

**Self-Study Report for the Accreditation  
of  
B.Sc. (Hons) Agriculture  
Degree Programme,  
School of Agriculture,  
ITM University, Gwalior (M.P.)**



**Submitted to:  
National Agricultural Education  
Accreditation Board,  
Indian Council of Agricultural Research  
New Delhi-110012**

## Self Study Report for the Accreditation of the Program B.Sc. (Hons.) Agriculture

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## ITM University

### Origin and Background

ITM University Gwalior is a multidisciplinary University with an international reputation for the quality of its research and teaching across the academic spectrum. It was established in May 2011 by an Act of State Legislature, M.P. as notified in the official Gazette (extra – ordinary) of the State Government, recognized by UGC. It is also recognized by concerned Statutory Bodies of Government of India. ITM University has been bestowed upon with more than 42 awards by different government & non-government agencies. The University was ranked 32nd in Management and 58th in Engineering in India Rankings 2016 by NIRF. ITM University also accredited by NAAC in 2018. The University seeks to sustain and enhance its excellence as an institution of higher education by imparting knowledge based learning and ethical values to the society.

The University campus spreads over 200 acres with world class sports and cultural facilities. It has four auditoriums of 250, 200, 200 and 500 seating capacity wherein various seminars, conferences, cultural activities and expert lectures are organized. The entire University landscape comprises of a knowledge hub situated in the vicinity of green meadows and exquisite sculptural pieces installed here and there.

### Vision:

- To be a leading global multidisciplinary university that will have transformative impact on society through excellence in teaching, research, creativity, outreach and entrepreneurship and remain firm in pursuit of students’ dreams aligned with the motto of ITM University Gwalior ‘Celebrating Dreams’.

### Mission

- To develop a transformative learning experience for students focused on in-depth disciplinary learning; problem solving; leadership, communication, and interpersonal skills focused on developing socially and ethically correct citizens.
- To develop conducive environment encouraging (a) free exchange of ideas, where research, creativity, innovation, and entrepreneurship can flourish (b) attracting and retaining best talent.

- To impact society through regional, national, and global collaborations by engaging with partners outside the university campus.
- To develop multidisciplinary culture through collaborative multidisciplinary projects.

### Values

- **Transparency:** Reflected in all the operations of the University for students from admission to placements and for employees from recruitment to separation.
- **Shared Governance:** Reflected in the governing structure of the University and the autonomy provided to the officials at all levels.
- **Inclusivity and diversity:** Reflected in the University’s culture and climate that seeks, welcomes and advances talented minds from diverse backgrounds as employees and students
- **Sustainable Development:** Reflected in our shared commitment to lead by example in preserving and protecting our natural resources (green lush campus, bio-fertilizer and bio-gas plants and use of solar energy), and in our approach to responsible financial planning.
- **Academic freedom:** Reflected in our process used to finalize the curriculum and syllabus and freedom given to the teachers in using pedagogical tools.
- **Empathy and compassion:** Reflected in the care taken during Covid; concessions provided to the employees and their families by the ITM Hospital; concessions in education of employees and their wards.
- **Integrity:** Reflected in our adherence to the highest ethical standards in personal and professional behavior, and in our commitment to transparency and accountability in governance and everything we do.

### About the School of Agriculture

The School of Agriculture at ITM University Gwalior was accredited with the Indian Council of Agricultural Research (ICAR), New Delhi, in 2019 and offers B.Sc. (Hons) Agriculture and postgraduate degree programs in the subjects *viz.* Agronomy and Horticulture (Vegetable Science). The undergraduate program is aligned with the ICAR Fifth Dean’s Committee Report, while the postgraduate programs have been aligned with the “Restructured and Revised Syllabi of Post-graduate

Programs” finalized by BSMA Committee. The programs under the school have been completely updated and structured to include courses pertaining to discipline-specific and generic electives, ability enhancement courses, skill enhancement courses, and value-added courses to inculcate entrepreneurial skills, managerial skills, critical thinking, communication skills, human values and ethics and the desired program outcomes.

The program's delivery is based on innovative pedagogical tools with sufficient teacher-student' interactions, project-based learning, experiential learning, and hands-on training to bring a real-life understanding of the subject to the various disciplines of agriculture. The Student READY program provides greater opportunities for B.Sc. (Hons.) Agriculture students to understand the workings of various industries, KVKs (Krishi Vigyan Kendra), start-ups, and the real-life situations of farmers. Each program in the school of agriculture provides holistic development for students in specific disciplines.

## **6.4. Self study report for the Accreditation of B.Sc. (Hons.) Agriculture, School of Agriculture, ITM University Gwalior 474001 (M.P.)**

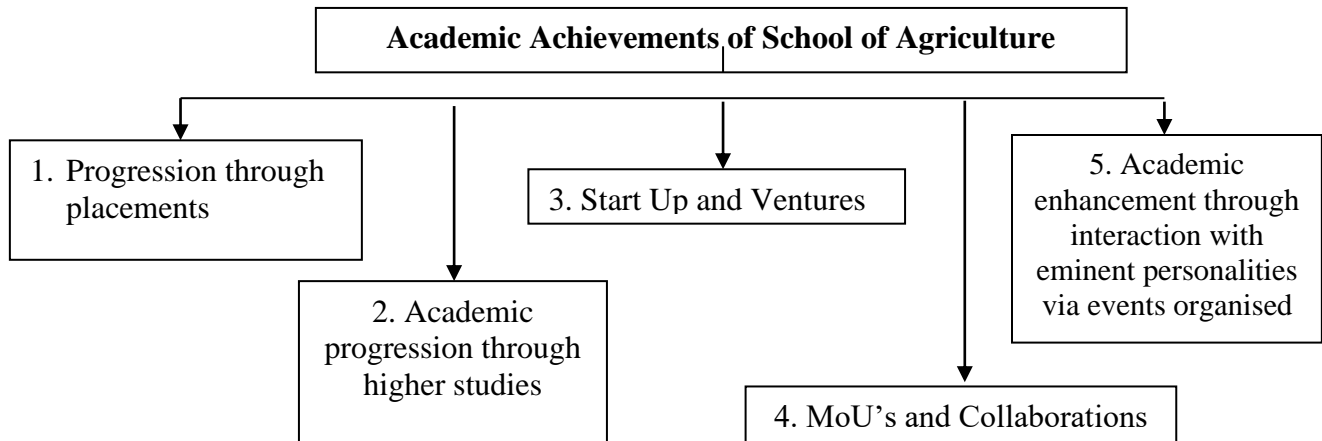
### **6.4.1 Brief History of the Degree Program: B.Sc. (Hons.) Agriculture**

The School of Agriculture was established as a constituent school of the ITM University during the year 2013, with the basic objective to impart agriculture education to students of Madhya Pradesh in particular and the Nation as a whole to strengthen teaching and research in various disciplines of Agricultural Sciences and related extension activities for the upliftment of rural economy. The B.Sc. (Hons.) Agriculture degree was started in 2013. The students are being educated as per the course curriculum recommended by Fifth Dean’s Committee with the following objectives:

1. **Education and Training:** Provide comprehensive education and training in agricultural sciences, including crop production, animal husbandry, soil management, and agricultural economics, to prepare students for careers in the agricultural sector.
2. **Research and Innovation:** Conduct research to develop innovative agricultural practices, improve crop yields, enhance pest management strategies, and promote sustainable farming techniques.
3. **Community Engagement:** Collaborate with local farmers and agricultural businesses to disseminate knowledge, provide resources, and support the implementation of best practices in agriculture.
4. **Sustainability Promotion:** Foster awareness and understanding of sustainable agricultural practices that protect natural resources, enhance biodiversity, and promote environmental stewardship.
5. **Extension Services:** Offer extension services that provide ongoing support and information to farmers, helping them adapt to new technologies, market trends, and regulatory requirements.

## Accomplishments

There are many accomplishments of the School in the areas of placement, progression to higher studies, academic achievements, infrastructure development, and teaching-learning process, student progression via research and extension activities, classroom, lab facilities, and ICT resources.



### 1. Progression through placements

Academic progression is significantly enhanced through its effective placement initiatives, which bridge the gap between theoretical knowledge and practical application. The School of Agriculture has strong partnerships with industry leaders, which creates a robust network that opens up diverse internship and job opportunities for students. This alignment of curriculum with real-world demands ensures that graduates are not only well-prepared but also highly sought after in the job market. Additionally, the school's dedicated career services provide personalized support, helping students develop essential skills such as resume writing and interview techniques.

#### 1 a. Year-wise record of placement

S. No.	Academic Year	No. of students placed
1	2019-20	55
2	2020-21	48
3	2021-22	95
4	2022-23	171

5	2023-24	104
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**1b. Year wise record of recruiters and number of students placed**

<b>Recruiters of the academic year 2019-20</b>		
S. No.	Recruiters	Students placed
1	Indorama Chemical Pvt. Ltd., Kolkata, W.B.	06
2	Agro Star Pvt. Ltd., Pune, Maharashtra	12
3	Ocean Agri India Ltd., Baroda, Gujarat	02
4	VN Organics Pvt. Ltd., Gwalior, M.P.	02
5	Coromandel International Pvt. Ltd., Secunderabad, Telangana	02
6	Gandhala Chemical, Katani, M.P.	01
7	Omex Pvt. Ltd., New Delhi	01
8	Self employed through own enterprise	29
		55
<b>Recruiters of the year 2020-21</b>		
1	Eximania Organic, Amravati, Maharashtra	30
2	Agro Star Pvt. Ltd., Pune, Maharashtra	18
		48
<b>Recruiters of the year 2021-22</b>		
1	Agro Star Pvt. Ltd., Pune, Maharashtra	24
2	Leads Connection Services, New Delhi	17
3	Virbac Pvt. Ltd., New Delhi	16
4	Reliance Retail, Mumbai, Maharashtra	09
5	Tech Mahindra, Chandigarh	09
6	NBHC, New Delhi	03
7	Arya.Ag Pvt. Ltd., Kanpur, U.P.	02
8	Telmax Pvt. Ltd., New Delhi	02
9	VNR Seeds Pvt. Ltd., Raipur, Chattisgarh	02

10	Best Agrolife Limited, Indore, M.P.	<b>01</b>
11	Deejay Coconut Farms Pvt Ltd, New Delhi	<b>01</b>
12	Green Gold Seeds Pvt Ltd, New Delhi	<b>01</b>
13	Gen Flow-AI, Secunderabad, Telangana	<b>01</b>
14	Dehaat, New Delhi	<b>02</b>
15	Expertrons, New Delhi	<b>01</b>
16	Green India Organic and Plantation , Bengaluru, Karnataka	<b>01</b>
17	OM Hybrid Seeds Pvt Ltd, Hyderabad	<b>01</b>
		<b>95</b>
<b>Recruiters of the year 2022-23</b>		
1	Suminter India Organics – GTP, Mumbai, Maharashtra	<b>37</b>
2	Hi-care Pvt. Ltd, New Delhi	<b>22</b>
3	Agro Star Pvt. Ltd., Pune Maharashtra	<b>18</b>
4	Crystal Crop Pvt. Ltd., Mumbai, Maharashtra	<b>15</b>
5	Jubilant Seeds Pvt. Ltd, NOIDA, U.P.	<b>12</b>
6	Keshari Farms Pvt. Ltd., Mumbai, Maharashtra	<b>11</b>
7	Vegrow, New Delhi	<b>08</b>
8	Virbac India Pvt. Ltd., Mumbai, Maharashtra	<b>08</b>
9	Rentokill PCI Pvt. Ltd.	<b>08</b>
10	DeHaat, New Delhi	<b>07</b>
11	VNR Seeds Pvt. Ltd., Raipur, Chattisgarh	<b>07</b>
12	Dayal Group, New Delhi	<b>07</b>
13	Country Delight, Haryana	<b>05</b>
14	Nurture Farms, Jharkhand	<b>02</b>
15	Pattern LLC, Bhopal, M.P.	<b>02</b>
16	Unikil Pesticide Pvt Ltd, New Delhi	<b>02</b>
		<b>171</b>
<b>Recruiters of the year 2023-24</b>		
1	Jubilant Seeds Pvt. Ltd., NOIDA, U.P.	<b>47</b>
2	Agro Star Pvt. Ltd, Pune, Maharashtra	<b>27</b>
3	Hi care, New Delhi	<b>15</b>
4	Paras Agro Pvt. Ltd., Bharatpur, Rajasthan	<b>09</b>
5	Katyayani Krishi Seva Pvt. Ltd., Gwalior	<b>02</b>
6	Country Delight, Haryana	<b>02</b>
7	Agro Ag Pvt. Ltd., New Delhi	<b>02</b>
		<b>104</b>

## 2. Academic progression through higher studies

### ➤ Year-wise record of students enrolled for higher studies

S.No.	Name of student	Name of the program	Organization
<b>Academic year 2023-24</b>			
1.	Ratnadeep Kar	M.Sc. Agriculture (Soil Science)	Banaras Hindu University, Varanasi
2.	Ganesh	Agri-business and Plantation Management	Indian Institute of Plantation Management, Bengaluru
3.	Yash Tripathi	M.B. A	Jaipuria School of Business, Ghaziabad
4.	Manvi Singh	M.B. A	University of Business School, Punjab University, Chandigarh
5.	Anurag Patidar	A.B.M	KIIT, School Rural Management, Bhubneswhwar
6.	Harshit	A.B.M	LBSIM, Delhi
7.	Devrat Bisen	A.B.M	MANAGE, Hyderabad
8.	Addi Sanjana	M.B. A	Administrative Staff College of India, Hyderabad
9.	Siba Prasad Padhi	M.Sc. Agriculture (Soil Science)	Banaras Hindu University, Varanasi
10.	Veerla Vinay	MBA	Woxsen University, Telangana
11.	Chitra Chaubey	M.Sc. Agriculture (GPB)	CCSU, Meerut Uttar Pradesh
12.	Neelmani	M.Sc. Agriculture (Agril Statistics)	J.N.K.V.V, Jabalpur
13.	Kartikey Acharya	M.Sc. Agriculture (Agril Statistics)	J.N.K.V.V, Jabalpur
14.	Rishu Saxena	M.Sc. Agriculture (Agril Extension)	J.N.K.V.V, Jabalpur
15.	Aishika Halder	M.Sc. Agriculture (Horticulture)	Shantiniketan, West Bengal
16.	Debasmita Laha	M.Sc. Agriculture (Plant Pathology)	J.N.K.V.V, Jabalpur
<b>Academic year 2022-23</b>			
17.	Kushagra Chaturvedi	M.Sc. Agriculture (Agronomy)	Banda University of Agriculture and Technology, Banda (U.P.)
18.	Shalini Mathur	M.Sc. Agriculture (Entomology)	R.V.S.K.V.V, Gwalior

