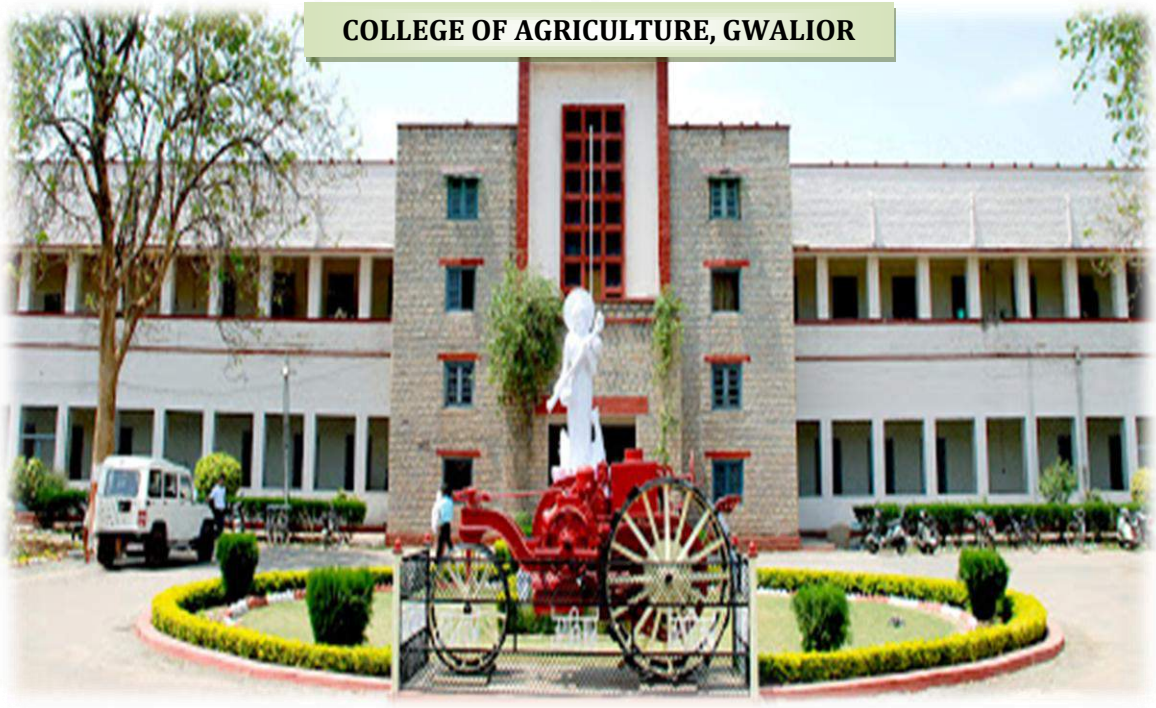
SELF STUDY REPORT

COLLEGE OF AGRICULTURE, GWALIOR



RAJMATA VIJAYARAJE SCINDIA KRISHI VISHWA VIDYALAYA

RAJA PANCHAM SINGH MARG, GWALIOR-474002 (M.P.)

PREFACE

It is my profound privilege to bring forth this self-study report (SSR) for accreditation of the College of Agriculture, Gwalior. This attempt has bestowed upon us an opportunity to review and analyze the institutional progress during the years meant for assessment and braced us up in our pursuit for quality and excellence. Regular meetings were held with the entire stake holder's viz., the faculty, university authorities, students and parents to review the report. Meetings were also held with the Heads of the Department to discuss the details of the Departmental profiles. The process of preparation of the SSR was a happy journey towards the desired destination. The preparation of SSR is not an output of any individual; rather it has been a team effort.

The college is equipped with the best infrastructure and equipments, which has been instrumental in creating the credibility. College of Agriculture, Gwalior alumni are absorbed in different national and multi-national institutes, as well as few students have started their own business units and are promising entrepreneurs, besides being employed in public sector Banks thus, contributing immensely to the nation and particularly the agricultural system, We believe that having established our credentials in the field of agricultural education, we need to take our commitment forward through introducing newer and higher avenues for the budding agriculture students. Our aim is to imbibe the good work practices as well as research culture and professional attitude amongst the student fraternity to make them able and competent to contribute to the ultimate goal of having sustainable agriculture.

