at Institute of Biotechnology
<b>1.</b>	<p><b>Adoption of postgraduate degree programme:</b></p> <p>Adoption of postgraduate degree programme, M.Tech. (Biotechnology) from the academic year 2025-26 has become a necessity keeping in view implementation of ICAR 6<sup>th</sup> Deans' Committee recommendations with respect to B.Tech. (Biotechnology) programme from Academic Session 2024-25. The students are regularly demanding to start M. Tech. (Biotechnology) degree programme to match with UG degree i.e. B.Tech. (Biotechnology). Many of the meritorious students prefer to join Masters degree in other institutes offering M.Tech, (Biotechnology). Therefore, to retain the talent and attract more students from outside, it is highly required that M.Tech. (Biotechnology) degree is institutionalized at Institute of Biotechnology, SKUAST-Jammu. Institute of Biotechnology, has sufficient academic and research facilities/infrastructure to cater to the basic requirements of M.Tech. (Biotechnology) degree programme.</p> <p><i>It is to redefine PG degree for growing market needs and for specialized jobs at national and international levels, the existing PG Degree Programme, M.Sc.(Agri.) Molecular Biology and Biotechnology shall continue as such as ICAR BSMA Committee recommendations already adopted by the University.. The detailed Course Catalogue is as per Annexure I</i></p>
<b>2.</b>	<p><b>Admission eligibility criteria:</b></p> <p><i>Adoption of ICAR-SAU admission system as eligibility criteria for M.Tech. (Biotechnology). For admission in M. Tech. (Biotechnology) candidate must have undergraduate minimum 4-year degree in B. Tech. Biotechnology/B.Sc. Biotechnology/B. Sc. (Hons.) Biotechnology/B. Sc. (Hons.) Agriculture/ B. Sc. (Hons.) Horticulture/ B.Sc (Hons.) Biology. All the admissions to the M. Tech. (Biotechnology) Programme shall be made on self finance basis and merit of the entrance exam conducted by University/ICAR.</i></p>



## **Course Curriculum**

### **Post-Graduate Degree Programme (M.Tech. Biotechnology)**



### **Institute of Biotechnology**

**Sher-e- Kashmir**

**University of Agricultural Sciences & Technology,  
Faculty of Agriculture, Main Campus, Chatha,  
Jammu-180 009(J&K)**

### **ABSTRACT OF PROPOSAL FOR M.TECH. (BIOTECHNOLOGY)**

<b>DEGREE PROGRAMME</b>	<b><u>M.Tech. (Biotechnology)</u></b>
<b>MINIMUM DURATION</b>	4 Semesters (2 Years)
<b>PROPOSED INTAKE CAPACITY</b>	10 Students per academic year (On self-finance basis; INR 1,10,000.00 per year)
<b>ELIGIBILITY</b>	Minimum 4-year degree in B. Tech. Biotechnology/ B.Sc.Biotechnology/B. Sc. (Hons.) Biotechnology/B. Sc. (Hons.) Agriculture/ B. Sc. (Hons.) Horticulture/B.Sc (Hons.) Biology

#### **BRIEF JUSTIFICATION:**

Adoption of postgraduate degree programme, M.Tech. (Biotechnology) from the academic year 2025-26 has become a necessity keeping in view implementation of ICAR 6<sup>th</sup> Deans' Committee recommendations with respect to B.Tech. (Biotechnology) programme from Academic Session 2024-25. The institute is already offering B.Tech. (Biotechnology) degree since 2018-19, when ICAR 5<sup>th</sup> Deans' Committee Report was adopted by the University. Since then, students have been regularly requesting to start M. Tech. (Biotechnology) degree programme for keeping match with UG degree i.e. B.Tech. (Biotechnology). Many of the meritorious students prefer to join Masters degree in other institutes offering M.Tech, (Biotechnology). Therefore, to retain the talent and attract more students from outside, it is highly required that M.Tech. (Biotechnology) degree is institutionalized at Institute of Biotechnology, SKUAST-Jammu. Institute of Biotechnology, has sufficient academic and research facilities/infrastructure to cater to the basic requirements of M.Tech. (Biotechnology) degree programme.

### Proposed Course Curriculum for M.Tech (Biotech.) Degree Programme

Code	Name of Course	Credits (L+P)	Semester(I/II)
<b>Major: 20 credits (12 credits of core + 8 credits of optional)</b>			
MBT 501	Genetic Engineering and Synthetic Biology*	2+0	I
MBT 502	Engineering Gene Regulation*	2+1	I
MBT 503	Electronics and Instrumentation in Biotechnology*	0+2	II
MBT 504	Omics and Systems Biology*	2+1	II
MBT 505	Biophysics and Biosensors*	1+1	I
MBT 506	Nano Biotechnology	3+0	I
MBT 507	Computational Biology, Artificial Intelligence and Big Data Analysis	2+1	II
MBT 508	Microbial and Industrial Biotechnology	2+1	II
MBT 509	Vaccine Biotechnology	2+1	I
MBT 510	Enzymology and Enzyme Engineering	2+1	II
MBT 511	Quality Assurance in Genetic Engineering and Biotechnology	2+1	II
MBT 512	Molecular Diagnostics	1+2	II
MBT 513	Environmental Biotechnology	3+0	I
MBT 514	Stress Biology and Genomics	2+0	I
MBT 515	IPR, Bio-safety & Bioethics	2+0	II
MBT 516	Bio-entrepreneurship	1+0	II

*Note: Need based 2-3 contractual/guest faculty shall be engaged for teaching specialized courses*

#### Minor Courses – 08 Credits

1. Microbiology
2. Biochemistry
3. Plant Physiology
4. Veterinary Biochemistry
5. Veterinary Microbiology
6. Animal Genetics & Breeding

#### Supporting Course – 06 Credits

1. Microbiology
2. Biochemistry
3. Plant Physiology
4. Statistics

5. Genetics & Plant Breeding
6. Plant Pathology
7. Entomology
8. Post-Harvest Management

**Common Courses – 05 Credits**

**Seminar = 0+1 Credits**

**Masters Research = 0+30 Credits**

**Total Credits = 70**

## **Detailed Syllabus for M.Tech (Biotech.) Degree Programme**

### **MBT501: Genetic Engineering and Synthetic Biology (2+0)**

#### UNIT I

Understanding DNA, RNA, proteins, and their roles in genetic engineering. Recombinant DNA Technology: Methods for gene cloning, DNA modifying enzymes, vectors, and applications in research. Genetic Circuits and Logic Gates: Introduction to synthetic biological systems and their design principles. Genome Editing Technologies: Focus on CRISPR/Cas9 tools and their applications in gene therapy and metabolic engineering.

#### UNIT II

Designing Genetic Pathways: Construction of synthetic pathways using modular components (BioBricks). Metabolic Engineering: Strategies for optimizing metabolic pathways for industrial applications. Ethics and Biosafety in Biotechnology: Discussion on bioethics, biosafety regulations, and intellectual property rights.

#### UNIT III

Current Trends in Synthetic Biology: Exploration of recent advancements such as gene drives and engineered living materials. Socio-economic Implications: Understanding the impact of synthetic biology on society and the environment. Career Opportunities in Biotechnology: Overview of career paths and entrepreneurial opportunities in the field.

#### **Suggested Readings:**

1. Watson, J. D., Baker, T. A., Bell, S. P., Gann, A., Levine, M., & Losick R. (2014). Molecular Biology of the Gene, 7th edition. Cold Spring Harbor Laboratory Press, New York.
2. Brown, T. A. (2010). Gene Cloning and DNA Analysis: An Introduction, 6th edition. Wiley Blackwell.

### **MBT502 :Engineering Gene Regulation (2+1)**

#### **Theory**

#### UNIT I

Transcriptional regulation – Regulatory proteins, Activators and Repressors, Binding of RNA polymerase, Allosteric regulation, DNA looping, Cooperative binding, Anti-termination, Combinatorial control – Regulation of Operons. Gene regulation in Lambda phage – lytic or lysogenic establishment.

## UNIT II

Regulatory sequences – Promoters, Enhancers, Silencers, Insulators, Locus Control Region. Activator proteins and their binding sites, DNA binding domain – Homeodomain, Zinc containing proteins, Leucine Zipper Motif, Helix-Loop-Helix, HMG proteins. Recruitment of RNA polymerase to promoter region, Nucleosomes and their modifiers. Signal integration. Signal transduction and transcriptional regulation. Gene Silencing. Epigenetic gene regulation.

## UNIT III

Regulation by RNA in prokaryotes and eukaryotes, RNA as defense agents. Ribo-switches. Gene Silencing by RNA - siRNA & miRNA – synthesis and function. Non-coding RNAs their impact, categories and role in gene regulation, chromatin assembly etc.

## UNIT IV

Negative auto-regulation, Positive auto-regulation, Bistable and Bimodal switch, Oscillating pattern of gene expression.

### **Practical**

1. To study the role of activators and repressors in transcription regulation.
2. To investigate the binding of transcription factors to specific DNA regions.
3. To demonstrate gene silencing using siRNA.
4. To study the function of ribo-switches in gene regulation.
5. To predict and validate transcription factor binding sites using bioinformatics tools.
6. To observe oscillating patterns of gene expression using synthetic biology techniques.

### **Suggested Readings**

1. Nelson, D. L. and Cox, M. M. (2017) Lehinger's Principles of Biochemistry, 7<sup>th</sup> edition, W H Freeman Publication New York
2. Krebs, J. E., Goldstein, E. S., Kilpatrick, S. T., (2017) Lewin's Genes XII 12<sup>th</sup> edition, Jones & Bartlett Learning publisher, Inc
3. Watson, J. D., Baker, T. A., Bell, S. P., Gann, A., Levine, M., & Lonick, R., (2014) Molecular Biology of the Gene, 7th Edition, Cold Spring Harbor Laboratory Press, New York.
4. Gardner, E. J., Simmons, M. J. & Snustad, D. P. (2006). Principles of Genetics (2006) eighth Edition. Wiley

## **MBT503 : Electronics and Instrumentation in Biotechnology (0+2)**

## UNIT I

PN junction diode, diode forward and reverse characteristics; Diode as a circuit element; Application of PN junction diode such as: half wave, full wave bridge rectifier, clipper, clamper and voltage multiplier circuit; Concept of generalized instrumentation system;

Transducers for the measurement of temperature using thermometer and thermocouple, linear displacement measurement using LVDT; Force measurement using the strain gauge.

## UNIT II

Principles and working of laboratory equipments: Table top, refrigerated and ultra centrifuges; Laminar air flow; Autoclaves, pH meter; Fermenters; Temperature control shakers, BOD shakers; Gel electrophoresis, 2-D gel electrophoresis, gel documentation, gel driers; ELISA readers; Freeze driers/lyophilizers; Spectrophotometers; Gene pulser; Particle gun; Plant growth chambers; Thermal cyclers; Realtime PCR; DNA synthesizer; DNA sequencer; Microscopes: Light, stereo, phase contrast and inverted.

### **Practical**

To familiarize laboratory equipment and its equipment working; Forward and reverse VI Characteristics of a PN junction diode; To study half wave, full wave and bridge rectifier using diode; Principle of centrifugation and spectrophotometry; PCR using isolated DNA

### **Suggested Readings**

1. Edward William Golding & Frederick Charles Widdis. 1969. *Electrical Measurements and Measuring Instruments*. Pitman.
2. Gupta JB. 2009. *Basic Electronics*. S. K. Kataria & Sons.
3. Malvino. 2007. *Electronics Principles*. Tata McGraw-Hill Education.
4. Manhas P. & Thakral S. 2010. *Digital Electronics*. S. K. Kataria & Sons.
5. Sharma Sanjay. 2012. *Electronics Devices & Circuits*. S. K. Kataria & Sons.

## **MBT 504: Omics and Systems Biology (2+1)**

### UNIT-I

Different methods of genome sequencing, principles of various sequencing chemistries, physical and genetic maps, Comparative and evolutionary genomics, Organelle genomics, applications in phylogenetics, case studies of completed genomes, preliminary genome data analysis, basics of ionomics analysis, different methods

### UNIT-II

Protein-basics: primary-, secondary- and tertiary structure, Basics of X-ray crystallography and NMR, Principal and Applications of mass spectrometry, Proteomics: Gel based and gel free, Basics of software used in proteomics, MASCOT, PD-Quest etc., Study of protein interactions, Prokaryotic and yeast-based expression system and purification.

### UNIT-III

Metabolomics and its applications, Use of 1D/2D NMR and MS in metabolome analysis, Multivariate analysis and identification of metabolite as biomarkers, Study of ionome using inductively coupled plasma – mass spectroscopy (ICP-MS), X-Ray Fluorescence (XRF), Neutron activation analysis (NAA), Data integration using genome, transcriptome, proteome, metabolome and ionome with phenome.

### UNIT-IV

Introductory systems Biology - The biochemical models, genetic models and systems model, Molecules to Pathway, Equilibrium binding and cooperatively – Michaelis-Menten Kinetics, Biological oscillators, Genetic oscillators, Quorum Sensing, Cell-cell communication, Drosophila Development, Pathways to Network, Gene regulation at a single cell level, transcription network, REGULATORY CIRCUITS, Negative and positive autoregulation, Alternative Stable States, Bimodal Switches, Network building and analysis

### **Practical:**

1. Isolation of HMW DNA and brief overview of sequencing, Primary information on genome data analysis.
2. BSA Standard curve preparation, Extraction of protein and estimation methods.
3. Quantification of proteins from different plant tissues using spectrophotometry.
4. 2-D Gel Electrophoresis, 2-D Image analysis.
5. Experiments on protein-protein interaction (Yeast 2-hybrid, Split Ubiquitin system).
6. Demonstration on MALDI-TOF.
7. Demonstration on ICP-MS, AAS, Nitrogen estimation using various methods.

### **Suggested Readings**

1. Primrose, S. B. and Twyman, R. (2006) Principles of gene Manipulation 7<sup>th</sup> edition, Wiley Blackwell
2. Wilson, K., and Walker, J., (2018) Principles and Techniques of Biochemistry and Molecular Biology 8<sup>th</sup> Edition, Cambridge University Press.

### **MBT 505 : Biophysics and Biosensors (1+1)**

### UNIT I

Quantum mechanics; Electronic structure of atoms; The wave particle duality, wave length of de-Broglie waves; Phase and group velocity; Some basic concepts of quantum mechanics;



Schrodinger's wave equations; Particle in a box; Quantum mechanical tunneling; 1st and 2nd law of thermodynamics; Enthalpy; Entropy; Statistical and thermodynamic definition of entropy; Helmholtz free energy, Equilibrium thermodynamic; Near-equilibrium thermodynamic; Gibbs free energy; Chemical potential; Thermodynamic analysis of membrane transport.