19.	Prashansa Khan	M.Sc. Agriculture (Plant Pathology)	R.V.S.K.V.V, Gwalior
20.	Chetan Mathuria	M.Sc. Agriculture (Soil Science)	R.V.S.K.V.V, Gwalior
21.	Vikas Tripathi	M.Sc. Agriculture (Soil Science)	R.V.S.K.V.V, Gwalior
22.	Rupali Devi	M.Sc. Agriculture (Horticulture)	KNK, College of Horticulture, Mandasaur, (M.P)
23.	Vishal Vijay Raj	M.Sc. Agriculture (Horticulture)	R.V.S.K.V.V, Gwalior
24.	Sailendra kushwaha	M.Sc. Agriculture (Plant Pathology)	R.V.S.K.V.V, Gwalior
25.	Hariom Dangi	M.Sc. Agriculture (Plant Pathology)	College of Agriculture, Sehore
26.	Imtiyaz Ali	M.Sc. Agriculture (Agronomy)	SHUATS, Allahabad
27.	Pranay Nagar	ABM	Rajendra Prasad CAU
28.	Om Veer Ojha	ABM	J.N.K.V.V, Jabalpur
<b>Academic year 2021-22</b>			
29.	Anshuman Bhadouria	ABM	GBPUAT, Pantnagar
30.	Manashi Chand	Homeland security	Texas Tech University, USA
31.	Mukund Singh	ABM	J.N.K.V.V, Jabalpur
32.	Yashi Chauhan	M.Sc. Agriculture (Plant Pathology)	J.N.K.V.V, Jabalpur
33.	Koustav Nandi	M.Sc. Agriculture (Horticulture)	College of Agriculture, Tripura
34.	Praveen Kumar	M.Sc. (GPB)	TNAU, Coimbatore
35.	Niharika Gurudev	M.Sc. Agriculture (Horticulture)	NDUAT, Faizabad
36.	Suraj Luthra	M.Sc. Agriculture (Horticulture)	NDUAT, Faizabad
37.	Ankit Kumar Goyal	M.Sc. Agriculture (Horticulture)	BRA, Lucknow
38.	Upsana Digarse	M.Sc. Agriculture (Agril Extension)	J.N.K.V.V, Jabalpur
<b>Academic year 2020-21</b>			
39.	Himanshu Verma	M.Sc. Agriculture (Horticulture)	J.N.K.V.V, Jabalpur
40.	Raushan Kumar	M.Sc. Agriculture (Horticulture)	J.N.K.V.V, Jabalpur



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“ CELEBRATING DREAMS ”

41.	Bakeshwar Yadav	M.Sc. Agriculture (GPB)	J.N.K.V.V, Jabalpur
42.	Prateek chhari	M.Sc. Agriculture (GPB)	J.N.K.V.V, Jabalpur
43.	Ganesh karode	ABM	J.N.K.V.V, Jabalpur
44.	Chetan Karode	M.Sc. Agriculture (Plant Pathology)	J.N.K.V.V, Jabalpur
45.	Saurav Sanoriya	ABM	J.N.K.V.V, Jabalpur
46.	Ajay Deep Kaurav	M.Sc. Agriculture (Horticulture)	RVSKVV, Gwalior
47.	Mohit Chourasiya	M.Sc. Agriculture (Horticulture)	RVSKVV, Gwalior
48.	Prashant Arya	M.Sc. (Plant Pathology)	RVSKVV, Gwalior
49.	Abhinav Kejriwal	M.Sc. (FST)	J.N.K.V.V, Jabalpur
50.	Neeraj Dhakad	M.Sc. Agriculture (Agricultural Statistics)	J.N.K.V.V, Jabalpur
51.	Aditya Gaurha	M.Sc. Agriculture (Horticulture)	IGKVV, Raipur

### 3. Start-up and ventures from School of Agriculture

**Founder: E Jagan Sai Nadh Reddy**

**Name of Start-up: Orgawin Private Limited**

**Enrolment No.: BAGN1AG21190**

**Batch: 2021-25**

**Registration No. of the company: U20121AP2024PTC115293**



**About the Start-Up:** Orgawin Pvt. Ltd. is a forward-thinking start-up founded by E Jagan Sai Nadh Reddy, dedicated to promoting sustainable agriculture. Specializing in producing and introducing environmentally friendly organic pesticides and fertilizers, Orgawin strives to revolutionize farming practices. The company’s mission is to provide comprehensive support to farmers, guiding them through the transition from chemical-based farming to more sustainable, organic methods. By empowering farmers with organic solutions, Orgawin aims to enhance soil health, protect ecosystems, and contribute to a healthier food system for future generations.



Electronically issued and Digitally signed ePAN is a valid mode of issue of Permanent Account Number (PAN) post amendments in clause (c) in the Explanation occurring after sub-section (8) of Section 139A of Income Tax Act, 1961 and sub-rule (6) of Rule 114 of the Income Tax Rules, 1962. For more details, [click here](#)

**Founder: Nisha Niranjana**  
**Name of Start-up: VN Organics**  
**Enrolment No.: BAGN1AG16101**  
**Batch; 2021-23 M.Sc. (Horticulture) Vegetable Science**



**Registration No. of the company: U20121AP2024PTC115293**

**About the Start-Up:** - Ms. Nisha Niranjana is an award-winning entrepreneur and innovator, leading farmers, and an organization dedicated to empowering tribal communities and farmers through sustainable mushroom production. Collaborating with multiple institutions, she has developed innovative products like mushroom-based chocolates, teas, flour, and meat alternatives, while launching medicinal mushrooms such as Cordyceps and oyster mushrooms. Nisha has trained over 8,000+ farmers & students across India and internationally, driving income generation and community upliftment. Honoured to be part of Europe's Farm to Fork program, she has earned accolades like the Clean Tech Innovation Award and the Women Entrepreneurs Award by MSME.

**Company Name: Nutrisure Farmers Producers Company Limited**

**Founder: Adesh Kumar Tiwari**

**Enrolment No: - BAGN1AG19007**

**Batch – 2019-23 (B.Sc. (H) Agriculture)**

**Registration No. of the company: U01619MP2023PTCO66966**



**About the start-up:** - Nutrisure Farmers Producers Company Limited, founded by Adesh Kumar Tiwari, is dedicated to enhancing the agricultural ecosystem by supporting farmers in multiple ways. The company focuses on producing, packaging, marketing high-quality seeds, and procuring essential food crops directly from farmers, including cereals, millet, and pulses. Nutrisure is committed to empowering farmers through specialized training in horticulture, honey production, and mushroom cultivation, equipping them with skills to diversify and improve their agricultural output. By connecting farmers to markets and providing education in sustainable farming techniques, Nutrisure plays a vital role in promoting agricultural growth and farmer welfare.

#### 4. MoU's and Collaborations:

Memorandums of Understanding (MOUs) and collaborations significantly contribute the academic progression of the School of Agriculture by fostering partnerships with industry, research institutions, and state and central agricultural universities. These agreements facilitate the exchange of resources, knowledge, and expertise, enriching the curriculum and enhancing research opportunities for undergraduate and postgraduate students. Additionally, partnerships can attract funding and support for innovative initiatives, driving faculty development and research advancements.

#### Year-wise record of organizations/ institution/ research centres/industries MoU's and Collaborations

S. No.	Name of the Party	Effective from
1	ICAR-Indian Institute of Sugarcane Research, Lucknow	21.05.2018
2	M.S. Swaminathan Research Foundation, Chennai, Tamil Nadu	06.08.2018
3	Tropilite Foods Private Limited, Gwalior, M.P.	13.07.2019
4	Center for Sustainable Agriculture, Secunderabad	03.10.2019
5	Professor Jayshankar Telangana State Agricultural University, Telangana	29.01.2020
6	ICAR-Central Institute of Fisheries Education, Mumbai	31.01.2020
7	Zenesis AgroSciences and Consulting (P) Ltd., New Delhi	15.03.2022
8	Farm origin Agro Science, New Delhi	03.03.2022
9	Bundelkhand University, Jhansi, U.P.	30.04.2022
10	ICAR-Central Agroforestry Research Institute, Jhansi, U.P.	03.01.2023
11	ICAR-Indian Institute of Pulses Research, Kanpur, U.P.	22.09.2023
12	ICAR-Central Institute of Subtropical Horticulture, Lucknow, U.P.	11.11.2023
13	ICAR-Directorate of Rapeseed and Mustard Research, Bharatpur, Rajasthan	19.06.2024
14	ICAR-Indian Research of Soybean Research, Indore, M.P.	03.06.2024
15	ICAR-Central Institute for Arid Horticulture, Bikaner, Rajasthan	23.08.2024

16	ICAR-Indian Institute of Seed Science, Mau, U.P.	11.09.2024
17	ICAR- National Bureau of Agriculturally Important Microorganism, Mau, U.P.	11.09.2024
18	Rani Laxshmi Bai Central Agricultural University, Jhansi, U.P.	19.09.2024
19	ICAR-Indian Grassland and Fodder Research Institute, Jhansi, U.P.	19.09.2024
20	ICAR-Directorate of Onion and Garlic Research, Pune, Maharashtra	26.09.2024
21	ICAR-Central Potato Research Institute, Shimla, H.P.	03.10.2024
22	ICAR-National Research Centre on Seed Spices, Ajmer, Rajasthan	08.10.2024
23	Dr. Y.S.P. University of Horticulture and Forestry Solan, HP	09.10.2024
24	ICAR-National Research Centre for Grapes, Pune, Maharashtra	11.10.2024
25	ICAR- Directorate of Floriculture Research, Pune, Maharashtra	Under Process
26	Central Agricultural University, Imphal, Manipur	Under Process

## 5. Academic events organized by School of Agriculture

The School of Agriculture at ITM University Gwalior has emerged as a vibrant and dynamic center for academic excellence, research, and holistic student development over the past five years. Since its inception, the school has consistently worked towards creating an environment that fosters learning, innovation, and community engagement through a combination of academic rigor, cultural enrichment, and social responsibility.

### Year-wise record of events conducted in School of Agriculture

S. No.	Program Name	Academic Year
1	Certificate Course on “Fruit and Vegetable Processing”	2019-2020
2	Certificate Course on “Mushroom Production Technology”	2019-2020
3	Certificate Course on “Basic Analytical Techniques for Soil and Water Testing”	2019-2020
4	Kisan Mela: Western Region Agricultural Fair (Krishi Vijay-2020)	2019-2020
5	Workshop on Interactive Videos for Teaching and Assessment at ITM University, Gwalior	2020-2021

6	International Drone Training cum Certificate Course	2020-2021
7	National Workshop on Intellectual Property Rights (IPR)	
8	National Conference on Advances in Plant Sciences Research	2020-2021
9	Faculty Development Program on Plant Genomic DNA Analysis	2021-2022
10.	Hydroponic Training cum Workshop	2021-2022
11.	Workshop on Breeding of Field and Horticultural Crops: Tools and Techniques of Hybridization	2021-22
12	Guest lecture on Functionality and role of commodity exchanges of India	2021-2022
13	International Conference on “Natural Resource Management for Sustainable Crop Production: A Tool to Combat Climate Change”	2022-2023
14.	Enhancing Student Learning Skills through an Online Government Survey on Geographical Indications	2022-2023
15	Virtual Lab Workshop and Utilization	2022-2023
16.	“Kisaan Sangoshti on Floriculture Awareness Mission”	2022-2023
17	Nutri-Sensitive Agriculture Program	2022-2023
18	<i>El-</i> insecto International Insect Photography Contest	2022-2023
19	National Workshop on Gender Sensitization and Women Empowerment through Urban Agriculture	2022-2023
20	Guest Lecture by Dr. Susheel Kumar, Senior Scientist, NBRI at ITM University, Gwalior	2022-2023
21	ELP Expo	2023-2024
22	Specialized Garden Competition	2023-2024
23	Valencia 2.0: Scientific Poster Presentation	2023-2024
24	Agriwiz-Scientific Model Presentation	2023-2024
25	“Kisaan Goshti and Farmer’s Field Demonstration”	2023-2024
26	Guest Lecture on Soil-less Cultivation by Prof. (Dr.) Umesh Thapa, BCKV, Kalyani, Nadia, W.B.	2023-2024

27	Guest Lecture on "Advances in Plant Genetics and Genomics "by Prof. (Dr.) G.R. Lavanya, SHUATS, Allahabad, U.P.	2023-2024
28	Optimizing Mushroom Production: Techniques, Tools, and Technology	2023-2024

#### 6.4.2. Faculty Strength:

The faculty strength of the Degree Programme need to be given cadre-wise, both sanctioned and in-place (under the table mentioned below). Clearly mention the number of permanent faculty appointed for the Degree Programme, part time faculty being deputed from the other departments (in such case mention the name of these departments). If the Degree Programme is also taking the help of Research staff, extension staff, contractual faculty, guest faculty, adjunct faculty or any other arrangement being made to complete the curriculum, it should be clearly mentioned in the report.

The faculty strength for the degree programme cadre-wise, both sanctioned and in-place is given below.

S. No.	Sanctioned Posts	Faculty in place	Faculty recommended by the ICAR
1.	Professor	09	00
2.	Associate Professor	01	16
3.	Assistant Professor	42	30
	<b>Total</b>	<b>52</b>	<b>46</b>

The list of faculty cadre wise with name, specialization, date of appointment in the college, period of contract, salary account summary for last three years with the reference to Form 16 (income tax) is given below.