This self-study report is the collective effort of the university authority, staff (both teaching and non-teaching) and students. I appreciate the deep involvement and painstaking cooperative efforts of the entire team who have extended whole hearted support in the preparation of this Self Study Report. I am very grateful to the worthy Vice-Chancellor for providing his valuable guidance. I also express my sincere thanks to the Dean Faculty of Agriculture for compilation of SSR and other officers of the university, HODs, faculty members and students and especially to the members of the Steering Committee. Last but not the least I wish thanks to all those who directly or indirectly supported/ helped me/us in preparing the self-study report.

I am very much keen to meet the Team of Accreditation during their forthcoming visit to our institution. Such occasion and interaction provides all of us; university authority, faculty members, supporting staff, students and other stake holders to enrich our selves with their comments and valuable suggestions.

We are eagerly looking forward to welcome the ICAR Peer Review Team and hope they will applaud for our efforts.

With thanks and greetings

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COLLEGE OF AGRICULTURE, GWALIOR

HISTORY

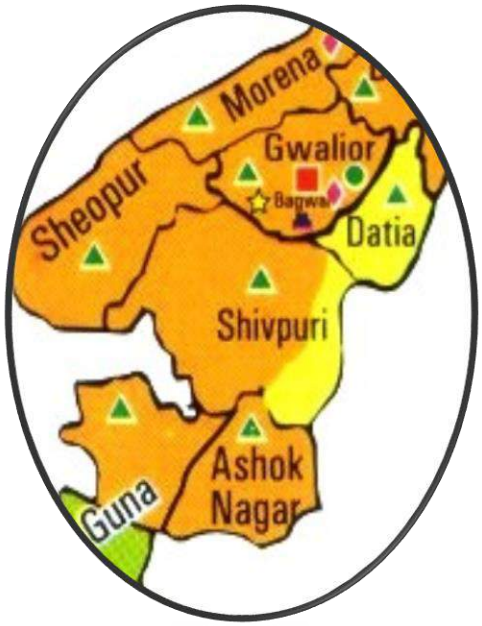
The college of Agriculture Gwalior was established in the year 1950. This is the oldest college of Madhya Bharat State. In the beginning this college was affiliated to Agra University and later on to Vikram University Ujjain. This college has celebrated its golden jubilee in the year 2000. After the establishment of Jawaharlal Nehru Krishi Vishwa Vidyalaya Jabalpur in the year1964, this college has been affiliated to it. On 19th August 2008 a new Agriculture University namely Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya came into existence after bifurcation of JNKVV, Jabalpur with its head quarter in Gwalior and this college has become the main campus of Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya. The Central Research Farm of the college (Regional Agriculture Research Station) was established in 1916.

LOCATION

The College of Agriculture, Gwalior is located in Gird Zone and lies on latitude 26^{0}2'N and longitude 78^{0}2'E with MSL varying from 152 to 529 meters. The maximum temperature during summer reaches up to 48^{0}C and minimum up to 3^{0}C in winter. The average annual rainfall of the zone is 751 mm. Chambal, Parvati and Sindh are important rivers in this zone. The College is located on Gwalior-Bhind highway and is 1 km away from Gwalior railway station and bus stand. Gwalior is on New Delhi – Bhopal main railway track just 315 km away from New Delhi. It is well connected with Jhansi, Jaipur, Kota, Kanpur, Lucknow, New Delhi, Indore and Agra by road as well as by railways.

JURISDICTION AREA

Eight districts of M.P. *viz* Ashoknagar, Bhind, Datia, Guna, Gwalior, Morena, Sheopur and Shivpuri comes under the jurisdiction of College of Agriculture, Gwalior.