## UNIT II

Hydration of macromolecules; Role of friction; Diffusion; Sedimentation; The ultracentrifuge; Viscosity; Rotational diffusion; Light scattering, Small angle x-ray scattering; Ultraviolet and visible spectroscopy; Circular dichroism(CD) and optical rotatory dispersion(ORD); Fluorescence spectroscopy; Infrared spectroscopy; Raman spectroscopy; Electron spin resonance; NMR spectroscopy; Light microscopy.

## UNIT III

Overview of Biosensors: Definition and classification of biosensors (electrochemical, optical, acoustic, etc.) Bio-recognition Elements: Types of biomolecules used in biosensors: enzymes, antibodies, nucleic acids, cells. Signal Transduction Mechanisms: Overview of transducers: electrochemical (amperometry, potentiometric), optical (surface plasmon resonance), piezoelectric. Emerging Trends: Recent advances in biosensor technology including nanomaterials and lab-on-a-chip systems.

## **Practical**

1. Demonstrate the wave-particle duality of light.
2. Analyse entropy changes in a physical process
3. Study diffusion rates of different substances.
4. Identify molecular structures using UV-Vis spectroscopy.
5. Explore transducer mechanisms.
6. Evaluate the effect of nanomaterials on sensor performance.

## **Suggested Readings**

1. Chang R. 2005. *Physical Chemistry for the Biosciences*. University Science Books.
2. Glaser. 2012. *Biophysics*. Springer.
3. Pattabhi V & Gautam N. 2002. *Biophysics*. Narosa Publishing House.
4. Rodney Cotterill. 2002. *Biophysics: An Introduction*. John Wiley & Sons.
5. Ozkan, Uslu, Sezginurk, Biosensors: Fundamentals, Emerging Technologies, and Applications
6. Biosensing: Methods, Applications and Technology, Nova Publishers
7. Biophotonics and Biosensing, Elsevier

## **MBT 506: Nanobiotechnology (3+0)**

### UNIT I

Introduction to Nanotechnology - Nanomaterials - Self-assembly to artificial assembly for creation of useful nanostructures – Bottoms up and Top down approach (Nano rods, nano cages, nanotubes, quantum dots, nanowires, metal / polymer-based nanostructures) – Preparation and Characterization of nanoparticles (particle size analyzer, microscopy viz., electron microscopy, atomic force microscopy etc).

### UNIT II

Cell structure – Bio macromolecules: Types, Structure, Dynamics and interaction with water – Cellular nano machines – cellular transducers, membrane channels, membrane transporters, Membrane motors – Creation of bio-nanostructures (Nano liposomes, Nano micelles, Nanomotorsetc).

### UNIT III

Chemical, physical and biological properties of biomaterials and bio response: biomineralization, biosynthesis, and properties of natural materials (proteins, DNA, and polysaccharides), structure-property relationships in polymeric materials (synthetic polymers and structural proteins); Aerosol properties, application and dynamics; Statistical Mechanics in Biological Systems,

### UNIT IV

Nanoparticulate carrier systems; Micro- and Nano-fluidics; Drug and gene delivery system; Microfabrication, Biosensors, Chip technologies, Nano- imaging, Metabolic engineering and Gene therapy.

### **Practical:**

1. Isolation of enzymes and nucleic acids involved in biosynthesis of nanomaterials
2. Synthesis of Gold/silver Nanoparticles by biogenic methods, Synthesis of micelles and inverse micelles
3. Synthesis of Carbon Nano-materials by Chemical Vapor Deposition and Sputtering technique
4. Preparation of thiolate silver nanoparticles, Purification and measurement of carbon nano materials
5. Zinc selenide quantum dot preparation, Synthesis of Iron Oxide Nanoparticle
6. Thin film preparation by spin coating technique, Synthesis of Nickel metal nanoparticle by urea decomposition method
7. Synthesis of Zinc Oxide nanoparticle

## **Suggested Readings:**

1. Nalwa, H. S. 2005. Handbook of Nanostructured Biomaterials and Their Applications in Nanobiotechnology.  
American Scientific Publications.
2. Niemeyer CM & Mirkin CA. Eds (2005). Nanobiotechnology: Concepts Applications and Perspectives, Wiley Inter-science publications. Cao, G., and Wang, Y., (2004) Nanostructures and Nanomaterials: Synthesis, properties and applications, Imperial College Press

## **MBT 507: Computational Biology, Artificial Intelligence and Big Data Analysis (2+1)**

### UNIT I

Foundations of Computational Biology: Introduction to biological data types (genomic, proteomic, etc.), Overview of computational biology applications. Algorithms in Computational Biology: Sequence alignment algorithms (e.g., Needleman-Wunsch, Smith-Waterman), Genome assembly techniques, Hidden Markov Models for biological sequence analysis.

### UNIT II

Machine Learning in Biology: Supervised and unsupervised learning algorithms, Neural networks and deep learning applications in genomics, Predictive modeling for drug discovery and disease classification. Big Data Analytics: Introduction to big data technologies (Hadoop, Spark), Data mining techniques for biological datasets, Statistical methods for large-scale data analysis

### UNIT III

Bioinformatics Tools and Software: Use of software tools for genomic data analysis (e.g., BLAST, Bioconductor), Visualization tools for biological data representation. Network Biology: Biological networks and their analysis, Systems biology approaches to understand complex interactions. Ethics in Computational Biology: Ethical considerations in bioinformatics research, Data privacy issues related to genetic information.

## **Practical**

1. Training sessions on bioinformatics software
2. Workshops on using machine learning libraries
3. Comparative genomics analysis using machine learning.
4. Analysis of single-cell RNA sequencing data.

## **Suggested Readings:**

1. Bioinformatics: Sequence and Genome Analysis" by David W. Mount

2. "Computational Biology: A Practical Introduction to BioData Processing and Analysis with Linux, MySQL, and R" by RöbbelWünschiers
3. "Systems Biology: A Unified Approach" by Andrew G. McCulloch et al.
4. "A Primer for Computational Biology" by Shawn T. O'Neil

## **MBT 508: Molecular and Industrial Biotechnology (2+1)**

### UNIT I

Introduction, scope and historical developments; Isolation, screening and genetic improvement (involving classical approaches) of industrially important organisms.

### UNIT II

Primary metabolites, production of industrial ethanol as a case study; Secondary metabolites, bacterial antibiotics and non-ribosomal peptide antibiotics as case study; Recombinant DNA technologies for microbial processes; Strategies for development of industrial microbial strains with scale up production capacities; Metabolic pathway engineering of microbes for production of novel product for industry.

### UNIT III

Microbial enzymes, role in various industrial processes, production of fine chemicals for pharmaceutical industries; Bio-transformations, Bio-augmentation with production of vitamin C as a case study; Bioreactors, their design and types; Immobilized enzymes-based bioreactors; Microencapsulation technologies for immobilization of microbial enzymes.

### UNIT IV

Environmental Biotechnology, biotreatment for pollution control, treatment of industrial and other wastes, biomass production involving single cell protein; Bio-remediation of soil; Production of eco-friendly agricultural chemicals, bio-pesticides, bio-herbicides, bio-fertilizers, bio-fuels, etc.

### **Practical:**

1. Isolation of industrially important microorganisms, their maintenance and improvement.
2. Lab scale production of industrial compounds such as alcohol, beer, citric acid, lactic acid and their recovery.
3. Study of bio-reactors and their operations.
4. Production of bio-fertilizers.
5. Experiments on microbial fermentation process of antibiotics, bio-pigments, dairy products, harvesting purification and recovery of end products.

6. Immobilization of cells and enzymes, studies on its kinetic behavior, growth analysis and biomass estimation.
7. Determination of mass transfer coefficient.

### **Suggested Readings:**

1. Waites, M. J., Morgan, N. L., Rockey, J. S., Higon, G., (2001) Industrial Microbiology: An Introduction, Wiley-Blackwell.
2. Slater, A., Scott, N. W., & Fowler, M. R. (2003). The genetic manipulation of plants. Plant Biotechnology Oxford, England: Oxford University Press.
3. Kun, L. Y. (Ed.). (2003). Microbial biotechnology: principles and applications. World Scientific Publishing Company.

### **MBT 509: Vaccine Biotechnology (2+1)**

#### UNIT I

History of vaccinology, conventional approaches to vaccine development, live attenuated and killed vaccines, adjuvants, quality control, preservation and monitoring of microorganisms in seed lot systems.

#### UNIT II

Instruments related to monitoring of temperature, sterilization, environment, quality assurance and related areas.

Production techniques, growing the microorganisms in maximum titre, preservation techniques to maintain good antigen quality, freeze drying.

#### UNIT III

Introduction to newer vaccine approaches namely sub-unit vaccines, synthetic vaccines, DNA vaccines, virus like particles, recombinant vaccines, edible vaccines, Nano particles in vaccine delivery systems, etc.

#### UNIT IV

Introduction to pharmacopeal requirement, disease security and biosecurity principles and OIE guidelines such seed management, method of manufacture, in-Process control, batch control, tests on final product.

### **Practical:**

1. Inoculation of embryonated chicken eggs for cultivation of virus.
2. Harvesting of virus from inoculated embryos.
3. Inactivation of harvested viruses.

4. Safety and sterility testing of inactivated vaccine.
5. Inoculation of tissue culture for propagation of virus.
6. Harvesting and production of inactivated virus vaccine.
7. Isolation and cloning of genes encoding immunogenic proteins.
8. Expression of cloned gene. ix. Purification of recombinant immunogenic protein.
9. Immunogenicity studies of recombinant protein
10. Immunization of laboratory animals.
11. Titration of antibodies against the recombinant protein.

### **Suggested Readings**

1. Barry, R. Bloom and Paul-Henri Lambert. 2002. The Vaccine Book. Academic Press New York
2. Levine, M.M., Kaper, J.B., Rappuoli, R., Liu, M.A. and Good, M.F. 2004. New Generation Vaccines. 3rd Ed. Informa Healthcare, London
3. Lowrie DB & Whalen R. 2000. DNA Vaccines. Humana Press, Totowa, New Jersey
4. Robinson A & Cranage MP. 2003. Vaccine Protocols. 2nd Ed. Humana Press, Totowa, New Jersey

### **MBT 510: Enzymology and Enzyme Engineering (2+1)**

#### UNIT I

Introductions: Enzymes- Michaelis-Menten kinetics. Kinetics and Statistics Inhibition- Effect of pH and temperature- Enzymology- Immobilized enzymes: Methods, Mass transfer considerations and Industrial enzymes.

#### UNIT II

Introduction to metabolism- Nutrient transport- Glycolysis - TCA cycle and other pathways - Control of metabolism. Factors affecting microbial growth – Stoichiometry- mass balances and energy balances. Growth kinetics Measurement of growth.

#### UNIT III

Introduction to bioreactors - Batch and Fed-batch bioreactors, Continuous bioreactors, Immobilized cells. Bioreactor operation, Sterilization, Aeration, Sensors. Instrumentation, Culture - specific design aspects: plant/mammalian cell culture reactors.

#### UNIT IV

Biomass removal - Biomass disruption – Membrane based techniques. Extraction -solvent, aqueous two phases, super critical, and Adsorption. Chromatography, Precipitation (Ammonium Sulfate, solvent), Electrophoresis (capillary), Crystallization, Drying and Freeze drying.

## UNIT V

White Biotechnology: Few industrial process using enzymes for production of drugs and fine chemicals, Enzyme based biosensors, Enzyme in organic catalysis, Molecular Imprinting. Enzyme engineering, selection of chiral molecules and their enzymatic separation, functional expression of enzymes protein engineering by modification of protein folding invitro and invivo, Case study

### **Practical**

1. Handling of enzymes and estimation of specific activity of an enzyme (e.g. amylase, phosphatase, protease)
2. Isolation of  $\beta$ -amylase and determination of enzyme activity using specific substrate
3. Purification of enzyme by ammonium sulphate precipitation
4. Effect of physicochemical parameters (pH, temperature) on the activity of enzyme
5. In situ enzyme activity staining on SDS Polyacrylamide gel. (Amylase, Lactate dehydrogenase)
6. Immobilization of enzyme by gel entrapment and cross linking method

### **Suggested Readings**

1. Michael Shuler and Fikret Kargi. "Bioprocess Engineering: Basic Concepts", 2nd Edition, Prentice Hall, and Englewood Cliffs, NJ, 2002.
2. Pauline Doran. "Bioprocess engineering principles", Academic Press, 1995.
3. Colin Ratledge, Bjorn Kristiansen, "Basic Biotechnology", 2nd Edition, Cambridge University Press, 2001.
4. Roger Harrison et al., "Bioseparation Science and Engineering", Oxford University Press, 2003.
5. Harrison R.G. Todd P., Rudge S.R. "Bioseparation Science and Engineering", Oxford Press 2003.

## **MBT513: Quality Assurance in Genetic Engineering and Biotechnology (2+1)**

### UNIT I

Concept and evolution of quality control and quality assurance. Total Quality Management, Philosophy of GMP and cGMP. Preparation of audit, Conducting audit, Audit Analysis, Audit Report and Audit follow up Quality control laboratory responsibilities: GLP protocols on

nonclinical testing control on animal house, data generation, integration and storage, standard test procedure, retention of sample records. CPCSEA guidelines.

## UNIT II

Quality review and batch release document of finished products, annual product quality review and parametric release, Audits, quality audits of manufacturing processes and facilities, audits of quality control.

## UNIT III

Good documentation practices, root cause analysis, corrective action preventive action (CAPA), out of specifications (OOS) and out of trend (OOT), Clinical studies- ICH GCP (E6) guidelines, post marketing surveillance, Pharmacovigilance.

## UNIT IV

BABE (bioavailability and bioequivalence) studies, Concepts and management of contract manufacturing guidelines, Statistical Tools for Quality Control and Precision, Tools of Problem Solving and Continuous Improvement.

## UNIT V

Introduction, scope and importance of IPR, Concept of trade mark, copyright and patents Product registration guidelines – CDSCO, USFDA, Concept of ISO 9001:2008, 14000, OSHAS guidelines, Quality Strategy for Indian Industry, Brief concept of IND, NDA, ANDA, SNDA and PAT.

### **Practical**

1. Conduct a mock audit of a laboratory or manufacturing area, documenting findings and recommendations.
2. Design an experiment following GLP protocols, including data generation and storage.
3. Create a compliance checklist based on CPCSEA guidelines for animal testing.
4. Develop a sample batch release document and perform a peer review and conduct a hypothetical annual product quality review using provided data.
5. Design and execute a simple bioavailability study using simulated data to analyze results statistically.
6. Develop an implementation plan for ISO 9001:2008 or ISO 14000 standards in a simulated pharmaceutical environment.

### **Suggested Readings**

1. Sharp J. Good Pharmaceutical Manufacturing Practice: Rationale and Compliance. CRC Press; 2005.
2. Gad SC. Pharmaceutical Manufacturing Handbook: Production and Processes. John Wiley & Sons; 2008.