S. No.	Name of Employee	Designation	DOJ
1	Dr. N. B. Singh	Dean & Professor	23.08.2023

<b>Department of Agronomy</b>			
2	Dr. Jai Dev Sharma	Professor	23.02.2021
3	Dr. Badrul Hasan	Professor	01.04.2024
4	Ms. Priyanka Chand	Assistant Professor	26.07.2021
5	Dr. Pradeep Kanaujiya	Assistant Professor	07.11.2022
6	Dr. Pradeep Rajput	Assistant Professor	30.12.2022
7	Dr. Satish Kumar	Assistant Professor	03.05.2023
8	Dr. Tshering Tamang	Assistant Professor	20.01.2023
9	Dr. Chitrangada Parihar	Assistant Professor	03.04.2024
10	Dr. Kalpana Mishra	Assistant Professor	05.09.2022
<b>Department of Agricultural Economics</b>			
11	Dr. Paras Nath Jhariya	Assistant Professor	05.09.2022
12	Dr. Mridul Mondal	Assistant Professor	16.01.2023
13	Dr. Savita Chauhan	Assistant Professor	28.08.2023
14	Dr. Ankita Verma	Assistant Professor	24.07.2024
<b>Department of Agricultural Extension</b>			
15	Dr. Ravi Shinde	Assistant Professor	13.03.2023
16	Dr. Gargi Paliwal	Assistant Professor	05.04.2023
17	Dr. Deepali Suryavanshi	Assistant Professor	22.08.2023
18	Dr. Arvind Kumar Singh	Assistant Professor	28.08.2023
<b>Department of Entomology</b>			
19	Dr. Prince Mahore	Assistant Professor	02.01.2023
20	Dr. Suraj Kumar	Assistant Professor	25.03.2023
21	Dr. Babli Bagri	Assistant Professor	04.03.2024
22	Mr. Shubham Singh	Assistant Professor	29.10.2024
<b>Department of Genetics and Plant Breeding</b>			
23	Dr. Ashok Kumar Singh	Professor	01.04.2024
24	Dr. Shama Parveen	Associate Professor	10.02.2018

25	Dr. Sudheer Kumar Pathak	Assistant Professor	15.07.2019
26	Dr. Soni Singh	Assistant Professor	05.09.2022
27	Dr. Pramod Kumar Yadav	Assistant Professor	09.03.2024
28	Dr. Akash Barela	Assistant Professor	04.04.2024
29	Dr. Swapnil Kumar Meshram	Assistant Professor	10.09.2022
<b>Department of Horticulture</b>			
30	Dr. Kedar Nath Nagaich	Professor	01.10.2020
31	Dr. Satish Kumar Sharma	Professor	18.07.2024
32	Dr. Dashrath Bhati	Assistant Professor	20.02.2021
33	Dr. Pushpendra Kumar	Assistant Professor	05.09.2022
34	Dr. Shipra Parmar	Assistant Professor	07.03.2024
35	Dr. Divya Pandey	Assistant Professor	07.03.2024
36	Dr. Vartika Singh	Assistant Professor	04.03.2024
37	Dr. Ranjith Reddy	Assistant Professor	10.07.2024
<b>Department of Soil Science</b>			
38	Dr. Ram Jit Tiwari	Professor	10.04.2023
39	Dr. Banwari Lal Sharma	Professor	01.05.2023
40	Dr. Vipin Kumar	Assistant Professor	24.08.2023
41	Dr. Gopal Kumar	Assistant Professor	12.04.2024
<b>Department of Plant Pathology</b>			
42	Dr. Sanjog Chhetri	Assistant Professor	01.09.2022
43	Dr. Rajendra Prasad	Assistant Professor	25.08.2023
44	Dr. Sonu Sharma	Assistant Professor	03.07.2023
<b>Department of Animal Sciences</b>			
45	Dr. Awadhesh Kishore	Professor	08.06.2019
46	Ms. Ayesha Bano	Assistant Professor	05.09.2022
47	Dr. Kajal Kumari	Assistant Professor	16.05.2024
<b>Department of Agricultural Engineering</b>			

48	Dr. Nivedita Singh	Assistant Professor	25.02.2021
49	Dr. Karuna Nidhan Singh	Assistant Professor	05.04.2023
50	Dr. Aribam Priya Mahanta Sharma	Assistant Professor	03.07.2023
<b>Department of Crop Physiology and Biochemistry</b>			
51	Dr. Pravchan Chettri	Assistant Professor	23.08.2023
52	Dr. Tiyasha Sarkar	Assistant Professor	05.08.2024

\*The Faculty assigned the responsibilities for the multiple programmes need to be clearly marked.

\*\*Clearly mention the deviation in the Faculty position with respect to the recommendations of V Deans' Committee/VCI/BSMA/other regulatory bodies.

\*\*\*In case of Private Universities/ affiliated colleges the list of faculty cadre wise with name, specialization, date of appointment in the college, period of contract, salary account summary for last three years with the reference to Form 16 (income tax) shall be provided.

### 6.4.3. Technical and Supporting Staff

**The position of the technical and supporting staff of the Degree Program including farm and field workers are mentioned for both sanctioned and in place.**

The list of technical and supporting staff, their name, specialization, date of appointment in the college, period of contract, and salary account summary for the last three years with reference to Form 16 (income tax) is given below.

#### 6.4.3 (a) Dean's Office Staff

S. No.	Name	Designation	DOJ	Responsibility
1	Mr. Rajendra Singh Dhamania	Dy. Registrar	02.07.2012	Administrative Officer
2	Dr. Sudheer Pathak	Assitant Professor	19.07.2019	Academic Officer
3	Mr. Ramji Dantre	Account Officer	07.05.2018	Account Officer
4	Mr. Devendra Pratap Singh	PA	01.07.2014	PA to Dean
5	Mr. Roop Singh Kushwah	Office	19.08.2011	Asst. to Administrative

		Superintendent		Officer
6	Mr. Pankaj Gupta	Account Superintendent	01.07.2020	Asst. to Account Officer
7	Mr. Jitendra Yaduvanshi	Office Assistant	01.09.2022	Asst. to Academic Officer
8	Mr. Gajendra Singh	Computer Operator	01.07.2012	Computer Operator
9	Mr. Santosh Srivastava	Office Superintendent	21.01.2021	Office Superintendent
10	Mr. Gyan Prakash Shrivastava	Store Keeper	21.01.2019	Store Keeper
11	Mr. Sanat Pawaiya	Farm Manager	13.07.2019	Farm Manager
12	Mr. Jitendra Tomar	Driver	16.06.2016	Driver

#### 6.4.3 (b) List of Lab Technicians

S. No.	Departments	UG/PG Lab	Name	DOJ
1.	Agronomy	UG Lab	1. Akash Mallik	21.08.2023
		PG Lab	2. Vishakha Jaiswal	26.11.2021
2.	Agricultural Economics/ Computer lab	UG Lab	1. Munnesh Singh	20.07.2019
3.	Agriculture Extension	UG Lab	1. K Sharma	16.08.2014
4.	Entomology	UG Lab	1. Santosh Dhakad	15.03.2021
5.	GPB	UG Lab	1. Gajendra	10.07.2019
		PG Lab	2. Priya Arvind Giri	17.08.2023
6.	Horticulture	UG Lab	1. Priyansh Sharma	12.09.2022
		PG Lab	2. Krishna Yadav	8.04.2022

		Post Harvest Management	3. Neha Bhaskar	19.08.2023
		Food Processing	4. Aman Ahirwar	14.11.2018
7.	Soil Science	UG Lab	1. Aman Parashar	26.11.2021
8.	Plant Pathology	UG Lab	1. Nukul Goyal	31.08.2023
9.	Animal Science & Dairy Science	UG Lab	1. Direndra Uniya	19.02.2020
		Fisheries Lab	2. Naval Kishore	31.08.2023
10.	Agriculture Engg.	UG Lab	1. Bhuvnesh Singh	19.07.2019
		Engg. Workshop	2. Atendra	19.06.2018
11.	Biochemistry & Crop Physiology	Analytical Lab	1. Neha Khan	13.04.2022

#### 6.4.3 (c) List of Supporting Staff

S. No.	Post	Deptt.	Name	DOJ
1.	Electrician	Estate	Ankush Rajput	01.10.2022
2.	Electrician Helper	Estate	Banti Jatav	01.10.2022
3.	Car Driver	Admin	Asraf Khan	09.09.2023
4.	Carpenter	Workshop	Arif	01.07.2024
5.	Welder	Fabrication	Virendra Kushwah	01.11.2021
6.	Workshop Helper	Workshop	Bhupendra Singh	01.10.2022
7.	Painter	Workshop	Amar Khan	01.02.2022
8.	Gym Care Taker	Estate	Gabbar Singh	24.04.2015
9.	Daftari	Admin	Naresh Dubey	01.07.2012



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10.	Daftari	Admin	Girish Kumar Yadav	01.07.2014
11.	Helper Store	Admin	Karan Dhanuk	17.07.2023
12.	Peon	Admin	Narendra Batham	30.08.2012
13.	Peon	Admin	Jitendra (Singh) Jatav	25.09.2018
14.	Peon	Admin	Ramji Saran Sen	01.02.2022
15.	Peon	Admin	Girraj Baghel	01.10.2022
16.	Peon	Admin	Chandraprakash Mahor	01.10.2022
17.	Peon	Estate	Dharmendra Nagar	01.08.2018
18.	Peon	Admin	Deepu	01.10.2022
19.	Peon	Admin	Jitendra Jatav	01.10.2022
20.	Mali	Estate	Seva Ram	05.02.2014
21.	Mali	Estate	Rajveer	20.12.2016
22.	Mali	Estate	Chotelal	01.10.2022
23.	Mali	Estate	Gayaram Baghel	01.10.2022
24.	Mali	Estate	Naresh	01.11.2022
25.	Mali	Estate	Ramratan Kushwah	07.03.2023
26.	Mali	Estate	Ram Swaroop	10.03.2023
27.	Mali	Estate	Ramesh Singh	01.05.2023
28.	Plumber	Estate	Mukesh Baghel	01.11.2022
29.	Labour	Farm	Ashok	01.10.2022
30.	Labour	Farm	Vimlesh	01.03.2024
31.	Labour	Farm	Rajkumari	01.03.2024
32.	Labour	Farm	Pejram	14.09.2024



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33.	Labour	Farm	Kok Singh	19.09.2024
34.	Labour	Farm	Mohar Singh	19.09.2024
35.	Labour	Farm	Girraj Singh	08.07.2024
36.	Driver	Bus	Patiram Kushwah	01.01.2014
37.	Driver	Bus	Megh Singh	01.01.2014
38.	Driver	Bus	Mansharam Pal	01.01.2014
39.	Driver	Bus	Dilip Singh Gurjar	01.01.2014
40.	Driver	Bus	Krishan Mohan	21.08.2014
41.	Driver	Bus	Shankar Singh Dhakad	23.12.2019
42.	Driver	Bus	Jagendra Singh Gil	01.12.2022
43.	Driver	Bus	Girraj Singh	01.12.2022
44.	Driver (battery Vehicle)	Transport	Manoj Singh Jat	01.03.2023
45.	Bus Helper	Transport	Gyanendra Singh Tomar	01.10.2022
46.	Bus Helper	Transport	Deepak Tiwari	24.11.2022
47.	Bus Helper	Transport	Vishal Batham	09.09.2024
48.	Bus Helper	Transport	Ramu Batham	28.09.2023
49.	Sup	Security	Sanjay Singh Yadav	01.07.2012
50.	GM	Security	Ram Lakhan Mudgal	01.03.2013
51.	DM	Security	Data Ram Kushwah	01.07.2012
52.	DM	Security	Sarfraj Khan	01.07.2012
53.	DM	Security	Mohammad Arif	01.07.2012
54.	DM	Security	Arvind Singh Yadav	03.12.2012
55.	DM	Security	Vishmbar Singh Baghel	18.12.2012

56.	DM	Security	Ranjeet Singh Kushwah	25.09.2013
57.	DM	Security	Meharban Singh Baghel	12.07.2015
58.	DM	Security	Tilak Singh Yadav	07.06.2012

#### 6.3.4 (d) List of Field Assistant

S. No	Department	Name	DOJ
1.	Agronomy	1. Shailesh Mishra	01.06.2022
		2. Abhishek Kushwaha	01.02.2022
		3. Lokendra Singh Gurjar	16.09.2022
2.	Entomology	4. Vinod Kumar	26.07.2019
3.	Genetics & Plant Breeding	5. Pradeep Gurjar	07.07.2023
		6. Abdul Sohel	10.07.2023
4.	Horticulture	7. Jay Singh	10.07.2023
		8. Sanjay Deep	17.04.2023
5.	Soil Science	9. Brijesh Gurjar	14.07.2023
6.	Plant Pathology	10. Shivam Vishwakarma	01.08.2023
7.	Animal Science	11. Ankush Yadav	14.07.2023
8.	Agriculture Engg.	12. Ashok Hindolia	26.10.2023
		13. Santosh Dhakar	15.03.2021

#### 6.4.3 (d) Central Instrumentation Staffs

S. No	Name of Employee	Post	DOJ
1	Balram Singh Lodhi	Technical Assistant	01.10.2013
2	Manoj Agarwal	Lab Technician	01.07.2012

#### 6.4.3 (e) Library Staff

S.No	Name of Employee	Post	DOJ
1.	Anshu Pateriya	Asst. Librarian	16.03.2021
2.	Hirdesh Lohiya	Asst. Librarian	03.06.2022
3.	Bhupesh Singh	Book Lifter	18.05.2018
4.	Hargovind Sharma	Book Lifter	15.02.2020