ORGANIZATIONAL SETUP:

The UG and PG teaching is imparted through electronic media (PowerPoint presentation). For Bachelor degree programmes the admission is made through Pre Agriculture Test for Faculty of Agriculture organized by MP Board of Professional Examination, Bhopal. Admission in Post-Graduate studies is given on merit basis. Ten percent extra seats are created over and above the prescribed intake capacity for Indians living abroad and foreign nationals besides payment seats. The College has well equipped laboratories, library, instructional farm, ARIS cell linked with global information system, class-room facilities and qualified faculty. The students live in pleasant and intellectually stimulating environment with well-furnished hostels for boys and girls. Well-equipped Gymnasium, NCC, NSS, educational tours and agro-industrial information enable students to develop their personality, whereas placement cell guides them to choose the profession. Rural Agricultural Work Experience is imparted to the students to understand the real village farming situation.

MISSION

To impart education, conduct research and extension activities for enhancing productivity, optimization of profit and sustainability of agriculture and allied sector and improving rural livelihood in the state of Madhya Pradesh.

MANDATES

- To serve as a centre of higher education, research and extension in the field of agriculture and allied sciences.
- To disseminate technologies to farmers, extension personnel's and organizations engaged in agricultural development through various need based extension programs.

Faculty

As per faculty recommended by ICAR the faculty strength is not sufficient. However, the research staffs, extension staff contractual faculty, guest faculty, adjunct faculty are being appointed to complete the curriculum of the undergraduate and post graduate degree programme.

6.5. SELF-STUDY REPORT FOR THE COLLEGES

6.5.1. COLLEGE ADMINISTRATION

6.5.1.1. College Dean's Office Establishment:

The Dean's post is sanctioned by the appropriate authority as per ICAR Model Act. The Dean is appointed through open selection on all India bases.

Staff available in the Dean's Secretariat:

Dean's Name	**Dr. Reeti Singh**
Weather the Dean's post sanctioned by the appropriate authority as per ICAR Model Act/UGC guidelines	Yes
Date of Selection of Present Dean	**01/04/2021**
Mode of Selection	**Seniority Basis**

Dean's office sanction establishment

S.No.	Designation	Discipline	Pay scale	S	F	V	Present place of posting
1.	Dean	Administration	37400-67000+10,000AGP	1	0	1	COA GWL.
2.	ASSOC. Prof.	Agronomy	37400-67000+9000 AGP	1	0	1	-
3.	ASSOC. Prof.	Soil science	37400-67000+9000 AGP	1	0	1	-
4.	ASSOC. Prof.	Ento.	37400-67000+9000 AGP	1	1	0	COA GWL.
5.	ASSOC. Prof.	Extension	37400-67000+9000 AGP	1	0	1	-
6.	ASSOC. Prof.	Horticulture	37400-67000+9000 AGP	1	1	0	COA GWL.
7.	ASSOC. Prof.	LPM	37400-67000+9000 AGP	1	0	1	COA GWL.
8.	ASSOC. Prof.	Botony	37400-67000+9000 AGP	1	0	1	-
9.	ASSTT. Prof.	Agronomy	15600-39100+6000 AGP	4	0	4	-
10.	ASSTT. Prof.	Plant Beeding	-do-	1	0	1	-
11.	ASSTT. Prof.	Soil science	-do-	3	1	2	COA GWL.
12.	ASSTT. Prof.	Ento.	-do-	2	2	0	COA GWL.
13.	ASSTT. Prof.	PP	-do-	2	0	2	-
14.	ASSTT. Prof.	Extn.	-do-	3	2	1	COA GWL.
15.	ASSTT. Prof.	Horticulture	-do-	1	0	1	-do-
16.	ASSTT. Prof.	Eco.	-do-	2	1	1	-do-
17.	ASSTT. Prof.	Engineering	-do-	1	1	0	-do-
18.	ASSTT. Prof.	Statistics &maths	-do-	1	1	0	-do-
19.	ASSTT. Prof.	Botany	-do-	1	0	1	-do-
20.	ASSTT. Prof.	Physical Education	-do-	1	0	1	-
21.	ASSTT. Prof.	English	-do-	1	0	1	-
22.	Librarian	Library	-do-	1	0	1	-
23.	PTI	Sport	-do-	1	0	1	-
24.	Dairy Manager	Dairy	Pay level-7	1	0	1	-
25.	Asst. Grade 1	COA GWL.	Pay level-7	1	1	0	COA GWL.
26.	Asst. Grade 2	COA GWL.	Pay level-6	4	2	2	-do-
27.	Asst. Grade 3	-do-	Pay level-4	5	1	4	-do-
28.	Jr. Stenographer	CNP	Pay level-7	1	0	1	-
	HOD Stenographer	CNP	Pay level-7	10	9	1	-do-
29.	Jr. computer	CNP	Pay level-6	1	0	1	-
30.	Lab Technician	-do-	-do-	9	0	0	-
31.	mechanic	-do-	Pay level-7	1	0	1	-
32.	Black smith	-do-	Pay level-6	1	0	1	-
33.	compounder	-do-	Pay level-4	1	0	1	-
34.	Carpenter	-do-	Pay level-6	1	0	1	-
35.	Electrician	-do-	Pay level-6	1	1	0	-do-