3. Steinborn L. GMP/ISO Quality Audit Manual for Healthcare Manufacturers and Their Suppliers, Sixth Edition, (Volume 1 - With Checklists and Software Package). Taylor & Francis; 2003.
4. Kolman J, Meng P, Scott G. Good Clinical Practice: Standard Operating Procedures for Clinical Researchers. Wiley; 1998.
5. Waller P. An Introduction to Pharmacovigilance. John Wiley & Sons; 2011.
6. Niazi S. Handbook of Bioequivalence Testing. CRC Press; 2007.
7. Chalmers AA. International Pharmaceutical Registration. Interpharm Press; 2000.
8. Edwards AJ. ISO 14001 Environmental Certification Step- by-Steps: Revised Edition. Butterworth-Heinemann; 2003.
9. Mantus D. FDA Regulatory Affairs: A Guide for Prescription Drugs, Medical Devices, and Biologics. Informa Healthcare USA; 2008.
10. Chalmers AA. International Pharmaceutical Registration. Interpharm Press; 2000.
11. Ganguli P. Intellectual Property Rights. The McGraw Hill Companies; 2008.

## **MBT 512 : Molecular Diagnostics (1+2)**

### UNIT I

Introduction, importance and historical perspective of development of molecular diagnostic technology, concept of development of group specific and strain specific nucleic acid based diagnostics, basis for selection of gene/nucleotide sequence of pathogenic organism to target for detection.

### UNIT II

Application of restriction endonuclease analysis for identification of pathogens, principle of development of pathogen specific DNA probes, Southern and Northern hybridization.

### UNIT III

Theoretical background of development of PCR and Real time PCR and its variations, application of PCR for diagnosis of infectious diseases of animals and poultry, nucleic acid sequence based diagnostics.

### UNIT IV

Advancements in diagnostic technology including DNA array technology, biosensors and nanotechnology. OIE guidelines in development of diagnostics.

### **Practical:**

1. Preparations of buffers and reagents.
2. Collection of clinical and environmental samples from animal and poultry farms for molecular detection of pathogens.

3. Isolation of bacterial pathogens from the samples.
4. Extraction of nucleic acids from bacteria and clinical specimens.
5. Restriction endonuclease digestion and analysis in agarose electrophoresis.
6. Development of animal pathogen specific nucleic acid probes.
7. Southern blotting for detection of pathogens.
8. Polymerase chain reaction for detection of pathogens in blood and other animal tissues.
9. RT-PCR for detection of RNA viruses.
10. Real time PCR for detection of pathogens in semen and other animal tissues.
11. DNA fingerprinting for identification of animal species.
12. PCR based detection of meat adulteration in processed and unprocessed meats.
13. Detection of food borne pathogenic organisms in vegetables and fruits using PCR technology.
14. PCR based detection of potential pathogens in milk, eggs and meat.

### **Suggested Readings**

1. Elles, R. and Mountford, R. 2004. Molecular Diagnosis of Genetic Disease. Humana Press, Totowa, New Jersey
2. Rao, J.R., Fleming, C.C. and Moore, J.E. 2006. Molecular Diagnostics. Horizon Bioscience Publisher, UK

### **MBT 513: Environmental Biotechnology (3+0)**

#### UNIT I

Basic concepts and environmental issues; types of environmental pollution; problems arising from high-input agriculture; methodology of environmental management; air and water pollution and its control; waste water treatment - physical, chemical and biological processes; need for water and natural resource management.

#### UNIT II

Microbiology and use of micro-organisms in waste treatment; biodegradation; degradation of Xenobiotic, surfactants; bioremediation of soil & water contaminated with oils, pesticides & toxic chemicals, detergent etc; aerobic processes (activated sludge, oxidation ditches, trickling filter, rotating drums, etc); anaerobic processes: digestion, filtration, etc.

#### UNIT III

Renewable and non-Renewable resources of energy; energy from solid waste; conventional fuels and their environmental impact; biogas; microbial hydrogen production; conversion of sugar to alcohol; gasohol; biodegradation of lignin and cellulose; biopesticides; biofertilizers; composting; vermiculture etc.

#### UNIT IV

Treatment schemes of domestic waste and industrial effluents; food, feed and energy from solid waste; bioleaching; enrichment of ores by microorganisms; global environmental problems: ozone depletion, UV-B, greenhouse effects, and acid rain; biodiversity and its conservation; biotechnological approaches for the management environmental problems.

### **Suggested Readings:**

1. Evans, G. M. and Furlong, J. C. (2010). Environmental Biotechnology: Theory and Application. 2<sup>nd</sup> edition, Wiley-Blackwell.
2. Jordening, H. J. and Winter, J. (2006). Environmental Biotechnology: Concepts and Applications. Wiley-VCH Verlag.

### **MBT 514: Stress Biology and Genomics (2+0)**

#### UNIT I

Different kinds of stresses (biotic and abiotic) and adaptation strategies: Plant cell as a sensor of environmental changes; role of cell membranes in signal perception; Ways of signal transduction in cells and whole plants as a response to external factors. Abiotic stresses affecting plant productivity – Drought, salinity, water logging, temperature stresses, light stress and nutrient stress; Drought stress – Effects on plant growth and development; Components of drought resistance; Physiological, biochemical and molecular basis of tolerance mechanisms; Biotic stress (insect and pathogen) resistance mechanism.

#### UNIT II

Strategies to manipulate drought tolerance – Osmotic adjustment and Osmo protectants - synthesis of proline, glycine betaine, poly amines and sugars; ROS and antioxidants; hormonal metabolism - ABA signaling; signaling components – transcription factors. Water logging stress – effects on plant growth and metabolism; adaptation to water logging, tolerance mechanisms - hormones and flooding tolerance. Strategies for improving submergence tolerance. Salinity stress – effects on physiology and metabolism of plants, SOS pathways and ion homeostasis, Strategies to improve salinity tolerance in plants. Water logging stress – effects on plant growth and metabolism; tolerance mechanisms. Physiological and biochemical changes – High & Low temperature tolerance mechanisms - molecular basis of thermo tolerance. Morphological and physiological changes in plants due to high and low light stresses - photo oxidation - plastid development. Characters of heliophytes and sciophytes – solar tracking – sieve effect and light channeling. Heavy metal stress – Al and Cd stress - effects on plant growth and development, biotech Strategies to overcome heavy metal

stress Nutrient stress- effects on plant growth and development. Genetic manipulation strategies to overcome the stress effects.

### UNIT III

Genomics; transcriptomes, small RNAs and epigenomes; functional genomics; transfer of tolerance/resistant genes to model plants and validation of gene function. Different techniques for the functional validation of genes. Signaling pathway related to defense gene expression, R proteins, RNAi approach and genes from pathogens and other sources, coat protein genes, detoxification genes, transgenic and disease management. Bt proteins, resistance management strategies in transgenic crops, ecological impact of field release of transgenic crops. Bioinformatics approaches to determine gene function and network in model plants under stress.

#### **Suggested Reading:**

1. Buchanan, B. B., Gruissem, W. and Jones R, (2015) Biochemistry and Molecular Biology of Plants, 2<sup>nd</sup> edition, Wiley and Blackwell Publications.
2. Sarwat, M., Ahmad, A., Abdin, M.Z. (2013) Stress Signaling in Plants: Genomics and Proteomics Perspective, Volume 1, Springer.
3. Heribert Hirt, (2010) Plant Stress Biology: From Genomics to Systems Biology, John Wiley.
4. Pandey, G. K., Elucidation of Abiotic Stress Signaling in Plants, Wiley.

### **MBB 515: IPR, Bio-safety&Bioethics (2+0)**

#### UNIT I

IPR: historical background in India; trade secret; patent, trademark, design& licensing; procedure for patent application in India; Patent Cooperation Treaty (PCT); Examples of patents in biotechnology-Case studies in India and abroad; copyright and PVP; Implications of IPR on the commercialization of biotechnology products, ecological implications; Trade agreements- The WTO and other international agreements, and Cross border movement of germplasms.

#### UNIT II

Biosafety and bio-hazards; General principles for the laboratory and environmental biosafety; Biosafety and risk assessment issues; handling and disposal of bio-hazards; Approved regulatory laboratory practice and principles, The Cartagena Protocol on biosafety; Biosafety regulations in India; national Biosafety Policy and Law; Regulations and Guidelines related to Biosafety in other countries

### UNIT III

Potential concerns of transgenic plants – Environmental safety and food and feed safety. Principles of safety assessment of Transgenic plants – sequential steps in risk assessment. Concepts of familiarity and substantial equivalence. Risk - Environmental risk assessment – invasiveness, weediness, gene flow, horizontal gene transfer, impact on non-target organisms; food and feed safety assessment – toxicity and allergenicity. Monitoring strategies and methods for detecting transgenics.

### UNIT IV

Field trials – Biosafety research trials – standard operating procedures, labeling of GM food and crop, Bio-ethics- Mankind and religion, social, spiritual & environmental ethics; Ethics in Biotechnology, labeling of GM food and crop; Biopiracy

#### **Suggested Readings:**

1. Goel, D., and Parashar, S., (2013) IPR, biosafety, and bioethics.
2. Joshi, R., (2006) Biosafety and Bioethics.
3. Nambisan, P., (2017) An Introduction to Ethical, Safety and Intellectual Property Rights Issues in Biotechnology.

### **MBT 516: Bio-entrepreneurship (1+0)**

#### UNIT I

Scope in biotechnology; types of bio-industries – bio-pharma, bio-agri, bio-services and bio-industrial; Importance of entrepreneurship; introduction to bio entrepreneurship – biotechnology in a global scale; –skills for successful entrepreneur – creativity, leadership, managerial, team building, decision making; opportunities for bio-entrepreneurship – entrepreneurship development programs of public and private agencies (MSME, DBT, BIRAC, Startup & Make in India)

#### UNIT II

Business plan preparation; business feasibility analysis by SWOT, socio-economic costs benefit analysis; funds/support from various agencies; statutory and legal requirements for starting a company/venture.

#### UNIT III

Entry and exit strategy; identifying needs of customers; Market linkages, branding issues; developing distribution channels - franchising; policies, promotion, advertising; branding and market linkages for 'virtual startup company'. Pricing strategy.

## UNIT IV

Knowledge centers e.g., in universities, innovation centres, research institutions (public & private) and business incubators; R&D for technology development and upgradation; assessment of technology development; managing technology transfer;

### **Suggested Reading:**

1. Adams, D. J., & Sparrow, J. C. (2008). Enterprise for Life Scientists: Developing Innovation and Entrepreneurship in the Biosciences. Bloxham: Scion.
2. Shimasaki, C. D. (2014). Biotechnology Entrepreneurship: Starting, Managing, and Leading Biotech Companies. Amsterdam: Elsevier. Academic Press is an imprint of Elsevier.
3. Onetti, A., & Zucchella, A. Business Modeling for Life Science and Biotech Companies: Creating Value and Competitive Advantage with the Milestone Bridge. Routledge.
4. Jordan, J. F. (2014). Innovation, Commercialization, and Start-Ups in Life Sciences. London: CRC Press.
5. Desai, V. (2009). The Dynamics of Entrepreneurial Development and Management. New Delhi: Himalaya Pub. House.

# **Annexure-VII**



**SHER-E-KASHMIR  
UNIVERSITY OF AGRICULTURAL SCIENCES & TECHNOLOGY OF  
JAMMU**

**9<sup>th</sup> CONVOCATION**

<b><u>Academic Scroll</u></b>	<b>Dated: __-02-2025</b> <b>Place: Jammu</b>
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**Post Graduate**

Scroll No.	S. No.	Name	Parentage	Registration No.	Result notified on	OGPA out of 10.00
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**1.1. Doctor of Philosophy in Agriculture Sciences**

**AGRONOMY**

4138	1	Swati Mehta	Sh. Ramesh Lal Sharma	J-18-D-329-A	07-02-2024	8.58
4139	2	Jyoti Sharma	Sh. Ram Saroop	J-20-D-386-A	05-08-2024	8.57
4140	3	Kanik Kumar Bansal	Sh. Naresh Kumar Bansal	J-20-D-387-A	17-09-2024	8.00
4141	4	Shubham Jamwal	Sh. Dilbag Singh	J-20-D-428-A	04-11-2024	8.15

**ENTOMOLOGY**

4142	1	Shafiya Rashid	Sh. Sofi Abdur Rashid	J-19-D-367-A	12-06-2024	8.23
4143	2	Monika Singh	Sh. Joginder Singh Baloria	J-18-D-332-A	19-06-2024	8.13
4144	3	Yousra Mukhtar	Sh. Mukhtar Ahmad Shah	J-20-D-392-A	22-10-2024	8.50

**GENETICS AND PLANT BREEDING**

4145	1	Shruthi K	Sh. Keshavamurthy K V	J-20-D-407-A	29-10-2024	8.33
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**SOIL SCIENCE AND AGRICULTURAL CHEMISTRY**

4146	1	Divya Sharma	Sh. Jagan Nath Sharma	J-19-D-377-A	27-09-2024	8.90
4147	2	Meena Yadav	Sh. Surender Kumar Yadav	J-19-D-380-A	22-10-2024	8.55

**AGRICULTURAL ECONOMICS**

4148	1	Neer Somakka A N	Sh. Nanjappa A K	J-20-D-394-A	22-10-2024	8.53
4149	2	Shaurya Sharma	Sh. Narveer Sharma	J-20-D-417-A	29-11-2024	7.78

**AGRICULTURAL EXTENSION & COMMUNICATION**

4150	1	Rashika Mahajan	Sh. Rakesh Kumar Gupta	J-19-D-382-A	19-06-2024	8.57
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**PLANT PATHOLOGY**

4151	1	Nisar Ahmad Dar	Sh. Ab Gani Dar	J-19-D-373-A	09-01-2024	7.84
4152	2	Lekkala Venkata Ravishankar	Sh. Lekkala Sreenivasulu Reddy	J-19-D-375-A	12-06-2024	8.25
4153	3	Stanzin Diskit	Sh. Tsetan Gonbo	J-19-D-372-A	29-10-2024	8.21
4154	4	Aabida	Sh. Mohammad Abas Shah	J-20-D-397-A	27-11-2024	8.41

**BIOTECHNOLOGY**

4155	1	Sonali Chib	Sh. Sunit Chib	J-18-D-33-Biot.	12-06-2024	7.36
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**AGRI-BUSINESS MANAGEMENT**

4156	1	Rafia Nabi Zargar	Sh. Gh Nabi Zarger	J-20-D-02-ABM	13-11-2024	8.73
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**1.2. Doctor of Philosophy in Basic Sciences**