#### 6.4.3 (f) List of Assistants

S.No	Department	Name	DOJ
1.	Agronomy	Sandeep K Shakyawar	22.04.2022
2.	Agricultural Economics	Manoj Kumar	24.03.2023
3.	Agriculture Extension	Sachin Yadav	27.07.2023
4.	Entomology	Vivek Bansal	20.02.2024
5.	Genetics & Plant Breeding	Ankit Bhargava	13.02.2023
6.	Horticulture	Govind Shrivastava	15.02.2023
7.	Soil Science	Ashok Babu Sujenia	01.07.2014
8.	Plant Pathology	Shyam Regar	08.06.2013
9.	Animal Science	Lakhan Tiwari	16.10.2015
10.	Agriculture Engg	Veerendra Sahoo	12.08.2024
11.	Biochemistry & Crop Phy.	Juved Ahmad	01.09.2022

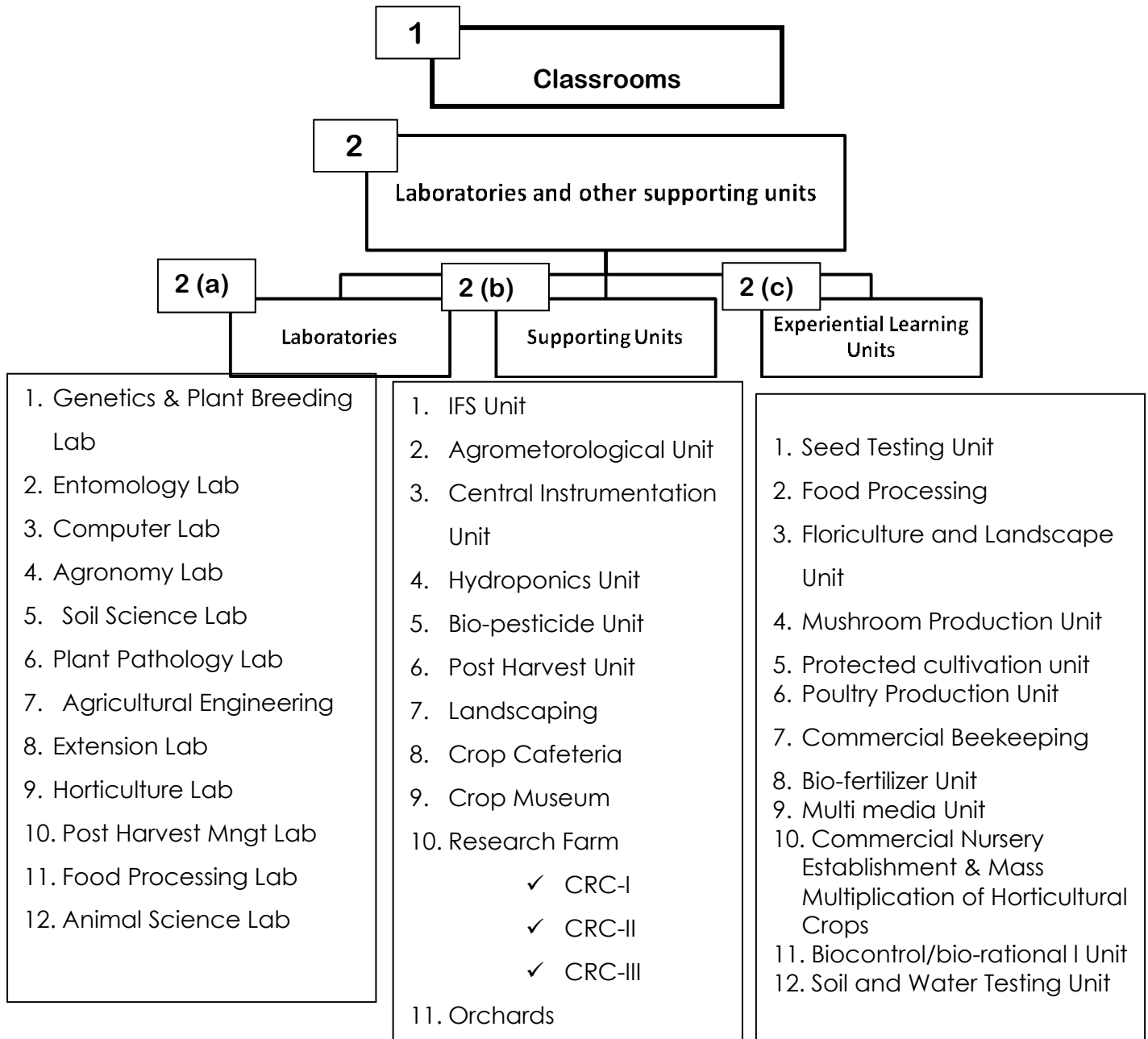
\*The technical and supporting staff assigned the responsibilities for the multiple programmes need to be clearly marked.

\*\*Clearly mention the deviation in the staff position with respect to the recommendations of V Deans' Committee/VCI/BSMA/ other regulatory bodies.

\*\*\* In case of Private Universities/affiliated colleges list of technical and supporting staff, their name, specialization, date of appointment in the college, period of contract, salary account summary for last three years with the reference to Form 16 (income tax) shall be provided.

#### 6.4.4. Classrooms, Laboratories and other Supporting Units

Mention the number of class rooms and functional laboratories available for the degree programme and justify if it is sufficient to meet the course curricula requirement. List of major equipment, laboratories, farm facilities, workshops and other instructional units being utilized for the award of the Degree Programme may be given. Mention theory and practical batches for the Degree Programme.



The number of classrooms and functional laboratories available for the degree program to meet the course curriculum requirement and the lists of major equipments, laboratories, farm facilities, workshops, and other instructional units being utilized for the award of the degree program are given below. The theory and practical batches for the degree program are also mentioned.

S. No.	Course	No. of Classrooms
1.	B.Sc. (Hons) Agriculture	23
2.	M.Sc. (Agriculture) Agronomy	02
3.	M.Sc. (Horticulture) Vegetable Science	02
4.	Laboratories for UG Program	12
5.	ELP Units	12
6.	Workshop	01
7.	Crop Museum	01
8.	Supporting Units	10
9.	Conference Hall	01
10.	Meeting Hall	01
11.	Common room (Boys)	02
12.	Common Room (Girls)	02

### 1. Details of Classroom

The School of Agriculture runs in three different buildings namely Vikram Sarabhai Block (VSB), Vishwakarma Block (VB), and Maxwell Block (MB), with a total of 23 classrooms. There are 6 smart classrooms viz. room no. VSB-208, VSB-211, VSB-307, VSB-310, VB-201 and VB-301. The classroom is enabled with a smart board and projector, whiteboards, and blackboard for teaching.

**Building wise list of classrooms:**

S. No.	Block	Room No.	Seating Capacity
1.	VSB Block	208	80
2.		209	45
3.		210	45
4.		211	80
5.		307	80
6.		310	80
7.		407	70
8.		408	60
9.		410	70
10.	Vishwakarma Block	201	60
11.		202	40
12.		203	60
13.		204	60
14.		301	60
15.		302	45
16.		303	45
17.		304	60
18.	Maxwell Classroom	101	40
19.		102	40
20.		103	40
21.		202	40
22.		203	40
23.		207	50

**2 (a) Details of Laboratory in School of Agriculture**

The School of Agriculture offers state-of-the-art laboratories for B.Sc. (Hons) Agriculture students, aligned with ICAR standards. Key labs include Agronomy, Horticulture, Genetics and Plant Breeding, Entomology, Soil Science, and Plant Pathology. Advanced research is supported by the Central Instrumentation, Post Harvest, and Food Processing Labs. The Crop Research Centre also provides hands-on training in Animal Science, ensuring comprehensive practical education across major agricultural disciplines. Each lab accommodates 30 students.

**Block wise list of laboratories:**

S. No.	Block	Room No.	Laboratory	Capacity
1	VSB - Block	203	Genetics and Plant Breeding Laboratory (Name as per ICAR: Seed Science & Technology; Biotechnology)	30
2		204	Entomology Lab	30
3		303	Computer Lab	30
5	Vishwakarma Block	202	Agronomy Laboratory (Name as per ICAR: Agronomy + Agroforestry)	30
6		203	Soil Science Lab	30
7		204	Plant Pathology Lab	30
8	Workshop		Agriculture Farm Machinery	30
9	Maxwell Block	201	Extension Lab	30
10		107	Horticulture Lab	30
11		208	Central Instrumentation Facility Lab	30
12		205	Post Harvest Lab	30
13		204	Food Processing Lab	30
14	Crop Research Centre - III		Farm Laboratory (Animal Science)	30

**Details of Laboratories with Instrument Facilities**

<b>1. Genetics and Plant Breeding Laboratory (Name as per ICAR: Seed Science &amp; Technology; Biotechnology)</b>		
S. No.	Equipment	Quantity
1	BOD Incubator	-
2	Colony Counter (Pointer)	1
3	Compound Microscope (10)	10
4	Digital Grain Moisture Meter	1
5	Digital Seed Counter	1
6	Distillation Assembly	-
7	Electronic Weighing Balance	1
8	Fluorescence microscope	-
9	Gamete Divider	1

10	Hot Air Oven	1
11	Hot Plate	1
12	Plant Growth Chamber	1
13	Refrigerated Centrifuge	1
14	Refrigerator	1
15	Seed Drum	1
16	Seed Germinator	1
17	Vortex Shaker	1

<b>2. Entomology Lab</b>		
<b>S. No.</b>	<b>Equipment</b>	<b>Quantity</b>
1	Dissecting Microscope	9
2	Compound Monocular Optical Microscope	9
3	Compound Binocular Light Microscope	2
4	Insect Collection Box	22
5	Insect Collection Bottles	22
6	Stereomicroscope (Trinocular)	1
7	Electronic Balance	1
8	Knapsack sprayer	1
9	Computer system	1
10	Stretching boards	7
11	Sieves	3
12	Hygrometer	1
13	Dissecting wax tray	19
14	Light Trap	1
<b>Apiary (ELP Unit)</b>		
15	Honey Bee Boxes with colony	5
16	Honey Bee wooden empty Boxes (to multiply colonies)	18
17	Honey Bee Box Stand	18
18	Frames	70
19	Smoker	1
20	Feeding Tray	4
21	Pollen collecting Box	4
22	Protecting Cap	2
23	Honey Extractor	1

<b>3. Computer Lab</b>		
<b>S. No.</b>	<b>Equipment</b>	<b>Quantity</b>
1	Monitor	85
2	CPU	85
3	Mouse	85
4	Keyboard	85
5	AC	3
6	Computer Table	90
7	Projector	1
8	Software	
9	Internet Facility	Available

**Vishwakarma Block (VB)**

<b>4. Agronomy Laboratory (Name as per ICAR: Agronomy + Agro-forestry)</b>		
<b>S. No.</b>	<b>Equipment</b>	<b>Quantity</b>
1	Conductivity Meter	1
2	PH Meter	1
3	Weighing Balance	1
4	Microbial Balance	1
5	Weighing Balance	1
6	Kitchen Scale	1
7	Soxhlet Apparatus	1
8	Distillation Unit	1
9	Seed Germinator	1
10	Refrigerator	1
11	Hot Air Oven	2
12	Incubator Shaker	1
13	Water Bath	1
14	Tensiometer	1
15	Hand Refractor	1
16	Leaf Area Meter	1
17	Chlorophyll Meter	1
18	Microbial Balance	1
19	Water Bath	1
20	Delux pH Meter	1

21	Soil-water testing kit	3
22	Conductivity Meter	1
23	Attberg Limit Meter	1
24	Hot Air Oven (SMALL)	1
25	Hot Air Oven	1
26	pH Meter	1
27	Measuring scale	1

<b>5. Soil Science Lab</b>		
<b>S. No.</b>	<b>Equipment</b>	<b>Quantity</b>
1	Stirrer	1
2	Spectro-photo meter	1
3	pH meter	1
4	Weighing balance	1
5	Hot plate	3
6	Flame photometer	1
7	Infiltration-meter	1
8	Rotary Shaker	1
9	Soxhlet apparatus	2
10	Distilled water unit	1
11	Incubator	1
12	Centrifuge	1
13	Hot air oven	1
14	EC meter	2
15	Water bath	1

<b>6. Plant Pathology Lab</b>		
<b>S. No.</b>	<b>Name of equipment</b>	<b>Quantity</b>
1	Hot Air Oven	1
2	B.O.D. Incubator	1
3	Simple compound microscope	1
4	Laminar airflow	1
5	Autoclave	1
6	Digital Trinocular Compound microscope	1
7	Electron microscope	1
8	Incubator Shaker	1
9	Water bath	1

10	PH Meter	1
11	Hot plate	1

### Workshop

<b>7. Agriculture Farm Machinery</b>		
<b>S. No</b>	<b>Instrument</b>	<b>Quantity</b>
1	Cultivator	1
2	Cut Model of the rectangular notch	1
3	Cut model of the triangular notch	1
4	Cut model of Parshall flume	1
5	Cut model of H- Flume	1
6	Cut model of venturie flume	1
7	Cut model of throat flume	1
8	Cut model of drop spillway	1
9	Cut model of inlet spillway	1
10	Cut model of chute spillway	1
11	Cut section of centrifugal pump	1
12	Cut section of reciprocating pump	1
13	Cut section of submersible pump	1
14	Cut section of CI engine	1
15	Cut model of SI engine	1
16	Current meter cup type	1
17	Current meter propeller type	1
18	Dumpy level	3
19	Engineering chain	3
20	Foot operated sprayer	1
21	Gunter chain	3
22	Harrow	1
23	Hand operated sprayer	1
24	Indigenous plough	3
25	Knapsack sparyer	1
26	Levelling staff	4
27	Mould board plough	1
28	Mower	1
29	Metric tape	2
30	Offset rod	10
31	Reaper	1

32	French type cross staff	5
33	Rotavator	1
34	Ridge maker	1
35	Seed drill	1
36	Sprit level	3
37	Tractor	1
38	Trolley	1
39	Theodolite	1
40	Tripod stands for auto-level	2
41	Tripod stands for dumpy level	2
42	Tensiometer	2