INFRASTRUCTURE ***(Give the details of the infrastructure available such as furniture, computer etc.)***

36.	FEO	-do-	-do-	1	0	1	-
37.	Driver	-do-	Pay level-4	2	0	2	-do-
38.	Pump Driver	-do-	-do-	1	0	1	-
39.	insect Setter	-do-	-do-	1	0	1	-
40.	Artist	-do-	Pay level-6	1	0	1	-
41.	Lab Attendant	-do-	pay level-3	8	0	8	-
42.	Peon/*Chokidar*/Farash/sweeper	-do-	pay level-1	8	2	6	COA GWL.
							COA GWL.
43.	Library Sorter	-do-	pay level-1	2	0	2	-

Dean's Secretariat: Faculty support in Dean's Secretariat

S.No.	Units	In-Charge	Designation
1.	Technical Cell	Dr. Shobhana Gupta	Sr. Scientist
2.	Academic Cell	Dr. S.K. Trivedi (PG & Ph.D.)	Professor
3.	Examination Cell	Dr. S.K. Trivedi (PG & Ph.D.)	Professor
4.	Library	Sh. Dheeraj Shrivastava	Tech. Asst. Library
5.	Student Placement Cell	Dr. S.K. Trivedi	Professor
6.	ARIS Cell	Dr. V. B. Singh	Professor
7.	Establishment Cell	Mr. M.S. Kuswaha	Asstt.Grade-III
8.	Accounts & Finance Cell	Dr. (Smt.) Shasi S. Yadav Sh. D.K. Pradhan	Scientist (DDO-1) Asst.Gr.-1
9.	NCC	Dr. S.P.S. Tomar (Boys)	Scientist
10.	NSS	Dr. Shobhana Gupta	Sr. Scientist
10.	Labor Welfare Office	Dr. D.S. Sasode	Sr. Scientist
11.	Instructional Farm Cell	Dr. V.S. Bhadouria	S.T.O.
12.	Instructional Dairy Unit	Dr. C.B. Sachan	Professor
13.	Extra Curricular activity Cell		
	a. Cultural Cell	Dr. S.K. Trivedi	Professor
	b. Sports Cell	Dr. S.P.S. Tomar	Scientist

The Secretariat is well equipped and furnished. All the staffs are provided with computers along with internet connections, along with Wi-Fi facility. Printers, scanners, photocopy machines, telephone are available for office use.