**BIOCHEMISTRY**

4157	1	Proloy Sankar Dev Roy	Sh. P.K.Dev Roy	J-19-D-35-BS	13-12-2023	7.87
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4158	2	Chandan Thappa	Sh. Jagdev Kumar	J-19-D-34-BS	13-12-2023	8.31
4159	3	Asmat Farooq	Sh. Farooq Ahmad Bhat	J-18-D-25-BS	10-01-2024	8.23
4160	4	Pavleen Kour	Sh. Rajinder Singh	J-20-D-44-BS	18-11-2024	8.63
4161	5	Abeeda Mushtaq	Sh. Mushtaq Ahmad Wani	J-20-D-43-BS	28-11-2024	8.23
<b><u>PLANT PHYSIOLOGY</u></b>						
4162	1	Muzamil Yousuf	Sh. Mohmad Yousuf Wani	J-19-D-41-BS	28-05-2024	7.99
4163	2	Mansha Gul	Sh. Gulam Ahmad Kuttoo	J-19-D-42-BS	18-11-2024	8.33
<b><u>STATISTICS</u></b>						
4164	1	Mohd Younis Shah	Sh. Mohd Sultan Shah	J-19-D-39-BS	14-05-2024	8.37
<b><u>MICROBIOLOGY</u></b>						
4165	1	Sneahpreet Kour	S. Beant Singh Bali	J-19-D-36-BS	06-05-2024	8.27
4166	2	Ankita Sharma	Sh. Bachan Lal Sharma	J-19-D-37-BS	03-07-2024	8.44
4167	3	Hibbah Javed Malik	Sh. Javed Iqbal Malik	J-20-D-45-BS	10-01-2025	8.35
<b><u>1.3 Doctor of Philosophy in Horticulture &amp; Forestry</u></b>						
<b><u>HORTICULTURE (FRUIT SCIENCE)</u></b>						
4168	1	Megha Patidar	Sh. Mohan Lal Patidar	J-20-D-396-A	22-10-2024	8.34
4169	2	Safina Kosser	Sh. Mohd Hussain	J-19-D-370-A	27-12-2024	8.44
<b><u>HORTICULTURE (FLORICULTURE AND LANDSCAPING)</u></b>						
4170	1	Ashutosh Sharma	Sh. Yogesh Kumar Sharma	J-20-D-411-A	18-11-2024	8.07
<b><u>FOOD SCIENCE AND TECHNOLOGY</u></b>						
4171	1	Shafaq Javid	Sh. Javid Ahmad Shah	J-18-D-336-A	28-05-2024	8.21
4172	2	Daman Preet Kour	Sh. Surinder Singh	J-20-D-419-A	24-10-2024	8.53
<b><u>AGRO-FORESTRY</u></b>						
4173	1	Qurat Ul Ain Binte Syed	Sh. Mohd Syed Bhat	J-19-D-366-A	12-06-2024	8.33
4174	2	Jigmet Namgial	Sh. Tsering Dorje	J-19-D-365-A	28-11-2024	8.26
<b><u>HORTICULTURE (VEGETABLE SCIENCE)</u></b>						
4175	1	Shivanjali Sarswat	Sh. Ranveer Sharma	J-19-D-381-A	30-05-2024	8.11
<b><u>1.4 Doctor of Philosophy in Agricultural Engineering</u></b>						
<b><u>FARM MACHINERY AND POWER ENGINEERING</u></b>						
4176	1	Obaid Zaffar	Sh. Zaffar Hassan Dand	J-20-D-388-A	12-06-2024	8.81
<b><u>1.5 Doctor of Philosophy in Veterinary Sciences</u></b>						
<b><u>ANIMAL NUTRITION</u></b>						
4177	1	Gagandeep Kour	Sh. Gurjeet Singh	J-20-D-151-V	12-04-2024	8.54
<b><u>LIVESTOCK PRODUCTS TECHNOLOGY</u></b>						
4178	1	Sakshi Sharma	Sh. Anil Kumar Sharma	J-20-D-153-V	07-05-2024	8.60
<b><u>VETERINARY MEDICINE</u></b>						
4179	1	Savleen Kour	Sh. Dilbagh Singh	J-20-D-154-V	12-06-2024	8.64
<b><u>VETERINARY SURGERY AND RADIOLOGY</u></b>						
4180	1	Ayushi Sawhney	Sh. Dev Raj Sawhney	J-20-D-155-V	14-05-2024	8.67
<b><u>VETERINARY PATHOLOGY</u></b>						
4181	1	Riya Abrol	Sh. Rajesh Abrol	J-20-D-152-V	07-10-2024	8.29
<b><u>VETERINARY PUBLIC HEALTH AND EPIDEMIOLOGY</u></b>						
4182	1	Kavya Gupta	Sh. Surinder Gupta	J-20-D-159-V	07-10-2024	8.58
<b><u>VETERINARY &amp; ANIMAL HUSBANDRY EXTENSION EDUCATION</u></b>						
4183	1	Farzana Choudhary	Sh. Mohd. Bashir	J-18-D-134-V	13-12-2023	7.93
<b><u>1.6 Master of Science in Agriculture &amp; Allied Sciences</u></b>						

<b>AGRONOMY</b>						
4184	1	Sidhant Sharma	Sh. Thakur Dass	J-21-M-814	03-05-2024	7.32
4185	2	Yudhvir	Sh. Baljeet Singh	J-21-M-813	21-10-2024	7.54
4186	3	Gurleen Kaur	Sh. Gurvinder Pal Singh	J-22-M-861	21-10-2024	8.47
4187	4	Ankita Singh	Sh. Yogendra Singh	J-22-M-871	24-10-2024	8.52
4188	5	Anshu	Sh. Chain Lal	J-22-M-860	24-10-2024	8.43
4189	6	Geetika	Sh. Ravinder Singh	J-22-M-868	04-11-2024	8.04
4190	7	Ramesh Bajroliya	Sh. Chhitar Ram	J-22-M-918	04-11-2024	7.80
4191	8	Abhishek Kumar	Sh. Darshan Kumar	J-22-M-859	04-11-2024	8.52
4192	9	Damini	Sh. Kashub Kumar	J-22-M-864	06-11-2024	8.59
4193	10	Marvi Sharma	Sh. Daulat Ram	J-22-M-862	06-11-2024	8.67
4194	11	Keshav Padha	Sh. Kishore Kumar	J-22-M-865	06-11-2024	7.85
4195	12	Sudha Verma	Sh. Ram Paul	J-22-M-866	06-11-2024	8.59
4196	13	Simrandeep Kour	Sh. Gurdeep Singh	J-22-M-867	06-11-2024	8.30
4197	14	Vikas Maiya	Sh. Sugna Ram Maiya	J-22-M-869	06-11-2024	7.12
4198	15	Rahul Nodal	Sh. Ram Gopal Jat	J-22-M-870	06-11-2024	7.70
4199	16	Lakshay Khajuria	Sh. Virinder Kumar Khajuria	J-22-M-863	18-11-2024	7.90
4200	17	Deepak Kumar	Sh. Om Parkash	J-21-M-785	30-12-2024	7.30
<b>AGRICULTURAL ECONOMICS</b>						
4201	1	Faheem Jabbar Bhat	Sh. Abdul Jabbar Bhat	J-21-M-788	24-01-2024	7.47
4202	2	Gowthami L	Sh. Lakshmipathi Y R	J-22-M-875	06-11-2024	8.56
4203	3	Ribhav Soni	Sh. Ravinder Soni	J-22-M-873	18-11-2024	7.36
4204	4	Apoorva	Sh. Jagtamba Prashad	J-22-M-874	29-11-2024	8.05
4205	5	Aryan Gautam	Sh. R K Gautam	J-22-M-876	09-12-2024	8.00
<b>AGRICULTURAL EXTENSION EDUCATION</b>						
4206	1	Vibhore Khajuria	Sh. Naresh Khajuria	J-21-M-798	03-05-2024	7.36
4207	2	Diskit Angmo	Sh. Sonam Stanzin	J-21-M-794	12-06-2024	7.86
4208	3	Greesha	Sh. Shish Pal Poonia	J-22-M-881	21-10-2024	7.72
4209	4	Nazma Khatun	Sh. Liaqat Ali	J-22-M-879	04-11-2024	8.27
4210	5	Harsh Bhushan	Sh. Bharat Bhushan	J-22-M-878	09-12-2024	7.27
<b>ENTOMOLOGY</b>						
4211	1	Virandra Yadav	Sh. Shiv Narayan Yadav	J-21-M-802	20-12-2023	7.56
4212	2	Sehrose Sharief	Sh. Mohd Sharief Chandial	J-21-M-801	20-12-2023	7.81
4213	3	Tanishq Sharma	Sh. Kuldeep Sudan	J-22-M-888	24-10-2024	7.96
4214	4	Zia-Ur-Rashid	Sh. Abdul Rashid	J-21-M-803	18-11-2024	7.78
4215	5	Subhanshi Khatotra	Sh. Ashok Kumar	J-22-M-887	18-11-2024	8.24
4216	6	Abrar Ahmad Wani	Sh. Bashir Ahmad Wani	J-21-M-799	09-12-2024	8.05
4217	7	Rohit	Sh. Shyam	J-22-M-891	09-12-2024	7.36
4218	8	Jitender Shakya	Sh. Narayan Dass Shakya	J-22-M-890	30-12-2024	7.49
<b>GENETICS AND PLANT BREEDING</b>						
4219	1	Lalita Kumari	Sh. Bishan Lal	J-21-M-826	20-12-2023	7.89
4220	2	Sehroz Sharif	Sh. Mohd Sharif Chandial	J-21-M-825	20-12-2023	7.13
4221	3	Kriti Singh	Sh. Ashok Kumar Singh	J-22-M-897	08-10-2024	8.41
4222	4	Manisha Sharma	Sh. Ramesh Chander	J-22-M-893	08-10-2024	7.92
4223	5	Shivam Singh	Sh. Ajay Singh	J-22-M-898	08-10-2024	7.78
4224	6	Reena Kumari	Sh. Ram Lal	J-22-M-894	21-10-2024	8.03
4225	7	Akshita Mahajan	Sh. Sanjeev Gupta	J-22-M-892	21-10-2024	8.12
4226	8	Harman Preet Singh	Sh. Inderjeet Singh	J-22-M-896	09-12-2024	7.22

4227	9	Ajit Shakya	Sh. Bainche Lal	J-22-M-895	30-12-2024	6.83
<b><u>PLANT PATHOLOGY</u></b>						
4228	1	Rakesh Kumar Bhagat	Sh. Bansil Lal	J-21-M-835	07-02-2024	7.95
4229	2	Aniket Gupta	Sh. Jawahar Gupta	J-20-M-759	04-04-2024	7.34
4230	3	Meh Run Nisa	Sh. Farooq Ahmed Butt	J-22-M-899	24-10-2024	8.24
4231	4	Lingeswari R	Sh. Ravichandran	J-22-M-905	24-10-2024	8.47
4232	5	Bestha Sai Teja	Sh. B Eranna	J-22-M-906	04-11-2024	7.25
4233	6	Mansi	Sh. Satish Kumar	J-22-M-901	06-11-2024	8.18
4234	7	Ritika Patyal	Sh. Raj Kumar Patyal	J-22-M-904	21-11-2024	7.83
4235	8	Millind Roshan	Sh. Roshan Lal	J-22-M-903	29-11-2024	7.48
4236	9	Anushriya Gupta	Sh. Ram Paul Gupta	J-22-M-900	29-11-2024	8.53
4237	10	Girja Devi	Sh. Surjan Singh	J-22-M-909	09-12-2024	7.33
4238	11	Pankaj Sharma	Sh. Ram Lal Sharma	J-22-M-902	09-12-2024	7.23
<b><u>SERICULTURE</u></b>						
4239	1	Harvendhan Kour	S. Kulbir Singh	J-21-M-839	24-01-2024	8.12
4240	2	Nikhil Sharma	Sh. Joginder Lal	J-21-M-837	24-01-2024	7.90
4241	3	Shahnoor Chowdhary	Sh. Mushtaq Ahmed	J-21-M-838	12-06-2024	8.29
<b><u>SOIL SCIENCE</u></b>						
4242	1	Karamjot Kour	Sh. Rajinder Singh	J-21-M-843	20-12-2023	8.31
4243	2	Bhumika Sharma	Sh. Anil Kumar Sharma	J-21-M-845	20-12-2023	8.11
4244	3	Shruti Sharma	Sh. Brij Lal Sharma	J-21-M-844	06-03-2024	8.15
4245	4	Aakash Kumar Saini	Sh. Siyaram Saini	J-22-M-919	06-11-2024	8.09
4246	5	Israrul Haq Qureshi	Sh. Abdul Salam Qureshi	J-22-M-917	06-11-2024	8.01
4247	6	Vani Mahindru	Sh. Atul Mahindru	J-22-M-933	18-11-2024	8.45
4248	7	Vidushi Antahal	Sh. Bishan Chand	J-22-M-915	30-12-2024	8.01
4249	8	Teesha Manhas	Sh. Bachan Singh	J-22-M-911	30-12-2024	8.54
4250	9	Vaibhav Kotwal	Sh. Rajesh Kumar Kotwal	J-22-M-916	30-12-2024	8.23
4251	10	Gourav Sudan	Sh. Naresh Kumar	J-22-M-910	03-01-2025	7.99
<b><u>SEED SCIENCE AND TECHNOLOGY</u></b>						
4252	1	Priyanka Bhatt	Sh. Shyam Lal Bhatt	J-22-M-921	21-10-2024	8.27
4253	2	Shewani	Sh. Romesh Lal	J-22-M-922	29-11-2024	8.40
4254	3	Sourav Sharma	Sh. Subhash Chander	J-22-M-920	09-12-2024	8.00
<b><u>ORGANIC FARMING</u></b>						
4255	1	Lobzang Zangmo	Sh. Tsering Phunchok	J-22-M-925	06-11-2024	8.19
4256	2	Sukanya Bharti	Sh. Girdhari Lal	J-22-M-923	30-12-2024	7.92
4257	3	Praykeshi Sharma	Sh. Shashi Pal Sharma	J-22-M-926	30-12-2024	8.24
4258	4	Satyam Thakur	Sh. Shiv Kumar	J-22-M-924	30-12-2024	8.37
<b><u>BIOTECHNOLOGY</u></b>						
4259	1	Kashish Sharma	Sh. Padam Kumar Sharma	J-22-MB-45	30-12-2024	7.74
4260	2	Salvenia Bhau	Sh. Prabhu Dayal Singh	J-22-MB-46	30-12-2024	6.83
4261	3	Pakhneet Singh	Sh. Satveer Singh	J-22-MB-47	30-12-2024	6.81
<b><u>MBA (AGRI-BUSINESS MANAGEMENT)</u></b>						
4262	1	Geetanjali	Sh. Arvind Kumar	J-21-M-90-ABM	08-01-2024	7.99
4263	2	Aiman Azfar	Sh. Azfar Hussain Mattoo	J-21-M-87-ABM	08-01-2024	7.92
4264	3	Lucky	Sh. Krishan Lal	J-21-M-86-ABM	06-05-2024	8.34
4265	4	Vembuluru Harshith	Sh. Vembuluru Madhu Sudhana Rao	J-21-M-89-ABM	06-05-2024	8.13
4266	5	Shweta Chambyal	Sh. Shamsher Singh Chambyal	J-22-M-93-ABM	13-11-2024	8.24