### Maxwell Block

<b>8. Extension Lab</b>		
<b>S. No</b>	<b>Instrument</b>	<b>Quantity</b>
1	Digital Voice Recorder	1
2	File Scope	1
3	Humidity Temperature Clock	1
4	Overhead Projector	1
5	LCD Projector	1
6	Radio	1
7	Television	1
8	Camera (SLR) with zoom, wide-angle, telephoto lens	-
9	Video camera with tripod, lighting accessories, and editing facility	-
10	Computers (workstation) with editing software	-
11	Audio recording-mixing consoles	-
12	Computation software for statistics	-

<b>9. Horticulture Lab</b>		
<b>S. No</b>	<b>Instrument</b>	<b>Quantity</b>
1	Budding Knife	150
2	Crown Corking Machine	1
3	Digital Vernier Calliper	2
4	Digital pH Meter	1



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5	Digital Refractometer	1
6	Foot Sprayer	2
7	Fruit Penetro Meter	2
8	Hand Refractometer (0-32%,45-82%)	1
9	Horizontal Deep Freezer	1
10	Hygrometer	1
11	Micro Wave Oven	1
12	Mixer and Grinder	1
13	Muffle Furnace	1
14	Penetrometer	1
15	pH Meter	1
16	Refrigerator	1
17	Sealer Machine	1
18	Secature	55
19	Weighing Balance 600gm	1
20	Weighing Balance 10Kg	1

<b>10. Post Harvest Lab</b>		
<b>S. No</b>	<b>Instrument</b>	<b>Quantity</b>
1	Cabinet Tray	1
2	Digital Salinity Meter (Brine Meter)	1
3	Digital TDS Meter	1
4	Digital Turbidity Meter	1
5	Digital Vernier Calliper	1
6	Electronic Weighing Machine (Min. Error 0.001)	1
7	Hot Air Oven	1
8	Microcentrifuge	1
9	Mini Pulverizer	1
10	Muffle Furnace	1
11	Orbital cum Indicator Shaker	1
12	Penetro Meter	1
13	pH Meter	1
14	Pressure Tester	1
15	Root Length Scanner	1
16	Rotatory Vacuum Evaporator with Pump	1
17	Thermo Hydrograph Digital (08)	8

18	Viscosity Analyser (Manual)	1
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<b>11. Food Processing Lab</b>		
S. No	Instrument	Quantity
1	Amala Decanting Machine	1
2	Basket Press	1
3	Deep Freezer (-20 Degree C)	1
4	Deionizer Water (RO Water Plant)	1
5	Digital pH Meter	1
6	Digital Refractometers (Brix Meter) (02)	2
7	Digital Turbidity Meter	1
8	Digital Vernier Calliper	1
9	Distillation Unit	1
10	Foil Sealing Machine	1
11	Food Processor	1
12	Fruit Mill (Juice extractor)	1
13	Hot Plate	1
14	Micro Wave Oven	1
15	Mini Pulper	1
16	Polythene Sealing Machine (Semi-automatic)	1
17	Potato Peeler	1
18	Tissue Homogenizer	1
19	Weighing Balance (30 Kg)	1
20	Weighing Balance (0.01gm)	1

**Crop Research Centre (CRC- III)**

<b>12. Farm Laboratory (Animal Science)</b>		
S. No	Instrument	Quantity
1	Automatic stringer (30ml)	1
2	Artificial vagina	1
3	Bull holder with thumb rest	1
4	Burdizos castrator small size	1
5	Burdizos castrator medium size	1
6	Burdizos castrator big size	1
7	Casting rope	1
8	Drenching bottle aluminum	1
9	Docking knife /Drawing knife	1

10	Electronic balance	1
11	Electric balance (5kg)	1
12	Ear notching device	1
13	Electronic Dehathes	2
14	EDR notches forceps	1
15	Hoof cutter imported 14"	1
16	Needle cutter /Destroys electric	1
17	Shearing knife/Sheep shear	1
18	Tooth cutter for small size	1
19	Tagging forceps for plastic tags	1
20	Pig catcher	1
21	G.P.S. machine	1
22	Toomy	2

**List of Practical Manuals, School of Agriculture**

S. No.	Course name	Course code
1	Fundamentals of Entomology	ENT-121
2	Principle of Integrated Pest and Disease Management	PP-312
3	Pests of Crop and Stored Grain and their Management	ENT-311
4	Introductory Biology	CP-111
5	Crop Physiology	CP-116
6	Fundamentals of Crop Physiology	CP-121
7	Environmental Studies and Disaster Management	CP-211
8	Elementary Plant Biotechnology	GPB- 216
9	Fundamentals of Plant Breeding	GPB-211
10	Crop Improvement – I (Kharif crop)	GPB-311
11	Crop Improvement - II (Rabi crop)	GPB-321
12	Breeding for Stress Resistance and Climate Change	GPB- 516
13	Molecular Breeding and Bioinformatics	GPB-506
14	Crop Breeding in <i>Rabi</i> Crops	GPB 512
15	Seed Developmental Biology	SST-501
16	Post Harvest Handling and Storage of Seeds	SST – 508
17	Fundamentals of Soil Science	SS-111



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18	Manures, Fertilizer & Soil Fertility Management	SS-311
19	Introductory Microbiology	MICROB-111
20	Agricultural Microbiology	MICROB-121
21	Diseases of Fruit, Plantation, Medicinal and Aromatic Crops	PHT-212
22	Diseases of Vegetable, Ornamental, and Spice Crops	PHT-311
23	Fundamentals of Plant Pathology	PP-121
24	Diseases of Field and Horticultural Crops and Their Management – I	PP-311
25	Fundamentals of Plant Pathology (PHT-213)	PHT-213
26	Soil and Water Conservation Engineering	AENG-121
27	Farm Machinery and Power Engineering	AENG-211
28	Renewable Energy and Green Technology	AENG-221
29	Protected Cultivation and Secondary Agriculture	AENG-321
30	Agriculture Marketing Trade and Prices	AE-221
31	Agricultural Finance and Co-operation	AE-211
32	Fundamentals of Agricultural Extension Education	AEXT-121
33	Communication Skills and Personality Development	AEXT -122
34	Agricultural Journalism	ELCT-AE-311
35	Entrepreneurship Development and Business Communication	AEXT-311
36	Introductory Agrometeorology and Climate Change	AGRON-122
37	Introduction to Forestry	AGRON-113
38	Crop Production Technology-I ( <i>Kharif</i> )	AGRON-211
39	Crop Production Technology-II ( <i>Rabi</i> )	AGRON-221
40	Fundamentals of Agronomy	AGRON-111
41	Geoinformatics, Nano-technology and Precision Farming	AGRON-321
42	Organic Farming	AGRON – 318
43	Organic farming	AGRON-322
44	Geoinformatics and Nanotechnology for Precision Farming	AGRON-311



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45	Practical Crop Production-II (Rabi crops)	AGRON 323
46	Introduction of Major Field Crops	AGRON 317
47	Practical Crop Production – I ( <i>Kharif</i> Crop)	AGRON – 312
48	Rainfed Agriculture and Watershed Management	AGRON-321
49	System Simulation and Agro Advisory	ELECT AGRON-321
50	Water Management in Horticultural Crops	AGRON-126
51	Weed Management	ELEC-AGRON-321
52	Weed Management in Horticultural Crops	AGRON-216
53	Principles and Practices of Soil Fertility and Nutrient Management	AGRON 502
54	Agronomy of Oilseed, Fiber, and Sugar Crops	AGRON 507
55	Processing Technology of Fruits and Vegetables	ELCT FST -311
56	Fundamentals of Food Technology	FST-216
57	Orchard and Estate Management	FSC-311
58	Nutrition of Fruit Crops	FSC-508
59	Fundamentals of Horticulture	HORT-111
60	Breeding of Vegetable, Tuber, and Spice Crops	VSC-311
61	Commercial Floriculture	FLA- 211
62	Potato and Tuber Crops	HVS- 312
63	Seed Production of Vegetable Crops	VSC- 508
64	Organic Vegetable Production	VSC- 511
65	Production Technology of Cool Season Vegetable and Spices	HORT-211
66	Production of Cool Season Vegetable Crops	VSC-501
67	Temperate Vegetable Crops	VSC-211
68	Breeding of Self-Pollinated Vegetable Crops	VSC-505
69	Landscaping	ELCT-HORT-311
70	Temperate Fruit Crops	FSC-211

71	Post Harvest Management of Horticultural Produce	PHM-501
72	Introductory Biology	CP-111
73	Agriculture Informatics	STAT-212
74	Statistical Methods	STAT-211
75	Livestock and Poultry Management	AHS-211

**List of ELP Manuals**

<b>S. No.</b>	<b>ELP</b>	<b>CODE</b>
1	Industrial Training in Product Development and Marketing	ELP-ABM-402
2	Processing of Fruits and Vegetables for Value Addition	ELP-HORT-403
3	Commercial Nursery Establishment and Mass Multiplication of Horticultural Crops	ELP-HORT-404
4	Agribusiness and Industrial Management	ELP-ABM-401
5	Commercial Bee Keeping	ENT-401
6	Production Technology for Bio-agents and Bio-fertilizers	ELP-ENT-402
7	Seed Production Technology	ELP GPB-402
8	Commercial Horticulture (Vegetable and Spices Crop Production)	ELP-HORT-401
9	Protected Cultivation of High-Value Horticulture Crops	ELP-HORT-405
10	Mushroom Cultivation Technology	ELP-PP-401
11	Organic Production Technology	ELP-AGRON-402
12	Floriculture and Landscaping	ELP-HORT-402
13	Soil, Plant & Water Testing	ELP-SS-401
14	Poultry Production Technology	ELP-AHS-211

## 2 (b) Supporting units at School of Agriculture

The supporting units available for B.Sc. (Hons) Agriculture students at ITM University, Gwalior's Turari campus likely include facilities such as:

### 1. **Integrated Farming Unit:**

- a. **Poultry Unit:** Practical exposure to poultry management, including rearing techniques, breeding, feed management, and disease control.
- b. **Fisheries Unit:** Hands-on experience in fish farming, aquaculture practices, and pond management, emphasizing fish breeding, feeding, and harvesting.
- c. **Beekeeping Unit:** Focuses on the practical aspects of apiculture, including bee hive management, honey extraction, and bee health monitoring.

Students learn about pollination's role in agriculture, honey production techniques, and the commercial aspects of beekeeping.

### 2. **Agro-meteorology unit:**

This unit focuses on the study of weather patterns and their impact on agriculture. Key learning aspects for students include:

- Monitoring and analyzing climate data such as temperature, humidity, rainfall, and wind speed.
- Understanding how different meteorological factors affect crop growth and yield.
- Using weather forecasts and data to make informed decisions regarding planting, irrigation, and pest control.
- Practical training in the operation of meteorological instruments like rain gauges, anemometers, and thermometers.

### 3. **Hydroponics Unit:**

- Provides training on soil-less cultivation techniques, where plants are grown in nutrient-rich water solutions.
- Students explore efficient water usage, controlled environment agriculture, and methods to enhance crop yield in a sustainable manner.

**4. Bio-pesticides Unit:**

- Students learn about the preparation and application of organic pesticides and fertilizers, promoting eco-friendly farming practices.
- Focus on developing bio-solutions that reduce chemical inputs, ensuring sustainable crop production.

**5. Post Harvest Unit:**

- Offers exposure to food preservation, processing, and packaging techniques, with an emphasis on value addition to agricultural produce.
- Students work on products like jams, sauces, and dehydrated vegetables, learning market-oriented skills.

**6. Landscaping Unit:**

1. Practical knowledge in designing and maintaining green spaces, including gardens, parks, and landscapes for residential and commercial purposes.
2. Involves working with ornamental plants, turf management, and landscape architecture principles.

**7. Crop Cafeteria:** The crop cafeteria is located in the Sithouli campus of School of Agriculture in an area of One Acre. The cafeteria comprises of various agronomic and horticultural crops for the study of crop cycle, crop growth and cropping pattern for the undergraduate students.

**8. Crop Museum:**

An agricultural museum plays a vital role in preserving agricultural heritage, in multiple forms and ways. To achieve this aim, the School of Agriculture has built up a crop museum. The museum includes a display physical memorabilia – implements, machinery, cropping tools crop seeds, varietal seeds, fertilizers, herbicides, insecticides, and pesticides.

➤ **Research Farm and Field Facilities at School of Agriculture**

**Crop Research Centre-I**

Crop Research Centre-I, nestled within ITM University in Gwalior, spans 5.87 hectares, offering a concentrated yet resource-rich environment for agricultural research. Specializing in the cultivation of rice, gram, and moth bean, the centre focuses on enhancing crop productivity, quality, and adaptability to local conditions.

Noteworthy is its inclusion of a meteorological unit, indicating a keen interest in studying weather patterns and their influence on agricultural practices. This unit plays a vital role in deciphering climatic dynamics, enabling informed decision-making for optimized crop management strategies.

Overall, Crop Research Centre-I at ITM University exemplifies a dedicated pursuit of agricultural advancement. Through its focused research on key crops and the integration of meteorological insights, it strives to contribute significantly to the evolution of sustainable and resilient farming practices.

**Crop Research Centre-II**

The Crop Research Centre-2 (CRC-2) is situated near ITM University Sithouli campus, in the close proximity of CRC-1. Functioning as a pivotal seed production facility, CRC-2 specializes in the cultivation of both Rabi and Kharif crops, essential for sustaining agricultural productivity across diverse seasons. With an unwavering commitment to advancing agricultural practices, the Centre is fervently dedicated to conducting innovative research and development endeavors. These efforts are meticulously designed to enhance crop yields and elevate the overall quality of agricultural produce.

**Crop Research Centre-III**

The Crop Research Centre-III, nestled within ITM University in Gwalior, sprawls over 20.86 hectares, offering an expansive canvas for agricultural exploration. Focused on enhancing farming techniques and crop resilience, it concentrates on cultivating rice, wheat, barley, and mustard, serving as a hub for research into yield optimization and quality enhancement.

Equipped with specialized amenities, the centre facilitates cutting-edge experimentation. The inclusion of a fan pad signifies its capability for controlled-environment studies, enabling precise manipulation of temperature and humidity for crop growth. Complementing this, poly houses provide shelter from adverse weather and pests while regulating optimal growing conditions.