Dean's Office-	Yes. Necessary infrastructure, office, furniture and computer facilities are available.		
P S Office-	Yes. Separate office with furniture and computer facilities.		
A A O Office-	Yes. Independent office room, furniture and computer are available.		
Cashier Chamber-	Yes, with all the facilities.		
Store(s)-	Yes		
Committee Room-	Yes, with video conferencing facilities.		
Waiting Lounge / Hall- for Visitors	Yes		
Common room for girl students-	Yes		
Washrooms/Toilets-	Yes		
Auditorium-	Yes.	Seating capacity:	200
Computer Centre-	Yes		40

Department:-

Names: Agricultural Economic; Agronomy; Agricultural Meteorology; Entomology; Extension Education; Genetics and Plant Breeding; Horticulture; Plant Pathology; Soil Science; Vegetable Science, Fruit Science, Agriculture Engineering, Agriculture Statics Agriculture Economics.

Lecture Halls(No.)	08
Facilities in the lecture hall like seating capacity, LCD Projector, Computer, CC Camera, Blackboard, screen.	Seating capacity 50 each 08 Halls seating capacity 40 students LCD projector and Computer with podium :Yes in each lecture hall
Smart Classrooms(No.)	04
Seminar Rooms(No.)	01 each (All Departments)
College Library	01
Departmental Computer facility	Each faculty member has computer facility.

6.5.1.2. Monitoring Mechanism for Quality Education:

6.5.1.2.1. Teaching

The lectures conducted by the faculty are being regularly monitored by The Dean and Academic Staff. Students who are academically weak are given special guidance and extra lectures are conducted for improvement.

After the declaration of result of each semester the results of the students are categorized into four category *viz.*, Distinction, First class, Second class and Pass class. The results of each subject are discussed with students. The results are interpreted and guidance/suggestions are made to improve the results. The innovative suggestions recommendations are forwarded to faculty meeting and academic council.

Monitoring of Teaching

- Self-appraisal report of individual teachers is evaluated by Dean, DFA, DRS, DES, DI and Hon'ble VC.
- Evaluation of teachers through feedback Performa from students.
- Programme of work, synopsis and thesis work of PG students is approved in Departmental Advisory Committee and finally approved by the Dean & DI.
- CCTV cameras have been installed for regular surveillance.
- Programme of work, synopsis and thesis work of PG students is approved in Departmental Advisory Committee. PG students deliver synopsis seminar in their departments to get feedback from the departmental faculty. The synopsis is evaluated internally before submission to the DI, for final approval.

Monitoring Research

Research programme on crop improvement such as wheat, mustard, pearl millet, Arid-legume and natural resource management such as water are in progress at the following research centers ;

- Zonal Agricultural Research Station, Morena.
- Regional Agricultural Research Station, Gwalior (College campus)
- Agricultural Research Station, Bagwai (Gwalior).
- Sesame and Linseed Research Station, Bhind .
- Special Research Station, Sirsod

Research Projects

AICRP and ICAR projects are in progress at following centers :

- AICRP on Wheat Improvement, Gwalior.
- AICRP on Arid Legume (Guar), Gwalior
- AICRP on Water Management, Morena.
- AICRP on Pearlmillet, Gwalior
- AICRP on Oil Seed (Rapeseed & Mustard), Morena
- AICRP on Weed Science, Gwalior

State Plan/Non-Plan Research Schemes

1. Soil Testing Laboratory
2. Improvement of Millet
3. Establishment of Regional Research Station
4. Intensification of Res. on mango, guava and citrus
5. Fodder Scheme
6. Intensive Extension and Research Project Phase-II

Adhoc Projects

ICAR

1. ICAR Voluntary centre for evaluation of root rot disease of chickpea, Gwalior
2. National Initiative on Climate Resilient Agriculture (Morena, Datia & Aron)

Monitoring mechanism of research activities:

- Monitoring team of visited AICRP as well as other projects time to time.
- Annual review meetings on progress and new action plans were also carried out by directorate of research services of the university.
- In-charge of project/scheme or concern scientist participated annual meetings organized by funding agencies / Institutions.