4267	6	Pallavi	Sh. Joginder Singh	J-22-M-94-ABM	13-11-2024	8.01
4268	7	Ayush Bhagotra	Sh. Kewal Krishan	J-22-M-97-ABM	21-11-2024	7.90
4269	8	Priyanka	Sh. Lakshman Singh	J-22-M-99-ABM	21-11-2024	7.47
4270	9	Karandeep Attri	Sh. Ramesh Kumar	J-22-M-102-ABM	21-11-2024	7.70
4271	10	Apoorva	Sh. Bhupinder Singh Dhiman	J-22-M-96-ABM	31-12-2024	8.28
4272	11	Anurag Sharma	Sh. Gopal Prashad Sharma	J-22-M-100-ABM	31-12-2024	7.19
4273	12	Shivani Thakur	Sh. Sanjay Thakur	J-22-M-101-ABM	31-12-2024	8.12
4274	13	Amit Saini	Sh. Jai Singh	J-22-M-103-ABM	31-12-2024	7.32
4275	14	Sunil Singh	Sh. Jagdev Singh	J-22-M-95-ABM	31-12-2024	7.84

### **1.7 Master of Science in Basic Sciences**

#### **PLANT PHYSIOLOGY**

4276	1	Shruti Verma	Sh. Kamal Lal	J-21-MBS-60	09-01-2024	8.38
4277	2	Sofia Malpotra	Sh. Suresh Kumar	J-21-MBS-63	09-01-2024	7.83
4278	3	Priyanka	Sh. Ashok Kumar	J-22-MBS-78	16-12-2024	7.81
4279	4	Vishali Dalgotra	Sh. Jagdish Raj	J-22-MBS-76	26-12-2024	8.48
4280	5	Harshita Dwivedi	Sh. M C Dwivedi	J-22-MBS-83	17-01-2025	7.52

#### **STATISTICS**

4281	1	Sukanya Mahajan	Sh. Ashok Kumar Gupta	J-21-MBS-69	03-05-2024	8.33
4282	2	Divyam Sharma	Sh. Bharat Bhushan	J-22-MBS-81	05-11-2024	8.11
4283	3	Amandeep Verma	Sh. Kartar Chand Verma	J-22-MBS-82	05-11-2024	8.05

#### **MICROBIOLOGY**

4284	1	Reva Thakur	Sh. Gurdev Thakur	J-22-MBS-79	18-11-2024	7.82
4285	2	Aarushi Chaudhary	Sh. Vijay Kumar	J-22-MBS-80	18-11-2024	7.90

### **1.8 Master of Science in Horticulture & Forestry**

#### **HORTICULTURE (FRUIT SCIENCE)**

4286	1	Prachi Soni	Sh. Rajinder Soni	J-22-MHF-12	21-10-2024	8.90
4287	2	Shweta	Sh. Ajay Chopra	J-22-MHF-31	05-11-2024	8.84
4288	3	Simran Hans	Sh. Rajinder Kumar	J-22-MHF-09	13-11-2024	8.74
4289	4	Shameen Choudhary	Sh. Mohd Iqbal	J-22-MHF-08	22-11-2024	8.02
4290	5	Mukesh Sarkar	Sh. Mahendra Sarkar	J-22-MHF-13	22-11-2024	8.04
4291	6	Mangi Lal Bhambhu	Sh. Brij Lal Bhambhu	J-22-MHF-10	22-11-2024	7.63
4292	7	Jitendra Kumar	Sh. Suresh Kumar	J-22-MHF-11	04-12-2024	7.77

#### **POST HARVEST MANAGEMENT**

4293	1	Kamakshi Sharma	Sh. Nigam Mishra	J-21-M-815	18-01-2024	8.59
4294	2	Gurveen Kour	S. Gurmeet Singh	J-21-M-840	29-01-2024	8.50
4295	3	Neeraj Kumar Sharma	Sh. Kailash Chand Sharma	J-22-MHF-17	21-10-2024	7.77
4296	4	Bharat Sharma	Sh. Inderjeet Sharma	J-22-MHF-18	21-10-2024	7.57
4297	5	Manminder Pal Singh	S. Nirmal Singh	J-22-MHF-14	05-11-2024	8.09
4298	6	Barsha Sambyal	Sh. Brijpal Singh	J-22-MHF-15	13-11-2024	8.11
4299	7	Jesreen Chauhan	Sh. Ram Singh	J-22-MHF-16	04-12-2024	8.46
4300	8	Gyan Singh Jankawat	Sh. Gajendra Singh Jankawat	J-22-MHF-19	30-12-2024	7.22

#### **SILVICULTURE AND AGROFORESTRY**

4301	1	Sourabh Chauhan	Sh. Hans Raj	J-22-MHF-29	25-09-2024	7.17
4302	2	Saurabh Singh	Sh. Suresh Kumar	J-22-MHF-30	17-12-2024	8.43
4303	3	Kanav Badhyal	Sh. Sunil Kumar Sharma	J-22-MHF-28	30-12-2024	6.96

#### **HORTICULTURE (VEGETABLE SCIENCE)**



4337	1	Vallavai Raju	Sh. Vallavai Krushnaiah	J-21-MV-688	30-05-2024	7.97
4338	2	Shabnam Kosser	Sh. Mohd Aslam Baig	J-21-MV-685	21-10-2024	7.45
<b>VETERINARY SURGERY AND RADIOLOGY</b>						
4339	1	Owais Shafi Bhat	Sh. Mohd Shafi Bhat	J-21-MV-693	21-10-2024	8.02
4340	2	Karun Gupta	Sh. Rajesh Gupta	J-21-MV-689	04-11-2024	8.12
<b><u>Under Graduate</u></b>						
<b><u>2.1 Bachelor of Science (Hons.) in Agriculture</u></b>						
<b>Batch 2016</b>						
4341	1	Akash Arya	Sh. Amar Singh Arya	J-16-Agri-705	23-07-2024	7.29
<b>Batch 2019</b>						
4342	1	Amir U Din	Sh. Abdul Hafiz	J-19-Agri-1127	08-01-2024	7.39
4343	2	Shahid Raza Wani	Sh. Anayatullah Wani	J-19-Agri-1073	23-07-2024	7.51
4344	3	Sohail Ahmed	Sh. Abdul Quyum	J-19-Agri-1075	23-07-2024	7.43
4345	4	Mohammad Abbas Ganie	Sh. Fayaz Ahmad Ganie	J-19-Agri-1105	23-07-2024	7.43
4346	5	Idrees Ashraf Butt	Sh. Mohd Ashraf Butt	J-19-Agri-1102	05-09-2024	7.17
<b>Batch 2020</b>						
4347	1	Sojal Sharma	Sh. Kailash Sharma	J-20-Agri-1168	23-07-2024	8.67
4348	2	Aakriti Sharma	Sh. Tilak Raj Sharma	J-20-Agri-1171	23-07-2024	8.70
4349	3	Ravinder Kour	S. Kulwant Singh	J-20-Agri-1172	23-07-2024	8.13
4350	4	Akhil Singh	Sh. Mohinder Singh	J-20-Agri-1173	23-07-2024	7.97
4351	5	Himani Sharma	Sh. Sanjay Sharma	J-20-Agri-1174	23-07-2024	8.01
4352	6	Tanvi Arora	Sh. Atul Arora	J-20-Agri-1175	23-07-2024	7.95
4353	7	Shivam Roshan	Sh. Suraj Parkash	J-20-Agri-1176	23-07-2024	7.91
4354	8	Arjun Singh	Sh. Ravat Raman	J-20-Agri-1177	23-07-2024	8.13
4355	9	Mohd Aakif Itoo	Sh. Gh Mohd Itoo	J-20-Agri-1178	23-07-2024	7.18
4356	10	Kartik Parihar	Sh. Pardeep Singh	J-20-Agri-1181	23-07-2024	7.81
4357	11	Aaryan Verma	Sh. Ajit Kumar Verma	J-20-Agri-1183	23-07-2024	7.77
4358	12	Vanshika Sharma	Sh. Anil Sharma	J-20-Agri-1184	23-07-2024	8.19
4359	13	Sumeet Thakur	Sh. Sanjay Kumar	J-20-Agri-1185	23-07-2024	7.86
4360	14	Qurat Ul Ain Nargis	Sh. Mohd Farooq Gutt	J-20-Agri-1186	23-07-2024	7.34
4361	15	Purvi Sharma	Sh. Kuldeep Kumar Sharma	J-20-Agri-1187	23-07-2024	8.23
4362	16	Mubashir Ahmed	Sh. Mohd Afzal Naik	J-20-Agri-1189	23-07-2024	7.72
4363	17	Mehrul Choudhary	Sh. Mumtaz Ali Choudhary	J-20-Agri-1190	23-07-2024	7.64
4364	18	Navpreet Kaur	Sh. Sital Singh	J-20-Agri-1191	23-07-2024	7.91
4365	19	Tashfeen Ajmal Natnoo	Sh. Kh Ajmal Hussain Natnoo	J-20-Agri-1193	23-07-2024	7.67
4366	20	Mehika Langeh	Sh. Harbans Lal Langeh	J-20-Agri-1197	23-07-2024	7.95
4367	21	Shamsia Fatima	Sh. Mehdi Ali	J-20-Agri-1201	23-07-2024	7.86
4368	22	Nasireen Fatima	Sh. Nasir Hussain	J-20-Agri-1202	23-07-2024	7.89
4369	23	Mohammad Amaan	Sh. Zakir Hussain	J-20-Agri-1205	23-07-2024	7.55
4370	24	Palak Mehra	Sh. Dharminder Kumar	J-20-Agri-1206	23-07-2024	8.25
4371	25	Sonam	Sh. Ashok Kumar	J-20-Agri-1207	23-07-2024	7.82
4372	26	Tanvi Choudhary	Sh. Devinder Kumar	J-20-Agri-1208	23-07-2024	8.09
4373	27	Rahul Sharma	Sh. Gittan Ram	J-20-Agri-1210	23-07-2024	7.65
4374	28	Tannu Sain	Sh. Tarlok Singh	J-20-Agri-1211	23-07-2024	8.15
4375	29	Shivalika Kapoor	Sh. Sanjeev Kapoor	J-20-Agri-1212	23-07-2024	8.02
4376	30	Nitesh Kumar	Sh. Satish Kumar Dhar	J-20-Agri-1213	23-07-2024	8.15

4377	31	Tarun Narayan Sharma	Sh. Ramesh Chander Sharma	J-20-Agri-1216	23-07-2024	7.33
4378	32	Sakreeti Sharma	Sh. Puran Chand	J-20-Agri-1217	23-07-2024	7.73
4379	33	Robinpreet Kour	Sh. Jasvinder Singh	J-20-Agri-1218	23-07-2024	7.66
4380	34	Ussama Zaffer	Sh. Zafferullah	J-20-Agri-1219	23-07-2024	7.72
4381	35	Kashish Sharma	Sh. Bodh Raj Sardalia	J-20-Agri-1221	23-07-2024	8.30
4382	36	Jhanvi Sharma	Sh. Pawan Kumar Sharma	J-20-Agri-1222	23-07-2024	7.21
4383	37	Aquiba Akhter Sheikh	Sh. Akhter Hussain Sheikh	J-20-Agri-1223	23-07-2024	7.76
4384	38	Palvi	Sh. Tilak Raj	J-20-Agri-1225	23-07-2024	7.98
4385	39	Prajual Kotwal	Sh. Inder Jeet Kotwal	J-20-Agri-1226	23-07-2024	7.72
4386	40	Siddhant Singh Parihar	Sh. Kuldeep Singh Parihar	J-20-Agri-1227	23-07-2024	7.66
4387	41	Mansi Sharma	Sh. Tejinder Sharma	J-20-Agri-1228	23-07-2024	8.19
4388	42	Nida Shafi Hafiz	Sh. Mohammad Shafi Hafiz	J-20-Agri-1231	23-07-2024	8.04
4389	43	Junaid Ahmad Malik	Sh. Javeed Ahmad Malik	J-20-Agri-1232	23-07-2024	7.37
4390	44	Zoya Mir	Sh. Sajjad Mir	J-20-Agri-1233	23-07-2024	8.00
4391	45	Ruchika Sharma	Sh. Vishav Kumar	J-20-Agri-1235	23-07-2024	8.67
4392	46	Parul Sharma	Sh. Ramesh Kumar Sharma	J-20-Agri-1236	23-07-2024	7.94
4393	47	Disha Sharma	Sh. Surinder Paul Sharma	J-20-Agri-1237	23-07-2024	8.14
4394	48	Chitwan Kotwal	Sh. Dhananter Singh Kotwal	J-20-Agri-1238	23-07-2024	7.77
4395	49	Sonali Sharma	Sh. Suraj Parkash	J-20-Agri-1239	23-07-2024	7.94
4396	50	Varnika Slathia	Sh. Mohan Singh Slathia	J-20-Agri-1240	23-07-2024	8.22
4397	51	Sujal Sharma	Sh. Ajay Sharma	J-20-Agri-1241	23-07-2024	7.99
4398	52	Sarthik Raina	Sh. Ashok Kumar	J-20-Agri-1242	23-07-2024	7.75
4399	53	Shivalika Sharma	Sh. Romesh Chander	J-20-Agri-1243	23-07-2024	8.47
4400	54	Pranika Gupta	Sh. Sunil Kumar Gupta	J-20-Agri-1244	23-07-2024	8.43
4401	55	Aayat Un Nisa	Sh. Mohammad Shafi Sheikh	J-20-Agri-1245	23-07-2024	7.57
4402	56	Sudhanshu Sharma	Sh. Sanjay Kumar	J-20-Agri-1246	23-07-2024	7.80
4403	57	Akshay Katoch	Sh. Ved Parkash Katoch	J-20-Agri-1247	23-07-2024	7.72
4404	58	Tiya Gupta	Sh. Sanjeev Gupta	J-20-Agri-1249	23-07-2024	7.85
4405	59	Pawanjeet Kour	Sh. Charanjeet Singh	J-20-Agri-1250	23-07-2024	8.02
4406	60	Sidharth Mahajan	Sh. Raman Gupta	J-20-Agri-1251	23-07-2024	7.91
4407	61	Saqlain Mushtaq	Sh. Mushtaq Ahmad Khan	J-20-Agri-1252	23-07-2024	7.58
4408	62	Meenakshi Raina	Sh. Jagdish Raina	J-20-Agri-1253	23-07-2024	8.05
4409	63	Tanishq	Sh. Jai Singh	J-20-Agri-1254	23-07-2024	7.61
4410	64	Harsh Angral	Sh. Ravi Kumar Angral	J-20-Agri-1255	23-07-2024	7.88
4411	65	Idnan Jaral	Sh. Zabaid Hussain	J-20-Agri-1256	23-07-2024	7.29
4412	66	Vivekinie Sharma	Sh. Kuldeep Sudan	J-20-Agri-1257	23-07-2024	8.21
4413	67	Raja Farzaan Ahmed Khan	Sh. Raja Farid Khan	J-20-Agri-1258	23-07-2024	7.60
4414	68	Palki Sharma	Sh. Parshotam Dutt	J-20-Agri-1260	23-07-2024	8.16
4415	69	Aaryan Mahajan	Sh. Arun Kumar	J-20-Agri-1261	23-07-2024	7.68
4416	70	Devanshi Mehta	Sh. Rajinder Kumar Mehta	J-20-Agri-1262	23-07-2024	8.07
4417	71	Aman Singh Manhas	Sh. Kuldeep Singh Manhas	J-20-Agri-1263	23-07-2024	7.68
4418	72	Shubham	Sh. Bodu Ram Bazaya	J-20-Agri-1264	23-07-2024	7.70
4419	73	Madhav	Sh. Sukh Dev Sharma	J-20-Agri-1265	23-07-2024	7.48
4420	74	Ramanjeet Kaur	Sh. Avtar Singh	J-20-Agri-1266	23-07-2024	8.35
4421	75	Visman Kour	Sh. Narinder Singh	J-20-Agri-1268	23-07-2024	8.17