Diversifying its scope, the centre hosts an Integrated Farming System (IFS) unit, integrating crop cultivation with poultry and fisheries. This holistic approach aims to maximize productivity and sustainability in agricultural practices. Additionally, the presence of poultry and fisheries pounds underscores its commitment to comprehensive agricultural research, exploring synergies between livestock and crop production.

**Orchards at School of Agriculture:**

S. No.	Name of trees	Location	Area (m <sup>2</sup> )
1.	Mango Orchard	Turari campus	8660
2.	Herbal Garden	Turari campus	2128
3.	Avenue	Sithouli campus	1830
4.	VSB (Aonla, Pomegranate and Lemon)	Sithouli campus	2597
5.	Mango, Papaya and Guava	Turari campus	6806
6.	Sapota	Turari campus	2408
7.	Mango, Guava, Beal, Litchi, Sweet Orange, Pomegranate, Fig, Aonla	Turari campus	10000

## 2(c). Experiential Learning Units

### 1. Seed Testing Unit

**Aim:**

The Seed Testing Unit at the School of Agriculture, ITM University, aims to ensure seed quality and viability through comprehensive testing and treatment, contributing to agricultural productivity and sustainability.

**Overview:**

Located in Vikram Sarabhai Block, Room No. 203, the unit operates under the Experience Learning Programme (ELP), focusing on farmer seed testing.

**Objective:**

- Ensure the quality and viability of seeds.
- Support agricultural productivity and sustainability.

**Student Engagement:**

Students participate in seed testing and treatment processes, gaining hands-on experience in seed quality assurance and management techniques.

### 2. Food Processing Unit

**Aim:**

The Food Processing Unit at ITM University aims to transform raw agricultural produce into value-added food products, focusing on innovation, preservation, and packaging.

**Overview:**

Located in the Maxwell block of the Sitholi campus, this modern facility uses advanced machinery and adheres to strict quality standards to enhance food products.

**Objective:**

- Add value to agricultural produce.
- Focus on food preservation, packaging, and quality enhancement.

**Student Engagement:**

Students gain hands-on experience in food processing techniques, learning about the machinery, processes, and quality control measures essential for producing high-quality food products.

### 3. Floriculture and Landscaping Unit

**Aim:** The Floriculture and Landscaping Unit at ITM University aims to enhance campus aesthetics while providing practical training in floriculture, landscape design, and sustainable gardening practices.

**Overview:** Located near the Vikram Sarabhai Block, this unit focuses on ornamental plant cultivation, garden management, and landscaping, serving as a learning centre for agriculture and horticulture students.

**Objective:**

- Cultivate ornamental plants and maintain landscapes.
- Support research on sustainable landscaping.
- Provide hands-on training in garden and landscape management.

**Student Engagement:**

Students engage in practical activities such as plant cultivation, garden maintenance, and landscape design, gaining essential skills in floriculture and sustainable landscaping.

### 4. Mushroom Production Unit

**Aim:**

The Mushroom Production Unit at ITM University aims to cultivate high-quality Button and Oyster mushrooms, focusing on Pink and Cluster varieties while providing practical training in sustainable mushroom farming.

**Overview:**

Located in the Einstein Block, this unit operates under the Experience Learning Program (ELP), specializing in controlled cultivation techniques for optimal mushroom growth, including managing humidity, temperature, and substrate conditions.

**Objective:**

- Produce high-quality mushrooms through optimized cultivation practices.
- Provide practical training in mushroom farming.
- Promote sustainable agriculture through mushroom production.

**Student Engagement:**

Students actively participate in the mushroom cultivation process, learning key aspects of controlled growing conditions and gaining hands-on experience in sustainable food production techniques.

## **5. Protected Cultivation Unit (Poly house and fan Pad Unit)**

### **Poly house unit**

**Aim:**

The Poly House at Crop Research Centre - III aims to provide an innovative, controlled environment for optimizing crop cultivation and advancing agricultural research.

**Overview:**

Spanning 2000 square feet, the Poly House is constructed with translucent polyethylene to create an ideal microclimate. It protects crops from adverse weather and allows researchers to control factors like temperature, humidity, and light for optimal crop growth.

**Objective:**

- Conduct agricultural experiments and trials in a controlled setting.
- Optimize growing conditions for crop breeding, pest, and disease management.
- Contribute to sustainable and high-yield farming practices.

**Student Engagement:**

Students engage in practical research and crop management within the Poly House, gaining hands-on experience in advanced cultivation techniques and controlled-environment agriculture.

### **Fan-pad unit**

**Aim:**

The Fan Pad facility aims to regulate environmental conditions for optimal crop growth and off-season cultivation through advanced cooling technology.

**Overview:**

Spanning 250 square meters within Crop Research Centre-III, the unit uses evaporative cooling with fans and wetted pads to control temperature and humidity, creating an ideal environment for crop research.

**Objective:**

- Enhance crop growth through climate control.
- Support off-season cultivation and crop experimentation.
- Advance sustainable farming practices through innovative research.

**Student Engagement:**

Students engage in managing and monitoring the system, gaining practical experience in protected cultivation and climate control techniques for agriculture.

## **6. Poultry Production Unit**

**Aim:**

The Poultry Unit at Crop Research Centre - III aims to advance research and sustainable practices in Kadaknath bird cultivation, focusing on breeding, nutrition, and genetic preservation.

**Overview:**

The unit houses 112 Kadaknath birds, renowned for their unique traits and culinary appeal. It carefully manages all aspects of their welfare, from nutrition to breeding, to enhance their genetic potential while preserving their distinct characteristics.

**Objective:**

- Conduct research on Kadaknath bird behavior, breeding, and genetics.
- Promote sustainable poultry production systems.
- Foster interdisciplinary collaboration in poultry science.

**Student Engagement:**

Students actively participate in managing the birds, gaining hands-on experience in poultry care, nutrition, and breeding, contributing to research and innovation in sustainable poultry farming.

## **7. Apiary Unit**

**Aim:**

The Beekeeping Unit at ITM University aims to provide practical training in apiculture, promoting sustainable agriculture and environmental conservation.

**Overview:**

Located near the School of Agriculture, the unit focuses on hive management, pollination, and honey production, while also supporting research on the economic benefits of beekeeping.

**Objective:**

- Train students in beekeeping practices.

- Encourage sustainable agriculture and environmental conservation.
- Support research on the economic impact of beekeeping and promote its adoption among local farmers.

**Student Engagement:**

Students gain hands-on experience in hive management, honey production, and pollination techniques, enhancing their skills and understanding of sustainable agricultural practices.

## **8. Biofertilizer Unit**

**Aim:**

The Bio fertilizer Unit aims to promote sustainable waste management by converting organic waste into nutrient-rich compost.

**Overview:**

Located near the Vikram Sarabhai Block, this unit uses a four-cycle process with earthworms to decompose organic materials into high-quality vermicompost, contributing to the campus's waste management efforts.

**Objective:**

- Produce organic vermicompost for agricultural use.
- Support waste reduction and sustainable practices on campus.
- Provide a model for environmental stewardship.

**Student Engagement:**

Students participate in managing the composting process, learning about organic waste recycling and sustainable soil improvement techniques.

## **9. Multimedia Unit**

**Aim:**

The Studio Unit aims to support agriculture journalism by providing a fully equipped media lab environment for hands-on learning and content creation.

**Overview:**

Located in Room 101 of the Reynolds Block at the Sithouli campus of ITM University Gwalior, the Studio Unit features a green room and all necessary facilities for media production.

**Objective:**

- Facilitate practical training in agricultural journalism.
- Equip students with skills in media production and broadcasting.
- Promote effective communication in the agricultural sector.

**Student Engagement:**

Students actively participate in media production activities, utilizing the studio for creating content related to agriculture, thereby enhancing their practical skills and knowledge in journalism.

## 10. Commercial Nursery and Mass Multiplication Unit

**Aim:**

To provide a practical learning environment for students in horticulture and related fields through hands-on experience in nursery management and plant propagation.

**Overview:**

The nursery at ITM University, situated near the School of Agriculture, supports agricultural education and research by offering a diverse range of plant species, including ornamental, fruit, vegetable, and medicinal plants.

**Objective:**

- Equip students with practical skills in plant cultivation and nursery management.
- Enhance understanding of plant biology and sustainable farming practices.
- Contribute to campus beautification and environmental sustainability efforts.

**Student Engagement:**

Students actively participate in the nursery's operations, applying theoretical knowledge in real-world scenarios, and engaging in experiential learning programs to develop essential skills in horticulture.

## 11. Bio-control/ bio-rational Unit

**Aim:**

To provide hands-on training in bio-fertilizer production to enhance students' understanding of sustainable agricultural practices.

**Overview:**

The Bio-Fertilizer Unit, located in the VB Block of the School of Agriculture at ITM University, is well-equipped for practical training in bio-fertilizer production, specifically *Azotobacter* and *Rhizobium*.

**Objective:**

- Educate students on the production and application of bio-fertilizers.

- Promote sustainable farming practices through the use of bio-fertilizers.

### **Student Engagement:**

Students actively participate in the production process of bio-fertilizers, gaining practical experience and enhancing their knowledge of ecological farming techniques.

## **C. Other infrastructural facility**

The ITM University Sitholi Campus provides well-structured hostel facilities for both undergraduate (UG) and postgraduate (PG) agriculture students. These hostels offer a conducive living environment with essential amenities, ensuring a comfortable stay for students. Below is a detailed report on the hostel accommodations and common facilities available for agriculture students.

### **1. Hostel Accommodation:**

The campus has multiple hostels designed to cater to the needs of both UG and PG students. Each hostel is equipped with essential facilities such as common areas, water coolers, and dining spaces. The following is a breakdown of the available hostels, their room types, and respective capacities:

- **Sandipani Hostel:**
  - *Single-Seated Rooms:* 3 rooms with a capacity of 6 students.
  - *Double-Seated Rooms:* 96 rooms with a capacity of 192 students.
- **Narmada Hostel:**
  - *Three-seated rooms:* 52 rooms with a capacity of 156 students.
- **Santiniketan Hostel:**
  - *Double-Seated Rooms:* 25 rooms with a capacity of 50 students.
  - *Three-seated rooms:* 85 rooms with a capacity of 255 students.

### **2. Mess Facilities:**

To cater to the dining needs of the students, the campus provides two common messes, which serve hygienic and nutritious meals:

- **Annapurna Mess**
- **Kaveri Mess**

### **3. Water Facilities:**

The hostel premises are equipped with **three large water coolers** placed at key locations, ensuring students have access to safe drinking water at all times.

### **4. Gymnasium**

The ITM University Sitholi campus offers a well-equipped gym facility located on the first floor of the Annapurna Mess, providing convenient access for both male and female students. This gym is designed to support students in maintaining a healthy and active lifestyle, with a range of fitness equipment suitable for various workouts. Whether you're looking to lift weights, build stamina, or engage in cardio exercises, this facility accommodates all fitness levels and goals, promoting wellness within the campus community.

### **5. ITM Hospital**

The ITM University Sitholi campus in Gwalior features a multispecialty hospital dedicated to serving the healthcare needs of both students and faculty members. This facility is equipped to handle a wide range of medical needs, from routine check-ups and diagnostics to specialized treatments, ensuring that the campus community has access to quality medical care. With experienced healthcare professionals and modern equipment, the hospital promotes a healthy and supportive environment for all on campus.

### **6.4.5 Conduct of Practical and Hands-on Activity**

**It is important to have a sound grasp of the theory that underlies any professional degree. But there are some skills that can only be learned through hands-on-practice. It is important that much of the learning material in any given course should be provided in a way that allows students to get as involved as possible to increase their knowledge and abilities. Clearly mention how far students are getting desired practical and hands-on-training as per the curriculum and meeting above mentioned requirements.**

The School of Agriculture conducts subject-wise practical's as per syllabus requirements, and hands-on trainings are also regularly conducted at research farms and in laboratories. All the laboratories are well equipped and functional for conducting UG/PG practical's requirements. Practical manuals are also

developed. As per the syllabus, students also visit Agricultural Industries, ICAR/SAUs, and KVKs. Students are attached to various innovative trainings in progressive farmer's fields and industries.

### **Implementation of READY Program in School of Agriculture, ITM University, Gwalior**

The **Student READY (Rural Entrepreneurship Awareness Development Yojana)** program was implemented for the **B.Sc. (Hons.) Agriculture student's** during the academic session 2019-2020. The primary objective of this program was to promote rural entrepreneurship, provide practical experience in real-world agricultural settings, and equip students with essential skills and knowledge in agriculture and allied sciences. The program helped in building students' confidence, skills, and Indigenous Technical Knowledge (ITK) to prepare them for self-employment and rural development.

#### **Program Components:**

The program, as prescribed by the Fifth Deans Committee, comprised five key components to ensure holistic agricultural education and skill development:

- Rural Awareness Work Experience (RAWE)
- Experiential Learning with Business Mode
- Hands-on Training (HOT)/Skill Development
- Internship/In-Plant Training (IPT)/Industrial Attachment
- Student Projects

#### **Rural Agricultural Work Experience (RAWE):**

##### **RAWE consisted of four sub-components:**

- **Village Attachment:** Students conducted surveys, analyzed farming systems, and identified rural issues.
- **Unit Attachment:** Students worked in various agriculture-related units such as soil testing labs, plant clinics, and seed production facilities.
- **Agro-Industrial Attachment:** Students gained industry exposure through attachments with agro-based industries and organizations.
- **Plant Clinic:** Students assisted farmers by diagnosing plant diseases and recommending solutions.