4422	76	Nancy Vohra	Sh. Naresh Vohra	J-20-Agri-1269	23-07-2024	8.06
4423	77	Abhiraj Kumar	Sh. Neeraj Kumar	J-20-Agri-1270	23-07-2024	7.54
4424	78	Shivam Bains	Sh. Rakesh Kumar	J-20-Agri-1271	23-07-2024	7.94
4425	79	Chirag	Sh. Sandeep	J-20-Agri-1273	23-07-2024	7.19
4426	80	Shreetama Roy	Sh. Diganta Roy	J-20-Agri-1277	23-07-2024	8.29
4427	81	Parveen Kumar	Sh. Mahaveer Prasad	J-20-Agri-1278	23-07-2024	7.66
4428	82	Sujata Jangu	Sh. Ranjeet Singh	J-20-Agri-1279	23-07-2024	8.06
4429	83	Vishal Dahiya	Sh. Shyam Sunder	J-20-Agri-1280	23-07-2024	8.23
4430	84	Anandita Anthal	Sh. Rajinder Singh	J-20-Agri-1282	23-07-2024	8.54
4431	85	Vansh Kamra	Sh. Jagmohan	J-20-Agri-1283	23-07-2024	8.29
4432	86	Harsh Kumar	Sh. Balvir Kumar	J-20-Agri-1284	23-07-2024	7.81
4433	87	Anubhav Kumar Thakur	Sh. Surendra Kumar Thakur	J-20-Agri-1285	23-07-2024	7.82
4434	88	Romika	Sh. Raj Kumar	J-20-Agri-1286	23-07-2024	8.25
4435	89	Mehmooda Khatoon	Sh. Hamid Khan	J-20-Agri-1287	23-07-2024	7.64
4436	90	Adnan Irshad Zargar	Sh. Irshad Ahmed Zargar	J-20-Agri-1288	23-07-2024	7.19
4437	91	Divanshi	Sh. Ravi Sharma	J-20-Agri-1289	23-07-2024	7.96

## **2.2 Bachelor of Technology in Biotechnology**

### **Batch 2018**

4438	1	Anirudh Dogra	Sh. R.K. Dogra	J-18-Biotech-218	08-01-2024	7.08
4439	2	Rameshwar Singh	Sh. Mohan Singh	J-18-Biotech-226	29-04-2024	6.38

### **Batch 2019**

4440	1	Rabjyot Kaur	Sh. Joginder Singh	J-19-Biotech-246	10-01-2024	6.85
4441	2	Ayushi Kesar	Sh. Ram Paul Sharma	J-19-Biotech-237	12-06-2024	7.07

### **Batch 2020**

4442	1	Abhilasha Sharma	Sh. Parshotam Kumar	J-20-Biotech-254	22.08-2024	8.61
4443	2	Mohd Rahil Butt	Sh. Zakir Hussain Butt	J-20-Biotech-256	22.08-2024	7.43
4444	3	Hardik Gupta	Sh. Pawan Gupta	J-20-Biotech-257	22.08-2024	7.60
4445	4	Alina Tabassum Suharwardy	Sh. Tahir Jameel Suharwardy	J-20-Biotech-258	22.08-2024	7.62
4446	5	Divyansh Bajala	Sh. Gurdeep Raj Bajala	J-20-Biotech-259	22.08-2024	7.83
4447	6	Ankita Sharma	Sh. Babu Ram Sharma	J-20-Biotech-261	22.08-2024	8.06
4448	7	Anshita Virdi	Sh. Ashwani Kumar	J-20-Biotech-262	22.08-2024	7.84
4449	8	Lally Bhagat	Sh. Sanjeev Kumar	J-20-Biotech-263	22.08-2024	6.98
4450	9	Harshita Gupta	Sh. Ashish Gupta	J-20-Biotech-264	22.08-2024	7.53
4451	10	Aqsa	Sh. Farooq Ahmed Sheikh	J-20-Biotech-265	22.08-2024	7.57
4452	11	Muskan Gupta	Sh. Naresh Gupta	J-20-Biotech-266	22.08-2024	7.21
4453	12	Sanjeevani Choudhary	Sh. Pawan Kumar	J-20-Biotech-269	22.08-2024	7.59
4454	13	Novika	Sh. Raj Kumar	J-20-Biotech-270	22.08-2024	7.71
4455	14	Ashleen Kour	Sh. Bali Baltar Singh	J-20-Biotech-271	22.08-2024	8.04
4456	15	Sharka Rafiqi	Sh. Abid Hussain Rafiqi	J-20-Biotech-272	22.08-2024	6.99
4457	16	Ritik Tickoo	Sh. Ram Krishan Tickoo	J-20-Biotech-273	22.08-2024	7.32
4458	17	Nikita Sharma	Sh. Sanjeev Kumar	J-20-Biotech-274	22.08-2024	7.23
4459	18	Sunidhi Malgotra	Sh. Kamal Kishore Malgotra	J-20-Biotech-275	22.08-2024	7.71
4460	19	Vanika Ajay	Sh. Ajay Gupta	J-20-Biotech-276	22.08-2024	7.63
4461	20	Priyanka Sharma	Sh. Tara Mani	J-20-Biotech-277	22.08-2024	7.03
4462	21	Satwik Sharma	Sh. Satpal Sharma	J-20-Biotech-278	22.08-2024	8.39



4463	22	Lakshita Katoch	Sh. Balbir Singh	J-20-Biotech-279	22.08-2024	7.29
4464	23	Janbhi Malik	Sh. Sham Lal	J-20-Biotech-281	22.08-2024	6.87
4465	24	Mohd Asim Raza	Sh. Mehmood Hussain	J-20-Biotech-284	22.08-2024	7.49
4466	25	Aseem K K Sharma	Sh. Sanjeev Kumar Sharma	J-20-Biotech-285	22.08-2024	7.51

### **2.3 Bachelor of Veterinary Science & Animal Husbandry(B.V.Sc.& A.H.)**

#### **Batch-2014**

4467	1.	Mohammad Rawoof	Sh. Ali Ghulam	J-14-BV-865	06-03-2024	6.550
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#### **Batch-2015**

4468	1.	Vikas Sharma	Sh. Inderjeet Sharma	J-15-BV-952	16-01-2024	6.541
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#### **Batch-2017**

4469	1.	Battan Singh Bhanwan	Sh. Des Raj	J-17-BV-1067	16-01-2024	7.462
4470	2.	Jobanpreet Singh Lubana	Sh. Gurnam Singh	J-17-BV-1125	16-01-2024	6.748
4471	3.	Koshki Raina	Sh. Romesh Raina	J-17-BV-1065	06-03-2024	6.491
4472	4.	Rahul Saini	Sh. Hari Narayan	J-17-BV-1131	10-12-2024	7.111

#### **Batch-2018**

4473	1.	Aasim Afzal	Sh. Mohammad Afzal Mir	J-18-BV-1140	16-01-2024	6.932
4474	2.	Shahid Hussain	Sh. Mohammad Shafi Shah	J-18-BV-1141	16-01-2024	6.647
4475	3.	Mashkoo Ahmad Shah	Sh. Ahmad U llah Shah	J-18-BV-1143	16-01-2024	7.797
4476	4.	Nandini	Sh. Narinder Singh Raina	J-18-BV-1144	16-01-2024	8.321
4477	5.	Abrar Hafiz Chowdhary	Sh. Darbar Ahmed Chowdhary	J-18-BV-1146	16-01-2024	6.285
4478	6.	Samiksha Sharma	Sh. Sham Lal	J-18-BV-1148	16-01-2024	7.749
4479	7.	Adnan Rashid Bhat	Sh. Abdul Rashid Bhat	J-18-BV-1150	16-01-2024	7.431
4480	8.	Aeyman Fatima	Sh. Mohd Rafi Butt	J-18-BV-1154	06-03-2024	6.437
4481	9.	Mohd Ziafat	Sh. Mohd Zaid	J-18-BV-1156	16-01-2024	7.783
4482	10.	Suneha Devi	Sh. Ajeet Kumar	J-18-BV-1157	16-01-2024	7.836
4483	11.	Riya	Sh. Puran Chand	J-18-BV-1158	16-01-2024	7.420
4484	12.	Mahima Raj Bhagat	Sh. Des Raj Bhagat	J-18-BV-1159	16-01-2024	8.078
4485	13.	Jameel Ahmed	Sh. Mohd Yousif	J-18-BV-1160	16-01-2024	7.247
4486	14.	Anjali Devi	Sh. Sunil Singh	J-18-BV-1163	16-01-2024	7.775
4487	15.	Sehrish Fatima	Sh. Farooq Ahmad Butt	J-18-BV-1164	16-01-2024	6.668
4488	16.	Syeeb Khursheed Reshi	Sh. Khursheed Ahmed Reshi	J-18-BV-1166	16-01-2024	7.465
4489	17.	Mohd Azzhar	Sh. Mohd Sarwar	J-18-BV-1173	16-01-2024	6.603
4490	18.	Deuvun Raina	Sh. Sunil Raina	J-18-BV-1174	16-01-2024	7.677
4491	19.	Milan Sharma	Sh. Naresh Kumar	J-18-BV-1176	16-01-2024	7.769
4492	20.	Priyanshi	Sh. Ravi Kumar Kohli	J-18-BV-1177	16-01-2024	7.669
4493	21.	Bhavya Jain	Sh. Gaurav Jain	J-18-BV-1178	16-01-2024	7.457
4494	22.	Niharika Kotwal	Sh. Mahesh Kotwal	J-18-BV-1179	16-01-2024	7.258
4495	23.	Ehtisham Sadiq	Sh. Mohammad Sadiq Shad	J-18-BV-1180	16-01-2024	7.143
4496	24.	Bareen Jaan	Sh. Atta Mohd Nehru	J-18-BV-1181	16-01-2024	7.708
4497	25.	Parul Sharma	Sh. Vijay Kumar	J-18-BV-1182	16-01-2024	7.383
4498	26.	Humera Khan	Sh. Abdul Rashid	J-18-BV-1183	16-01-2024	7.459
4499	27.	Arpita Jamwal	Sh. Ajit Singh	J-18-BV-1184	16-01-2024	6.994
4500	28.	Soshthi Talwar	Sh. Bhupinder Talwar	J-18-BV-1185	16-01-2024	7.485
4501	29.	Palak Sharma	Sh. Devinder Sharma	J-18-BV-1186	16-01-2024	7.814
4502	30.	Harish Bajiya	Sh. B R Bazaya	J-18-BV-1187	16-01-2024	7.283
4503	31.	Shubhra Arun	Sh. Arun Chandra Jha	J-18-BV-1188	16-01-2024	6.795

4504	32.	Gurlalbir Singh	Sh. Gurparsan Singh	J-18-BV-1189	16-01-2024	6.726
4505	33.	Naveen Bugra	Sh. Balwinder Singh	J-18-BV-1190	16-01-2024	7.303
4506	34.	Mohit	Sh. Satyawar	J-18-BV-1191	16-01-2024	7.230
4507	35.	Milind Tyagi	Sh. S P Tyagi	J-18-BV-1192	16-01-2024	7.502
4508	36.	Shivam Monga	Sh. Rakesh Kumar	J-18-BV-1194	16-01-2024	7.205
4509	37.	Nirupal Kaur	Sh. Niripraj Singh Sohal	J-18-BV-1195	06-03-2024	7.140
4510	38.	Harshita Asin	Sh. Harish Kumar	J-18-BV-1196	16-01-2024	7.224
4511	39.	Navjeet Kaur	Sh. Harpal Singh	J-18-BV-1197	16-01-2024	6.532
4512	40.	Rahul Mahajan	Sh. Rajiv Gupta	J-18-BV-1198	16-01-2024	7.115
4513	41.	Akashdeep	Sh. Rajesh Kumar	J-18-BV-1199	16-01-2024	6.769
4514	42.	Katyayini Sharma	Sh. Parveen Sharma	J-18-BV-1200	16-01-2024	7.405
4515	43.	Gurkirat Singh Mand	Sh. Khushwinder Singh Mand	J-18-BV-1201	19-03-2024	6.705
4516	44.	Anmoldeep Singh	Sh. Kanwaljeet Singh	J-18-BV-1202	16-01-2024	6.867
4517	45.	Charu Sharma	Sh. Dr Desh Bandhu Sharma	J-18-BV-1203	16-01-2024	7.388
4518	46.	Nikhar Mahajan	Sh. Naresh Kumar	J-18-BV-1204	16-01-2024	7.598
4519	47.	Shivangi Maurya	Sh. Shiv Prasad	J-18-BV-1205	16-01-2024	7.800
4520	48.	Mannat Kalotra	Sh. Mohinder Pal Kalotra	J-18-BV-1206	16-01-2024	7.014
4521	49.	Sanchita Prasher	Sh. Vinod Kumar	J-18-BV-1207	16-01-2024	7.177
4522	50.	Parambir Kaur	Sh. Khushwinder Singh	J-18-BV-1208	16-01-2024	6.622
4523	51.	Harnoor Kaur Dhindsa	Sh. Rajbirinder Singh Dhindsa	J-18-BV-1209	16-01-2024	7.105
4524	52.	Neha Karlupia	Sh. Ashok Kumar	J-19-BV-1281	16-01-2024	7.745
4525	53.	Tania Kousar	Sh. Yaqub Ali	J-19-BV-1282	16-01-2024	7.597
4526	54.	Sajid Rashid	Sh. Abdul Rashid	J-18-BV-1147	10-12-2024	7.833
4527	55.	Touseef Shafqat	Sh. Shafqat Hussain	J-18-BV-1153	10-12-2024	7.026
4528	56.	Asrar Ahmed	Sh. Mohd Shafi	J-18-BV-1161	10-12-2024	7.480
4529	57.	Saqib Malik	Sh. Shabir Ahmed Malik	J-18-BV-1167	10-12-2024	7.540
4530	58.	Deepak Kumar	Sh. Karnail Singh	J-18-BV-1170	10-12-2024	6.951
4531	59.	Aditya Singh	Sh. Gurdeep Singh	J-18-BV-1172	10-12-2024	7.139
4532	60.	Bheem Sain	Sh. Daleep Chand	J-18-BV-1193	10-12-2024	6.816
<b>Batch-2019</b>						
4533	1.	Ravjot Singh	Sh. Navtej Singh	J-19-BV-1212	10-12-2024	8.166
4534	2.	Utkarsh Mahajan	Sh. Rajinder Kumar Gupta	J-19-BV-1215	10-12-2024	7.854
4535	3.	Shafali Jeet Kour	Sh. Ravinder Singh	J-19-BV-1217	10-12-2024	7.588
4536	4.	Numaan Tariq	Sh. Tariq Hussain	J-19-BV-1218	10-12-2024	7.521
4537	5.	Manyata	Sh. Rajesh Kumar Rampal	J-19-BV-1219	10-12-2024	7.985
4538	6.	Vishavdeep Sharma	Sh. Vijay Kumar Sharma	J-19-BV-1220	10-12-2024	7.168
4539	7.	Ashutosh Sharma	Sh. Ashok Kumar Sharma	J-19-BV-1222	10-12-2024	7.872
4540	8.	Tanu Priya	Sh. Omkar Sharma	J-19-BV-1223	10-12-2024	7.884
4541	9.	Roshni Virdhy	Sh. Rajesh Virdhy	J-19-BV-1224	10-12-2024	7.188
4542	10.	Nivedita Sharma	Sh. Kulwant Kumar	J-19-BV-1226	10-12-2024	7.941
4543	11.	Sunil Kumar	Sh. Satish Kumar	J-19-BV-1228	10-12-2024	7.596
4544	12.	Amandeep	Sh. Jang Bahadur	J-19-BV-1229	10-12-2024	7.198
4545	13.	Umansi	Sh. Subash Chander	J-19-BV-1230	10-12-2024	8.546
4546	14.	Chahat Sharma	Sh. Ashwani Kumar Sharma	J-19-BV-1231	10-12-2024	8.165
4547	15.	Ifra-Ul-Nisa	Sh. Sadiq Mohd	J-19-BV-1233	10-12-2024	7.220

4548	16.	Nazakit Ali	Sh. Mohd Nasib	J-19-BV-1234	10-12-2024	6.726
4549	17.	Stanzin Tsela	Sh. Sonam Punchok	J-19-BV-1235	10-12-2024	8.051
4550	18.	Tanisha Kumari	Sh. Tara Mani	J-19-BV-1236	10-12-2024	8.029
4551	19.	Syed Shafiya Kousar	Sh. Syed Altaf Hussain	J-19-BV-1239	10-12-2024	7.720
4552	20.	Sayeed Tohfiez Jaffer	Sh. Jaffer Hussain Shah	J-19-BV-1241	10-12-2024	6.948
4553	21.	Ashmita Sen	Sh. Sanjay Kumar Sen	J-19-BV-1242	10-12-2024	7.168
4554	22.	Vishwajeet Singh	Sh. Ajit Babu	J-19-BV-1243	10-12-2024	6.838
4555	23.	Neha Singh	Sh. Mahender Singh	J-19-BV-1245	13-12-2024	7.505
4556	24.	Anshu Raina	Sh. Kewal Kumar Raina	J-19-BV-1247	10-12-2024	7.036
4557	25.	Epsa Sharma	Sh. Vikrant Sharma	J-19-BV-1248	10-12-2024	8.076
4558	26.	Vishali Sharma	Sh. Raj Kumar	J-19-BV-1249	10-12-2024	8.146
4559	27.	Noor-Ul-Nissa Bandey	Sh. Zafar Ahmed Bandey	J-19-BV-1250	10-12-2024	7.767
4560	28.	Adamyia Sharma	Sh. Gulshan Khajuria	J-19-BV-1251	10-12-2024	7.793
4561	29.	Vanshika Gupta	Sh. Rajeev Gupta	J-19-BV-1252	10-12-2024	8.019
4562	30.	Anuj Sharma	Sh. Som Raj Sharma	J-19-BV-1253	10-12-2024	7.428
4563	31.	Siddharth Sharma	Sh. Kamal Sharma	J-19-BV-1254	10-12-2024	7.580
4564	32.	Chananjote Kour	Sh. Baldev Singh	J-19-BV-1256	10-12-2024	7.978
4565	33.	Ayushi Gupta	Sh. Satish Kumar Gupta	J-19-BV-1257	10-12-2024	8.129
4566	34.	Sparshdeep Singh	Sh. Gursharan Pal Singh	J-19-BV-1259	10-12-2024	7.278
4567	35.	Nancy Chaudhary	Sh. Prem Singh	J-19-BV-1260	10-12-2024	7.862
4568	36.	Upvanpreet Singh	Sh. Gurpreet Singh	J-19-BV-1261	10-12-2024	7.717
4569	37.	Anuj Bishnoi	Sh. Dalip Kumar Bishnoi	J-19-BV-1263	10-12-2024	7.319
4570	38.	Taranjot Kaur	Sh. Kuldeep Singh	J-19-BV-1265	10-12-2024	8.127
4571	39.	Yogesh Yadav	Sh. Omprakash Yadav	J-19-BV-1266	16-12-2024	6.924
4572	40.	Chaitanya Mohindroo	Sh. Jitender Mohindroo	J-19-BV-1267	10-12-2024	7.836
4573	41.	Danish	Sh. Jagdip Singh	J-19-BV-1268	10-12-2024	7.760
4574	42.	Jobanpreet Singh	Sh. Manpreet Singh	J-19-BV-1269	10-12-2024	7.548
4575	43.	Jaskirat Kaur	Sh. Satnam Singh	J-19-BV-1270	10-12-2024	7.930
4576	44.	Tejpartap Singh	Sh. Gurnaunihal Singh	J-19-BV-1271	10-12-2024	7.641
4577	45.	Karamveer Kour	Sh. Satwant Singh	J-19-BV-1273	10-12-2024	7.483
4578	46.	Tina Singh	Sh. Manoj Kumar Singh	J-19-BV-1274	10-12-2024	7.521
4579	47.	Harmeet Singh	Sh. Kanwaljit Singh	J-19-BV-1275	10-12-2024	7.612
4580	48.	Akshi Sharma	Sh. Pushpinder Kumar Sharma	J-19-BV-1276	10-12-2024	7.846
4581	49.	Akshat Kumar	Sh. Sanjay Kumar	J-19-BV-1278	10-12-2024	6.880
4582	50.	Fatehjeet Singh	Sh. Harpal Singh	J-19-BV-1279	03-01-2025	7.310
4583	51.	Akashdeep Singh	Sh. Jagdish Singh	J-19-BV-1280	10-12-2024	7.499

# **Annexure-VIII**



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**9<sup>th</sup> CONVOCATION**

**Dated:**  
**Place: Jammu**

### 1.1. Doctor of Philosophy in Agriculture Sciences

Scroll No.	S. No.	Name	Parentage	Registration No.	Result notified on	OGPA out of 10.00
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	1	Swati Mehta	Sh. Ramesh Lal Sharma	J-18-D-329-A	07-02-2024	8.58
	2	Jyoti Sharma	Sh. Ram Saroop	J-20-D-386-A	05-08-2024	8.57

<b>ENTOMOLOGY</b>						
	1	Yousra Mukhtar	Sh. Mukhtar Ahmed Shah	J-20-D-392-A	22-10-2024	8.50

	1	Divya Sharma	Sh. Jagan Nath Sharma	J-19-D-377-A	27-09-2024	8.90
	2	Meena Yadav	Sh. Surender Kumar Yadav	J-19-D-380-A	22-10-2024	8.55

	1	Neer Somakka A N	Sh. Naniappa A K	J-20-D-394-A	22-10-2024	8.53
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	1	Rashika Mahajan	Sh. Rakesh Kumar Gupta	J-19-D-382-A	19-06-2024	8.57
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	1	Rafia Nabi Zargar	Sh. Gh Nabi Zarger	J-20-D-02-ABM	13-11-2024	8.73
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	1	Pavleen Kour	Sh. Rajinder Singh	J-20-D-44-Bs	18-11-2024	8.62
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	1	Daman Preet Kour	Sh. Surinder Singh	J-20-D-419-A	24-10-2024	8.53
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	1	Obaid Zaffar	Sh. Zaffar Hussan Dand	J-20-D-388-A	12-06-2024	8.81
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	1	Gagandeep Kour	S. Gurjeet Singh	J-20-D-151-V	12-04-2024	8.54
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	1	Sakshi Sharma	Sh. Anil Kumar Sharma	J-20-D-153-V	07-05-2024	8.60
<b><u>VETERINARY MEDICINE</u></b>						
	1	Salveen Kour	Sh. Dilbagh Singh	J-20-D-154-V	12-06-2024	8.64
<b><u>VETERINARY SURGERY AND RADIOLOGY</u></b>						
	1	Ayushi Sawhney	Sh. Dev Raj Sawhney	J-20-D-155-V	14-05-2024	8.67
<b><u>VETERINARY PUBLIC HEALTH AND EPIDEMIOLOGY</u></b>						
	1	Kavya Gupta	Sh. Surinder Gupta	J-20-D-159-V	07-10-2024	8.58
<b><u>1.6. Master of Science in Agriculture &amp; Allied Sciences</u></b>						
<b><u>AGRONOMY</u></b>						
	1	Ankita Singh	Sh. Yogendra Singh	J-22-M-871	24-10-2024	8.52
	2	Abhishek Kumar	Sh. Darshan Kumar	J-22-M-859	04-11-2024	8.52
	3	Damini	Sh. Kashub Kumar	J-22-M-864	06-11-2024	8.59
	4	Marvi Sharma	Sh. Daulat Ram	J-22-M-862	06-11-024	8.67
	5	Sudha Verma	Sh. Ram Paul	J-22-M-866	06-11-2024	8.59
<b><u>AGRICULTURAL ECONOMICS</u></b>						
	1	Gowthami L	Sh. Lakshmipathi Y R	J-22-M-875	06-11-2024	8.56
<b><u>PLANT PATHOLOGY</u></b>						
	1	Anushriya Gupta	Sh. Ram Paul Gupta	J-22-M-900	29-11-2024	8.53
<b><u>SOIL SCIENCE</u></b>						
	1	Teesha Manhas	Sh. Bachan Singh	J-22-M-911	30-12-2024	8.54
<b><u>1.8. Master of Science in Horticulture &amp; Forestry</u></b>						
<b><u>HORTICULTURE (FRUIT SCIENCE)</u></b>						
	1	Prachi Soni	Sh. Rajinder Soni	J-22-MHF-12	21-10-2024	8.90
	2	Shweta	Sh. Ajay Chopra	J-22-MHF-31	05-11-2024	8.84
	3	Simran Hans	Sh. Rajinder Kumar	J-22-MHF-09	13-11-2024	8.74
<b><u>POST HARVEST MANAGEMENT</u></b>						
	1	Kamakshi Sharma	Sh. Nigam Mishra	J-21-M-815	18-01-2024	8.59
	2	Gurveen Kour	S. Gurmeet Singh	J-21-M-840	29-01-2024	8.50
<b><u>HORTICULTURE (FLORICULTURE &amp; LANDSCAPING)</u></b>						
	1	Ritika Manhas	Sh. Kamal Singh	J-22-MHF-01	10-10-2024	8.65
	2	Shivam Kanungo	Sh. Sanjeev Kumar	J-22-MHF-06	10-10-2024	8.61
	3	Shriya Gupta	Sh. Anil Gupta	J-22-MHF-05	21-10-2024	8.55
	4	Rasleen Kaur	Sh. Gurmeet Singh	J-22-MHF-02	05-11-2024	8.79
<b><u>1.10 Master of Veterinary Science (M.V.Sc.)</u></b>						
<b><u>ANIMAL NUTRITION</u></b>						
	1	Aanvi	Sh. A.K.Khajuria	J-21-MV-657	26-03-2024	8.55
<b><u>VETERINARY &amp; ANIMAL HUSBANDRY EXTENSION EDUCATION</u></b>						
	1	Ridham	Sh. Romesh Magotra	J-21-MV-665	09-05-2024	8.58

# **Annexure-IX**



**Sher-e-Kashmir University of Agricultural  
Sciences and Technology of Jammu- 180009**

**ORDER**

The list of students to be qualified for award of University Gold Medal & Dr. Arun Gupta Memorial Gold Medal for the 9<sup>th</sup> Convocation of this University is given as under:

<b>(A) Dr. Arun Gupta Memorial Gold Medal</b>					
<b>1. Post Graduate (M.Sc. Vegetable Science)</b>					
<b>Batch 2022</b>					
S.No.	Name of Candidate	Parentage	Regd. Number	Year of passing	OGPA
1.	Sunit Jarngal	Sh. Mukar Jeet	J-22-MHF-21	2024	8.33
<b>(B) University Gold Medal</b>					
<b>1. Master of Sceince in Agriculture and Allied Sciences</b>					
<b>Batch 2022</b>					
1.	Marvi Sharma	Sh. Daulat Ram	J-22-M-862	2024	8.67
<b>2. Master of Sceince in Horticulture &amp; Forestry</b>					
<b>Batch 2022</b>					
1.	Prachi Soni	Sh. Rajinder Soni	J-22-MHF-12	2024	8.90
<b>3. Master of Veterinary Science (M.V.Sc.)</b>					
<b>Batch 2021</b>					
1.	Ridham	Sh. Romesh Magotra	J-21-MV-665	2024	8.58
<b>4. B.Sc. (Hons) Agriculture Programme</b>					
<b>Batch 2020</b>					
1	Aakriti Sharma	Sh. Tilak Raj Sharma	J-20-Agri-1171	2024	8.70
<b>5. B.Tech (Biotechnology)</b>					
<b>Batch 2020</b>					
1	Abhilasha Sharma	Sh. Parshotam Kumar	J-20-Biotech-254	2024	8.61
<b>6. B.V.Sc. &amp; A.H Programme</b>					
<b>Batch 2018</b>					
1	Nandini	Sh. Narinder Singh Raina	J-18-BV-1144	2024	8.321
<b>Batch 2019</b>					
1	Umansi	Sh. Subash Chander	J-19-BV-1230	2024	8.546

*(Signature)* 10/02/25  
Asstt. Registrar (Acad)

NO:- AUJ/Acad/24-25/F-25/ 11808-818  
Dated 10-02-2025

Copy to:-

- Director Education, SKUAST-Jammu for information please
- Dean, FoA/ F.V.Sc./ F.B.Sc./FoAE /FoH&F/Dairy Technology/DWS, SKUAST-Jammu.
- Director, Institute of Biotechnology, SKUAST-Jammu for information.
- Nodal Officer, Data Center, SKUAST-Jammu for uploading to the University website.
- Notice Board.