#### **Details of READY Program of the Session 2019-2020**

**ELP Courses:**

The following Experiential Learning Program (ELP) courses were offered during the 2019-2020 session:

1. Crop Production (Integrated Farming System) - AGRON (E)-421
2. Crop Production: Water Management (Watershed, Micro-Irrigation, Problematic Water Utilization) - AGRON (E)-422
3. Genetics and Plant Breeding - GPB (E)-421
4. Bio-Fertilizer - SS (E)-421

**RAWE Industry/Agency Attachments:**

Students underwent training with the following industries and government agencies:

1. Krishi Vigyan Kendra (ICAR), Ministry of Agriculture and Farmers Welfare
2. Gwalior Sahakari Dugdh Sangh Maryadit, Gwalior
3. Granora Crop Seed Science Pvt. Ltd., Gwalior

**Details of READY Program of the Session 2020-2021**

**ELP Courses:**

The following Experiential Learning Program (ELP) courses were offered during the 2020-2021 session:

- Crop Production (Integrated Farming System) - AGRON (E)-421
- Crop Production: Water Management (Watershed, Micro-Irrigation, Problematic Water Utilization) - AGRON (E)-422
- Genetics and Plant Breeding - GPB (E)-421
- Bio-Fertilizer - SS (E)-421

**RAWE Industry/Agency Attachments:**

Students also underwent training with the following industries and government agencies:

1. Krishi Vigyan Kendra (ICAR), Ministry of Agriculture and Farmers Welfare
2. Gwalior Sahakari Dugdh Sangh Maryadit, Gwalior
3. Granora Crop Seed Science Pvt. Ltd., Gwalior

4. Vridhi Agro Organic India Pvt. Ltd. Mathura
5. Adarsh Enterprises, Khargone (M. P.)

### Details of READY Program of the Session 2021-22

#### **ELP Courses:**

The following Experiential Learning Program (ELP) courses were offered during the 2021-2022 session:

- |     |               |   |
|-----|---------------|---|
| 1.  | ELP-ABM-401   | Agribusiness and Industrial Management  |
| 2.  | ELP-ABM-402   | Agriculture Marketing   |
| 3.  | ELP-ABM-403   | Agricultural Heritage and Agritourism   |
| 4.  | ELP-AGRON-401 | Agriculture Waste Management  |
| 5.  | ELP-AGRON-402 | Organic Production Technology   |
| 6.  | ELP-AGRON-403 | Commercial Crop Production Technology (Agronomical Crops)                       |
| 7.  | ELP-ENT-401   | Commercial Beekeeping   |
| 8.  | ELP-ENT-402   | Production Technology For Bioagents and Biofertilizer                           |
| 9.  | ELP-GPB-401   | Seed Production and Technology  |
| 10. | ELP-HORT-401  | Commercial Horticulture(Vegetable and Spices Crop Production)                   |
| 11. | ELP-HORT-402  | Floriculture and Landscaping  |
| 12. | ELP-HORT-403  | Processing Of Fruits and Vegetables For Value Addition                          |
| 13. | ELP-HORT-404  | Commercial Nursery Establishment and Mass Multiplication Of Horticultural Crops |

14.	ELP-HORT-405	Protected Cultivation Of High Value Horticulture Crops
15.	ELP-HORT-406	Medicinal and Aromatic Crop Production
16.	ELP-PP-401	Mushroom Cultivation Technology
17.	ELP-PP-402	Plant Health Diagnosis and Management
18.	ELP-SS-401	Soil Plant Water and Seed Testing

**RAWE Industry/Agency Attachments:**

Students also underwent training with the following industries and government agencies:

**S. No. List of industries/government agencies for training under AIA**

1. Plantica Natural, Dehradun, U. K.
2. M/s. Prashant seeds, Suryapeta, Telangana
3. Krishi Vigyan Kendra (ICAR) Ministry of Agriculture and Farmers Welfare
4. Gwalior Sahakari Dugdh Sangh Maryadit Gwalior M.P.
5. OMCAR INDIA, Pvt. Ltd, Gwalior
6. MANMUL, Milk Producers Societies, Mandya, Karnataka
7. MULKANOOR Cooperative Rural Credit and Marketing Society, Ltd., Hanamkonda, Telangana
8. Uttam Agro Industries, Udupi Taluk, Karnataka
9. Humane Agrariab Centre, Banda, U.P.
10. National Fertilizer Limited (NFL-A Govt. of India Undertaking), Guna, M.P.
11. Tirhut Dugdh Utpadak Sahkari Sangh Limited, Muzaffarpur, Bihar
12. Kargil, Organic Fertilizer company, Ratlam, M.P.
13. Sresta Natural Bio-products Pvt. Ltd., Hyderabad

**Details of READY Program of the Session 2022-23**

### **ELP Courses:**

The following Experiential Learning Program (ELP) courses were offered during the 2022-2023 session:

- |     |               |   |
|-----|---------------|---|
| 1.  | ELP-ABM-401   | Agribusiness and Industrial Management  |
| 2.  | ELP-ABM-402   | Industrial Training in Product Development and Marketing                        |
| 3.  | ELP-ABM-403   | Agricultural Heritage and Agritourism   |
| 4.  | ELP-AGRON-401 | Agriculture Waste Management  |
| 5.  | ELP-AGRON-402 | Organic Production Technology   |
| 6.  | ELP-AGRON-403 | Commercial Crop Production Technology (Agronomical Crops)                       |
| 7.  | ELP-ENT-401   | Commercial Beekeeping   |
| 8.  | ELP-ENT-402   | Production Technology for Bioagents and Biofertilizers                          |
| 9.  | ELP-GPB-401   | Seed Production Technology  |
| 10. | ELP-HORT-401  | Commercial Horticulture (Vegetable and Spices Crop Production)                  |
| 11. | ELP-HORT-402  | Floriculture and Landscaping  |
| 12. | ELP-HORT-403  | Processing Of Fruits and Vegetables for Value Addition                          |
| 13. | ELP-HORT-404  | Commercial Nursery Establishment and Mass Multiplication of Horticultural Crops |
| 14. | ELP-HORT-405  | Protected Cultivation Of High-Value Horticulture Crops                          |
| 15. | ELP-HORT-406  | Medicinal and Aromatic Crop Production  |
| 16. | ELP-PP-401    | Mushroom Cultivation Technology   |
| 17. | ELP-PP-402    | Plant Health Diagnosis and Management   |
| 18. | ELP-SS-401    | Soil Plant Water and Seed Testing   |
| 19. | ELP-GPB-402   | Seed Testing and Quality Assessment   |

### **RAWE Industry/Agency Attachments:**

#### **S.No. List of industries/government agencies for training under AIA**

1. ICAR-International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Hyderabad
2. ICAR-Central Research Institute of Dryland Agriculture, Hyderabad

3. VNR, Seeds Pvt. Ltd., Hyderabad
4. Nuziveedu, Seeds, Ltd. , Hyderabad
5. Krishi Vigyan Kendra (ICAR) Ministry of Agriculture and Farmers Welfare
6. Gwalior Sahakari Dugdh Sangh Maryadit Gwalior M.P.
7. National Fertilizer Limited (NFL-A Govt. of India Undertaking), Guna, M.P.
8. MANMUL, Milk Producers Societies, Mandya, Karnataka
9. MULKANOOR Cooperative Rural Credit and Marketing Society, Ltd., Hanamkonda, Telangana
10. Uttam Agro Industries, Udupi Taluk, Karnataka
11. Humane Agrariab Centre, Banda, U.P.
12. OMCAR INDIA, Pvt. Ltd, Gwalior
13. Tirhut Dugdh Utpadak Sakhari Sangh Limited, Muzaffarpur, Bihar
14. Kargil, Organic Fertilizer company, Ratlam, M.P.
15. Sresta Natural Bio-products Pvt. Ltd., Hyderabad
16. Leads Connect Pvt. Ltd. NOIDA, U.P.
17. Hogar Agro, Organization under MSME, Dehradoon, U. K.
18. Prashanth Seeds, Suryapeta, Telangana
19. Satkar Industries Pvt. Ltd., Indore M.P.
20. Zenesis Agro Pvt. Ltd. New Delhi
21. De Nova Seeds Pvt. Ltd. Hyderabad, Telangana
22. Plantica Natural, Dehradoon, U. K.

### **Details of READY Program of the Session 2023-2024**

#### **ELP Courses:**

The following Experiential Learning Program (ELP) courses were offered during the 2023-2024 session:

1. ELP-ABM-401 Agribusiness and Industrial Management
2. ELP-ABM-402 Industrial Training on Product Development and Marketing
3. ELP-AGRON-402 Organic Production Technology
4. ELP-ENT-401 Commercial Beekeeping

- |     |              |   |
|-----|--------------|---|
| 5.  | ELP-ENT-402  | Production Technology for Bioagents and Biofertilizers                          |
| 6.  | ELP-GPB-401  | Seed Production and Technology  |
| 7.  | ELP-HORT-401 | Commercial Horticulture (Vegetable and Spices Crop Production)                  |
| 8.  | ELP-HORT-402 | Floriculture and Landscaping  |
| 9.  | ELP-HORT-403 | Processing Of Fruits and Vegetables for Value Addition                          |
| 10. | ELP-HORT-404 | Commercial Nursery Establishment and Mass Multiplication of Horticultural Crops |
| 11. | ELP-HORT-405 | Protected Cultivation Of High-Value Horticulture Crops                          |
| 12. | ELP-PP-401   | Mushroom Cultivation Technology   |
| 13. | ELP-SS-401   | Soil Plant Water and Seed Testing   |
| 14. | ELP-AHS-401  | Poultry Production Technology   |

**RAWE Industry/Agency Attachments:**

Students also underwent training with the following industries and government agencies:

**S.No. List of industries/government agencies for training under AIA**

- |    |  |
|----|--|
| 1  | ICAR-International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Hyderabad |
| 2  | ICAR-Central Research Institute of Dryland Agriculture, Hyderabad                          |
| 3  | VNR, Seeds Pvt. Ltd., Hyderabad  |
| 4  | Nuziveedu, Seeds, Ltd., Hyderabad  |
| 5  | Krishi Vigyan Kendra (ICAR) Ministry of Agriculture and Farmers Welfare                    |
| 6  | Gwalior Sahakari Dugdh Sangh Maryadit Gwalior M.P.   |
| 7  | National Fertilizer Limited (NFL-A Govt. of India Undertaking), Guna, M.P.                 |
| 8  | MANMUL, Milk Producers Societies, Mandya, Karnataka  |
| 9  | MULKANOOR Cooperative Rural Credit and Marketing Society, Ltd., Hanamkonda, Telangana      |
| 10 | Uttam Agro Industries, Udupi Taluk, Karnataka  |

- 11 Humane Agrariab Centre, Banda, U.P.
- 12 Omcar India, Pvt. Ltd, Gwalior
- 13 Tirhut Dugdh Utpadak Sahkari Sangh Limited, Muzaffarpur, Bihar
- 14 Kargil, Organic Fertilizer company, Ratlam, M.P.
- 15 Sresta Natural Bio-products Pvt. Ltd., Hyderabad
- 16 Leads Connect Pvt. Ltd. NOIDA, U.P.
- 17 Hogar Agro, Organization under MSME, Dehradun, U. K.
- 18 Prashanth Seeds, Suryapeta, Teangana
- 19 Satkar Industries Pvt. Ltd., Indore M.P.
- 20 Zenesis Agro Pvt. Ltd. New Delhi
- 21 De Nova Seeds Pvt. Ltd. Hyderabad, Telangana
- 22 Plantica Natural, Dehradun, U. K.

Through these components, the READY program successfully enhanced students' practical skills, entrepreneurship abilities, and readiness for real-world agricultural challenges, thereby preparing them for future endeavors in agriculture and allied sectors.

### **Future plan of the ELP for the Session 2024-2025**

1. Agribusiness and Industrial Management
2. Industrial Training on Product Development and Marketing
3. Organic Production Technology
4. Commercial Beekeeping
5. Production Technology for Bioagents and Biofertilizers
6. Seed Production Technology
7. Commercial Horticulture (Vegetable and Spices Crop Production)
8. Floriculture and Landscaping
9. Processing of Fruits and Vegetables for Value Addition
10. Commercial Nursery Establishment and Mass Multiplication of Horticultural Crops
11. Protected Cultivation of High Value Horticultural Crops
12. Mushroom Cultivation Technology
13. Soil, Plant and Water Testing
14. Poultry Production Technology

#### **6.4.6. Supervision of students in UG programmes:**

Within one week after the admission of the newly admitted students of B.Sc. (Hons.) Agriculture, an orientation session is being held in the school auditorium for two days to educate the students regarding course curriculum, academic rules, hostel rules, anti ragging rules, introduction with the faculty members and examination rules.

In order to closely monitor the overall development of the students and to help them in the problems being faced by them in academic activities, hostels, sports and extra curricular activities, the school administration is allotting mentors to the newly admitted students. The allotted mentors continue with the concern student from the date of admission till they leave the school after the completion of their education.

#### **6.4.7. Feedback of Stakeholders**

**Mention the feedback mechanism (duly supported by the documents) from different stockholders of the degree programme. What action the University has taken in last five years to issues raised in the feedback?**

The feedback process at ITM University, Gwalior is an integral part of maintaining and enhancing the quality of education. In line with the National Assessment and Accreditation Council (NAAC) guidelines, feedback from various stakeholders—students, alumni, employers, and faculty—is collected, analyzed, and used to inform decision-making and continuous improvement.

This document outlines the guidelines for collecting feedback, focusing on feedback concerning faculty performance and course content. The process ensures that all relevant stakeholders are engaged, and that their input is systematically used to enhance the educational experience at ITM University.

#### *Feedback Collection Process*

##### **➤ Feedback from Students:**

Faculty Feedback (Mid-of-the-Semester and End-of-the-Semester):

- **Frequency:** Twice per semester (Mid-of-the-Semester and End-of-the- Semester).
- **Responsibility:** The Internal Quality Assurance Cell (IQAC) will oversee the collection of feedback, utilizing teachers not engaged in classes from that school.
- **Mode of Collection:** Feedback will be collected through the Management Information System (MIS) of the University.
- **Action:** Feedback concerning faculties will be shared with the HoD/Dean/Coordinators, who will create an action taken report and share it with IQAC. The IQAC will then share this report with the Chairman IQAC for further processing if needed.
- **Use:** The feedback will be a critical component of the teachers' performance evaluation. Teachers who receive below 60% on the feedback benchmark may not be retained at the University.