Visit us at [www.skuast.org](http://www.skuast.org)



# **Annexure-X**



**Sher-e-Kashmir**  
**University of Agricultural Sciences and Technology of Jammu**  
**Faculty of Dairy Technology**

**Dr. J. S. Soodan**

**Dean**

No:- AUJ/FDT/2024-25/F-03/452

Date:- 30-12-2024

**Agenda:-** Inclusion of Mathematics course for students having biology (PCB) at 10+2- reg.

Since, SKUAST-Jammu is also allowing students with PCB at 10+2 level for admission in B.tech. (Dairy Technology), hence amendment is required in course curriculum for students admitted with PCB at 10+2 level. As per 6<sup>TH</sup> Dean's committee recommendations PCM has been kept as the minimum requirement for getting admission in B.Tech. (Dairy Technology). Since our university is admitting students with PCB also along with PCM, the basic course of mathematics ( MATH-111 credit hours (2+0) ) may be included as compulsory course for students with PCB background at 10+2 level. The syllabus of Basic mathematics course has been appended for your kind reference and approval.

  
**Dean**

**SKUAST**  
**Jammu**

Faculty of Dairy Technology, SKUAST-J  
R.S Pura, Jammu J&K 181102 INDIA

Email: deanfdt@skuastj.org  
Mob: 9419233374

*"An institution for sustainable agriculture for food and nutritional Security"*

2 (2+0)

**Basic Mathematics****Objectives**

1. To study the basic principles and functions in mathematics like limits and continuity
2. To study differentiation and integration
3. To study matrices and determinants

**Theory**

Functions; Limit: Introduction, left-handed and right-handed limits, general rules for the calculation of limits Standard limits. Continuity: Definition of continuity, continuity of algebraic functions. Continuity of trigonometric and exponential functions.

Differentiation: Differentiation by the first principle, sum, difference, product and quotient formulae, differentiation using the chain rule, differentiation of functions in parametric and implicit form, logarithmic differentiation, geometrical interpretation of derivative. Successive differentiation, geometrical interpretation of derivative, maxima and minima, tangent and normal.

Integration: Integration by substitution, integration by partial fractions, integration by parts, integration by trigonometric substitution.

Matrices and Determinants: Definition of matrix, addition, subtraction and multiplication, inverse of matrix. Solution of linear equations; by Crammer's rule and inverse of matrix.

**Suggested Reading**

1. NCERT, 2012, Mathematics of Class XII, NCERT, India.
2. Sharma RD, 2014, Mathematics of Class XII, Dhanpat Rai Publisher.

2 (2+0)

**Basic Botany****Objectives**

1. To study the basic taxonomy and classification of plants
2. To study the features of plant kingdom and morphology
3. To study the internal structure of plants

**Theory**

Plant kingdom and features of each group. Morphology, modifications and functions of root, stem, leaf, flower and inflorescence. Pollination and fertilization. Fruit types. Structure of dicot and monocot seed, and seed germination.

Cell structure. DNA, chromosome and genes. Cell and tissue types. Internal structure of root, stem and leaf.

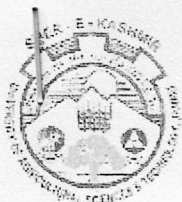
Plant taxonomy, systems of classification. Characteristics and economic importance of Poaceae, Brassicaceae, Fabaceae, Malvaceae, Rutaceae, Rosaceae, Asteraceae and Solanaceae families.

**Suggested Reading**

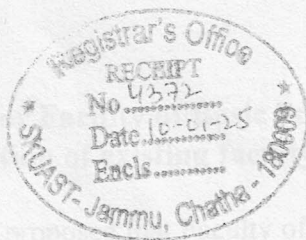
1. Bendre AM and Kumar A, 1999, Textbook of Practical Botany. Vol. 2, 7<sup>th</sup> edn, Rastogi Publications.

# **Annexure-XI**





Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu  
Faculty of Basic Sciences, Chatha, Jammu – 180009



Prof. S.E.H. Rizvi  
Dean

No: AUJ/FBSc/24-25/F-10/1840  
Dt: 10.01.2025

Registrar/Member Secretary  
Academic Council  
SKUAST-J

Sub: Agenda item for the 26<sup>th</sup> meeting of Academic Council-regd.

Sir,

In reference to the circular No. AUJ/Acad/F-08/24-25/9064-9113 dt: 18.11.2024, kindly find enclosed herewith the detailed agenda item for the 26<sup>th</sup> Meeting of Academic Council from this Faculty for the Up gradation of existing Faculty of Basic Sciences into Faculty of Basic Sciences & Humanities.

This is for your kind information and further necessary action, please.

Yours faithfully,

*S.E.H. Rizvi*  
10/01/25  
Dean

Encl: 06 leaves

## **Proposal for Faculty of Basic Sciences & Humanities, SKUAST Jammu (Up gradation of existing faculty of Basic Sciences)**

It is proposed that Faculty of Basic Sciences SKUAST Jammu , which was established in July, 2015 vide Univ. Notification No 14 ( Secy) of 2015, Dated 12-07-2015 after its approval in the 13<sup>th</sup> Meeting of University Council held on 15-04-2015, may be strengthen and re-designate as “Faculty of Basic Sciences and Humanities” that is needed due to its importance and implications as envisaged in the National Education Policy (NEP-2020) to establish Departments in Languages, Mathematics, Statistics, Pure and Applied Sciences, Sociology, and other such subjects needed for a multidisciplinary stimulating education environment in higher education institutions. **This is also in line with University Act, 1982 Chapter No 1 Sno. 18. Faculties that says “Each university shall have initially the Faculties of Agriculture, Veterinary science & animal husbandry and Post-graduate Studies and as soon as may be it shall also have the Faculties of Forestry. Basic Science and Humanities and such other faculties as may be prescribed”.**

The detail of the existing and required teaching and non-teaching positions of the various divisions to be created in the proposed Faculty of Basic Sciences and Humanities is given follows:

### **Detail of teaching positions**

<b>Position</b>	<b>Sanctioned</b>	<b>Minimum Requirement</b>	<b>Gap</b>
Dean	01	01	0
Assistant Professor( Education)	00	01	01
<b>Existing Divisions</b>			
<b>Division of Statistics and Computer Science*%</b>			
Professor	0	01	01
Associate Professor	02	03	01
Assistant Professor	02	06	04
<b>Division of Biochemistry</b>			
Professor	01	01	0
Associate Professor	02	03	01
Assistant Professor	02	04	02
<b>Division of Plant Physiology</b>			
Professor	0	01	01
Associate Professor	01	03	02
Assistant Professor	02	04	02
<b>Division of Microbiology</b>			
Professor	0	01	01

Associate Professor	0	03	03
Assistant Professor	02	04	02
<b>Newly Proposed Divisions</b>			
<b>Position</b>	<b>Sanctioned</b>	<b>Minimum Requirement</b>	<b>Gap</b>
<b>Division of Culture and languages (Dogri culture, Hindi, English, Urdu and French)**</b>			
Professor	0	01	01
Associate Professor	0	01	01
Assistant Professor	0	05	05
<b>Division of Environmental Sciences</b>			
Professor	0	01	01
Associate Professor	0	03	03
Assistant Professor	0	04	04
<b>Division of Mathematics<sup>ψ</sup></b>			
Professor	0	01	01
Associate Professor	0	03	03
Assistant Professor	0	04	04
<b>Division of Chemistry<sup>ψ</sup></b>			
Professor	0	01	01
Associate Professor	0	03	03
Assistant Professor	0	04	04
<b>Division of Computer Science<sup>ψ</sup></b>			
Professor	0	01	01
Associate Professor	0	03	03
Assistant Professor	0	04	04
<b>Division of Social Sciences<sup>ξ</sup></b>			
Professor	0	01	01
Associate Professor	0	03	03
Assistant Professor	0	04	04

## Summary (Teaching positions)

Sr. No.	Post	Proposed positions	Existing positions	GAP
1	Dean	01	01	00
2	Professor	10	01	09
3	Assoc. Professor	28	05	23
4	Assistant Professor	43	08	35
5	Assistant Professor (Education)	01	00	01
<b>Total</b>		<b>83</b>	<b>15</b>	<b>68</b>

\*Computer Science will be relieved from Division of Statistics & Computer Science and separate Division will be created.

‡Service Division for the Faculty of Agriculture, Faculty of Horticulture and Forestry, Faculty of Veterinary Science and AH, Faculty of Agricultural Engineering, Faculty of Dairy Sciences, Faculty of Basic Sciences and Humanities and Faculty of Community Sciences.

\*\*English and French are required for teaching at UG and PG level respectively. Other languages are required for publication of Farm Literature in regional languages and establishment of languages lab

‡Service Division of Division of Extension Education.

## Detail of non-teaching positions

Administrative Office of the Dean			
Post	Sanctioned positions	Minimum requirement	Gap
Administrative Officer/Asstt. Registrar	00	01	01
Accounts Officer/ Asstt. Comptroller	0	01	01
Senior Stenographer	0	01	01
Junior Stenographer	01	01	0
Accountant	01	01	0
Account Assistant	01	02	01
Data Entry Operator/Computer Assistant	0	02	02
Head Assistant	0	01	01
Assistant-cum-Typist ( ACT)	01	03	02
FCLA	0	01	01
Electrician	0	01	01
Store Keeper	0	01	01
Driver	01	01	0
OCC/Helper/ Mali//Peon	06	06	0
Sweeper	00	06	06



Existing Divisions			
Post	Sanctioned positions	Minimum requirement	Gap
<b>Division of Statistics and Computer Science*</b>			
Jr. Stenographer	01	01	0
Data Entry operator/ Computer Assistant	0	02	02
Accounts Assistant	0	01	01
Field-cum-Lab Assistant (FCLA)	01	01	0
Lab Attendant	0	01	01
OCC/Helper/ Mali/Peon	01	02	01
<b>Division of Biochemistry</b>			
Jr. Stenographer	0	01	01
Data Entry operator/ Computer Assistant	01	01	0
Accounts Assistant	0	01	01
Field-cum-Lab Assistant (FCLA)	01	02	01
Lab Attendant	0	01	01
OCC/Helper/ Mali/Peon	01	02	01
<b>Division of Plant Physiology</b>			
Jr. Stenographer	01	01	0
Data Entry operator/ Computer Assistant	0	01	01
Accounts Assistant	0	01	01
Field-cum-Lab Assistant (FCLA)	01	02	01
Lab Attendant	0	01	01
OCC/Helper/ Mali/Peon	01	02	01
<b>Division of Microbiology</b>			
Jr. Stenographer	0	01	01
Data Entry operator/ Computer Assistant	0	01	01
Accounts Assistant	0	01	01
Field-cum-Lab Assistant (FCLA)	0	02	02
Lab Attendant	0	01	01
OCC/Helper/ Mali/Peon	0	02	02
<b>Newly proposed Divisions</b>			

Post	Sanctioned positions	Minimum requirement	Gap
<b>Division of languages (Dogri culture, Hindi, English, Urdu and French)</b>			
Jr. Stenographer	0	01	01
Data Entry operator/ Computer Assistant	0	01	01
Accounts Assistant	0	01	01
ACT	0	01	01
OCC/Helper/ Mali/Peon	0	02	02
<b>Division of Environmental Sciences</b>			
Jr. Stenographer	0	01	01
Data Entry operator/ Computer Assistant	0	01	01
Accounts Assistant	0	01	01
Field-cum-Lab Assistant (FCLA)	0	02	02
Lab Attendant	0	01	01
OCC/Helper/ Mali/Peon	0	02	02
<b>Division of Mathematics</b>			
Jr. Stenographer	0	01	01
Data Entry operator/ Computer Assistant	0	01	01
Accounts Assistant	0	01	01
Lab Assistant	0	02	02
Lab Attendant	0	01	01
OCC/Helper/ Mali/Peon	0	02	02
<b>Division of Chemistry</b>			
Jr. Stenographer	0	01	01
Data Entry operator/ Computer Assistant	0	01	01
Accounts Assistant	0	01	01
Lab Assistant	0	02	02
Lab Attendant	0	01	01
OCC/Helper/ Mali/Peon	0	02	02
<b>Division of Computer Science</b>			
Jr. Stenographer	0	01	01
Data Entry operator/ Computer Assistant	0	01	01
Accounts Assistant	0	01	01
Lab Assistant	0	02	02
Lab Attendant	0	01	01
OCC/Helper/ Mali/Peon	0	02	02
<b>Division of Social Sciences</b>			
Jr. Stenographer	0	01	01

Data Entry operator/ Computer Assistant	0	01	01
Account Assistant	0	01	01
ACT	0	01	01
OCC/Helper/ Mali/Peon	0	02	02
<b>Central Instrumentation Lab</b>			
Instrumentation Junior Engineer	0	01	01
Instrumentation Technician/Lab Technician	0	02	02
Lab Attendant	0	02	02
<b>Faculty Library</b>			
Asstt. Librarian	0	01	01
Library Assistant	0	01	01
OCC/Helper/ Mali/Peon	0	01	01

### Summary of non-teaching positions

S. No.	Post	Proposed positions	Existing positions	GAP
1.	Administrative Officer/Asstt. Registrar	01	00	01
2.	Accounts Officer/ Asstt.Comptroller	01	00	01
3.	Asstt. Librarian	01	00	01
4.	Senior Stenographer/PA to Dean	01	00	01
5.	Head Assistant	01	00	01
6.	Accountant	01	01	00
7.	Jr. Stenographer	11	03	08
8.	Data Entry operator/ Computer Assistant	12	01	11
9.	Instrumentation Junior Engineer	01	00	01
10.	Instrumentation Technician/Lab Technician	02	00	02
11.	Library Assistant	01	00	01
12.	Accounts Assistant	12	01	11
13.	Field-cum-Lab Assistant (FCLA)	10	03	07
14.	Lab. Assistant	06	00	06
15.	Lab Attendant	10	00	10
16.	Electrician	01	00	01
17.	Store Keeper	01	00	01
18.	Assistant –cum- Typist	05	01	04
19.	Driver	01	01	00
20.	OCC/Helper/ Mali/Peon	27	09	18
21.	Sweeper	06	0	06
	<b>Total</b>	<b>112</b>	<b>20</b>	<b>92</b>