#### **Content Feedback (End-of-the-Semester):**

- **Frequency:** Once per semester (End-of-the- Semester).
- **Responsibility:** Faculties will collect feedback from students concerning course content at the end of each semester.
- **Mode of Collection:** Feedback will be collected through the University's MIS.
- **Feedback Areas:** The feedback will address the comprehensiveness, relevance, and alignment of the course content with learning outcomes, real-world applications, and employability.
- **Action:** Feedback concerning content will be routed to the HoD/Dean and Chairman of the Board of Studies (BoS). They will create an action taken report to be attached to the BoS minutes.

#### ➤ **Faculty Feedback (Yearly):**

- This will be given by HoD/Deans of the faculty working with them and will be a part of performance appraisal.

#### ➤ **Feedback from Alumni and Employers**

##### **Alumni and Employer Feedback on Course Content:**

- **Frequency:** Collected during campus visits or through special drives organized by the University.
- **Responsibility:** The respective HoD/Dean will ensure that feedback is collected from alumni. TAP Cell will ensure that the same is collected from employers during their visits.
- **Mode of Collection:** Feedback will be collected via structured questionnaires or interviews and recorded in the MIS.
- **Feedback Areas:** Focus on the relevance, comprehensiveness, and applicability of course content to industry standards and employability.
- **Action:** Feedback concerning course content will be forwarded to the HoD/Dean and Chairman BoS. They will draft an action-taken report to be included with the BoS minutes.

### Reporting and Action

#### Action Taken Reports (ATR):

- **Faculty Feedback:** The HoD/Dean/Coordinators will prepare an action taken report based on faculty feedback shared by IQAC and forward it to IQAC again. The IQAC will then forward this to the Chairman IQAC for further actions, if necessary.
- **Content Feedback:** The HoD/Dean and Chairman BoS will prepare an action-taken report based on content feedback, which will be attached to the BoS minutes and discussed during meetings.

#### Sharing of Reports:

- Both the faculty feedback ATR and the content feedback ATR will be shared with the Academic Council of the University for review and further action.

#### Periodic Collection of Feedback

Stakeholder	Feedback Type	Frequency	Responsible Party
Students	Faculty Feedback	Mid-of-the-Semester, End-	IQAC

		of-the- Semester	
Students	Content Feedback	End-of-the Semester	IQAC
Alumni & Employers	Content Feedback	During Visits/Special Drives	TAP Cell

### **Conclusion**

This feedback system is an essential part of maintaining high standards in teaching and learning at ITM University, Gwalior. By systematically collecting and analyzing feedback from various stakeholders, the University ensures continuous improvement in its academic offerings and faculty performance. This process not only enhances the educational experience but also ensures that the curriculum remains relevant and aligned with industry needs and student expectations.

### **6.4.8 Student Intake and Attrition in the Program for the Last Five Years**

**Year-wise information on sanctioned strength, actual intake, and attrition in the last five years of the degree program, in tabular form, is given below.**

#### **Student Intake and Attrition**

Name of the Degree Program	Sanctioned Seats	Actual student admitted in last five years					Attrition (%)				
		Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5
B.Sc. (Hons)Ag	240	2019-20	2020-21	2021-22	2022-23	2023-24	2019-20	2020-21	2021-22	2022-23	2023-24
		240	264	264	264	264	3.0	7.2	5.8	5.0	0.12

#### **6.4.9 ICT Application in Curriculum Delivery**

**The ICT is now integral part of the teaching programme. ICAR has also been promoting the use of ICT in teaching and practical. Mention whether the Degree Programme is meeting the expectations. If there is any shortfall, it shall be clearly mentioned.**

In the digital age, Information and Communication Technology (ICT) has become an indispensable component of modern education, especially in higher education. The integration of ICT in curriculum delivery has enhanced the teaching-learning process, making it more interactive, efficient, and accessible. This report outlines the ICT applications in the B.Sc. (Hons.) Agriculture Programme, specifically focusing on the use of Management Information Systems (*Prabandh*), Learning Management Systems (*Tattva*), interactive boards in classrooms, projector-enabled classrooms, and digital library facilities.

##### ➤ **Management Information System (*Prabandh*)**

The university has dedicated software, the **Management Information System (MIS)**, which automates the activities of examination, student registration, attendance system (for staff and students), student notice section, etc. To meet future challenges like accessing information and the availability of information, the software maintains the information on the cloud and can be accessed by the person from anywhere and anytime.

- The Management Information System (MIS) Portal has been conceived to meet the information needs of the students and parents of ITM University, Gwalior.
- It has been attempted to create a strong online platform, the student information system, wherein parents and students can find almost all the information about their wards and keep themselves updated about their performance.
- Parents and students can access the following information from their customized MIS login.
- Using this portal, parents and students can see their fee dues, daily notices and circulars, results, and exam forms, give feedback, write suggestions and grievances etc.

##### ➤ **Learning Management System (*Tattva*)**

The **Learning Management System (LMS)** plays a crucial role in the effective delivery of academic content to both students and teachers. It serves as a platform where teachers can upload lecture notes, assignments, quizzes, and assessments, while students can access study materials, submit assignments, and receive feedback.

- **Student Benefits:**

- **Access to Learning Materials:** Students can access study materials and notes anytime, ensuring a flexible learning environment.
- **Assessment Tools:** The LMS allows for online quizzes, tests, and assignments, which can be auto-graded for instant feedback.
- **Student-Teacher Interaction:** Discussion forums and chat options facilitate real-time communication between students and teachers.

- **Teacher Benefits:**

- **Content Management:** Teachers can upload syllabi, notes, and presentations for each course, ensuring organized access to resources.
- **Performance Tracking:** LMS provides detailed insights into student progress and performance through analytics and reports.
- **Feedback System:** Teachers can provide timely feedback on assignments and assessments, enhancing the learning experience.
- Moodle (Tattva) is also used for a variety of assessments including multiple-choice and short-answer questions.
- Smart classrooms with inbuilt projectors for powerpoint presentations and videos.
- ICT comprising of NPTEL lectures.
- MOOC courses for all subjects
- Managed ERP for documentation
- Course-wise audio video lectures by faculty in Moodle (Tattva)

- Activity Based Learning
- Management Information System (MIS) for Students

➤ **Smart Interactive Panels in Classrooms**

The integration of **smart panels** in classrooms adds a layer of interactive learning to the B.Sc. (Hons.) Agriculture Programme. Smart panels are digital touch boards that allow instructors to present multimedia content, annotate on the screen, and engage students with visual aids.

- **Interactive Learning:** Teachers can use digital tools such as diagrams, graphs and simulations, which help students visualize complex agricultural concepts.
- **Real-Time Annotation:** Teachers can draw and write directly on the smart panel, making explanations more dynamic and engaging.
- **Multimedia Integration:** Videos, presentations, and other multimedia resources can be seamlessly integrated into lessons, catering to different learning styles.

**Detail Description of Interactive Panel**

<b>DISPLAY</b>	
Active Screen Size	<b>86"</b>
Model No.	PRO AT-86P
Speaker	2X20 W Speaker
Subwoofer	25W
Speaker	2X20 W Speaker
<b>OPERATING SYSTEM</b>	
RAM	DDR4 SGB
ROM	64GB (OPTIONAL 128GB)
System Version	Android 13.0
CPU	Octa-core

➤ **Projector-Enabled Classrooms**

Projector-enabled classrooms are another critical ICT infrastructure that enhances the learning environment in the B.Sc. (Hons.) Agriculture Programme.

- **Presentations:** Teachers use projectors to display Power Point slides, videos, and other educational materials, ensuring that all students have a clear view of the content.
- **Group Learning:** Projectors enable the display of group projects and presentations, encouraging collaborative learning.
- **Visual Learning:** Complex concepts such as crop management, pest control, and soil analysis can be better understood through visual representations.

➤ **Digital Library**

The **digital library** is an essential resource for students and faculty, providing access to a vast collection of e-books, e-magazines, agricultural journals, and specialized software. The library is equipped with modern technology and resources that support academic and research needs.

- **E-Books and E-Journals:** The library subscribes to **2,040 e-books** and **116 e-journals**, giving students and faculty access to the latest research and developments in agriculture. These resources cover a wide range of topics, from crop management to emerging agricultural technologies, offering valuable insights for both coursework and independent research.
- **Software-Enabled Computers:** The library is equipped with **10 computers** that are loaded with specialized agricultural software. These computers aid students in conducting **data analysis, statistical calculations, and simulation** exercises, which are essential for research projects and field studies. The software provided helps in modelling crop growth, pest management simulations, and financial planning for farm operations.
- **24/7 Access to Resources:** With digital access through the library’s portal, students can retrieve academic content, including e-books, e-journals, and research databases, from anywhere and at any time. This ensures **self-paced learning** and the ability to stay updated on the latest academic material, even outside of library hours.

## ➤ **Library Facility**

### **1. Central Library Summary**

The central library at ITM University, Gwalior, serves as a vital resource for students, faculty, and researchers in the School of Agriculture (SOAG). The library is equipped with modern tools and resources, contributing to a comprehensive learning and research environment. The key highlights of the library facilities are outlined below:

1. **Online Journals Package:** 06 packages (DELNET, Web Of Science, EBSCO, MAT online, HBR, Inventi, NDL)
2. **Magazines:** 10 subscriptions
3. **Newspapers:** 05 print newspapers
4. **E-Newspapers:** 191 e-newspapers available in 12 languages through DELNET
5. **Library Services:** Includes TURNITIN & DRILLBIT plagiarism services, WEB-OPAC (Online Public Access Catalog), Current Awareness Service (CAS), journal content services, and reprographic services.
6. **E-books:** 2040 titles available through EBSCO
7. **E-journals:** 116 titles available through DELNET
8. **Subject Encyclopedias:** 04
9. **Dictionaries:** 07
10. **Projects & Dissertations:** 213 reports
11. **Library Software:** e-Granthalya, KOHA
12. **Digital Library:** 10 computers available for accessing online resources
13. **Library Reading Capacity:** 70 individuals
14. **Staff:** 02 library staff members
15. **Operating Hours:** 09:00 AM to 11:00 PM

### **2. Library Resources of School of Agriculture**

#### **Books Collection:**

1. **Number of Titles:** 1059
2. **Number of Volumes:** 7513
3. **Dissertations:** 213

**Print Journals:** The library subscribes to 09 prominent journals that serve as essential resources for agriculture-related research and studies:

1. Indian Journal of Weed Science

2. Indian Journal of Genetics and Plant Breeding
3. Progressive Agriculture
4. Agricultural Science Digest
5. Journal of the Indian Society of Soil Science
6. The Indian Journal of Agricultural Sciences
7. Vegetable Science
8. The Indian Journal of Horticulture

**Magazines:**

1. Yojana
2. Kurukshetra
3. Drashti
4. Pratiyogita Darpan
5. India Today
6. Competition Success
7. Indian Farming
8. Indian Horticulture
9. Kheti
10. Phal Phool

**Newspaper:**

1. Dainik Bhaskar
2. Times of India
3. The Hindu
4. The Economic Times

**3. Digital Resources**

The SOAG Library at ITM University is well-equipped with digital resources. These resources are aimed at enhancing the research capabilities of students and faculty. The digital collection includes:

- **E-books:** 4020 titles available through EBSCO
- **E-journals:** 116 titles available through DELNET
- **E-newspapers:** 191 newspapers in 12 languages via DELNET. This includes 14 in Hindi and 15 in English.

### ✓ **Library Services and Tools**

To support academic integrity and research, the library provides access to TURNITIN and DRILLBIT plagiarism detection services. Other advanced services include:

- **WEB-OPAC:** An online public access catalog to facilitate easy search and retrieval of library resources.
- **Reprographic Services:** For photocopying and scanning of important documents.
- **Journal Content Services:** Facilitates access to the latest journal articles.

### ✓ **Infrastructure and Facilities**

The SOAG library offers a well-furnished reading space with a seating capacity of 90, along with a digital library consisting of 20 computers for accessing e-resources. The library is managed by two qualified staff members who ensure smooth operation and assistance to users.

### ✓ **Library Operating Hours**

The central library operates from 9:00 AM to 11:00 PM, providing ample time for students and faculty to access resources for study and research.

This comprehensive library resource contributes significantly to the academic environment of ITM University, supporting the teaching, learning, and research activities of the School of Agriculture. The integration of digital and physical resources aligns with the university's commitment to quality education and research.

### **Impact on of ICT on Curriculum Delivery**

The incorporation of ICT tools in the curriculum delivery of the B.Sc. Agriculture Programme has resulted in:

- **Enhanced Engagement:** ICT tools like smart panels and projectors make lessons more interactive and engaging, helping students grasp complex topics more easily.
- **Improved Access to Resources:** Through the LMS and digital library, students have constant access to learning materials, promoting self-study and deeper understanding of subjects.
- **Efficient Assessment and Feedback:** LMS-based assessment tools allow teachers to provide quick feedback, which is essential for continuous improvement in student performance.

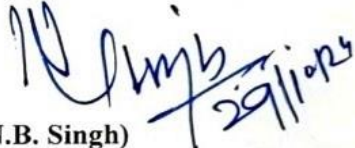
- **Collaborative Learning:** The use of group projects, presentations, and discussion forums fosters collaborative learning and peer-to-peer interaction.

**6.4.10.** The information pertaining to 6.4.1 to 6.4.9 has been provided for each one of the UG, PG, and Ph.D. degree programs separately and to be presented college-wise. The information regarding accreditation of B.Sc.(Hons.) Agriculture has been prepared as per ICAR guidelines is being submitted for the consideration.

**6.4.11.** Since the accreditation of programs is related to all India admission from ICAR and also has weight for college accreditation, the data presented in Section 6.4 is liable for verification at any stage. Every care has been taken for preparation and presentation as per ICAR guidelines.

**6.4.12. Certificate**

I, Prof. N.B. Singh, Dean, School of Agriculture, hereby certify that the information contained in Sections 6.4.1 to 6.4.9 is furnished as per the records available in the School of Agriculture, ITM University, Gwalior.

  
(N.B. Singh)  
Dean  
School of Agriculture  
ITM University, Gwalior  
**DEAN**  
School of Agriculture  
ITM University  
Gwalior (M.P.)