Monitoring Extension

Monitoring mechanism is used to review the Extension activities involved. The extensions of different technologies developed are disseminated through different *krishi-mela*, agro-technology exhibitions, live demonstrations, interactions through Scientist Farmer Forum. Outcome of such activities result in the students excelling in academics, research and extracurricular activities.

Impact: Year-wise numbers of the students passed out are given as under

Students passed out during:						
	2016-17	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**TOTAL**
UG	63	63	75	47	63	**311**
PG	63	53	62	88*	19*	**285**

***till 05 August 2021.**

- **Achievements of Students in Academic Activities**

a) Award of Gold Medal UG

Year	Name	Enrollment No	Name of Award
2016-17	Nil		
2017-18	Nil		
2018-19	Nil		
2019-20	Nil		
2020-21	Nil		

a) Award of Gold Medal PG

Year	Name	Enrollment No	Name of Award
2016-17	Nil		
2017-18	Manoj Kumar	141E02	
2018-19	Nil		
2019-20	Artika S. Kushwah	T12/2009	Gold Medal
2020-21	Nil		

RAWE: To reorient graduates of Agriculture and allied subjects for ensuring and assuring employability and develop entrepreneurs for emerging knowledge intensive agriculture, the component envisages the introduction of the programme in all the Agricultural Universities as an essential prerequisite for the award of degree to ensure hands on experience and practical training The Student READY (Rural Entrepreneurship Awareness Development Yojana) programme aims to provide rural entrepreneurship awareness, practical experience in real-life situation in rural agriculture and creating awareness amongst undergraduate students about practical agriculture and allied sciences

Rural Experience: Students assume full responsibility to operate individually and in small groups to interact with farmers during stay in villages. They prepare survey schedule, identify issues and constraints in farming system and analyze factors involved in the sustainability of overall system in the village. Students learn how farmers determine and manage their resources and prepare a document, which presented to the course faculty at the end of the course. This helps students to develop and maintain cooperation among the group and with farmers.

Agro-Industrial Attachment: The students gain a substantial experience through interaction with agro-based industries. The experience of commercial environment further advanced their practical knowledge in communication skills and working in a team. The students work on specified projects and document the project output for further planning and execution of commercial activity related to the project. During the period under report, students were placed in various agro-based industries

6.5.1.3. CC/ Board of Studies

At college level there is **no Board of Studies**. However, the respective Professor from each of the department is the members of the board of Academic council at V.V. level.

6.5.1.4. Anti-Ragging Cell

The guidelines provided by the ICAR regarding anti-ragging is followed by the college. Anti-Ragging Cell has been constituted in the college. The Dean of the college is the Chairman of the Anti-Ragging Cell. Various members constitute the committee from different fields like a nominee of District Collector and Police Superintendent, parents, students, hostel wardens.

Table: . Anti-ragging committee

1.	**Head of Institution**	**Dean**	**Dr. Reeti Singh**
2.	**Members**	Professor	Dr. U. C. Singh
3.		Professor	Dr. M.L. Sharma
4.		Professor	Dr. Shobhana Gupta
5.		Professor & I/c Examination & Academic	Dr. Sudhir Trivedi
6.		All Wardens of Boys and Girls Hostel	

The notice of the anti-ragging committee is placed on the notice board of the hostel and college notice board. At the time of the admission to the first year an indemnity bond on a bond paper is taken from each student. Similarly the students also have to submit an undertaking online on the anti-ragging portal. The major highlights of the Anti-Ragging Act have been placed in the college and hostel premises. Separate anti-ragging squad committee are also formed at the collegiate level to control ragging activity in the hostel. Frequent visits are made by the committee to the hostel to ensure safety of the students. Regular visits of the staff of the squad committee are held to the hostel where the first year students are residing. During the visit to the hostel, the faculty members interact with the students make them aware of the provisions of anti-ragging. Through the counselling of the students, students are also made aware of the different provisions of UGC anti-ragging law.

Table: 13. Anti-Ragging squad committee

The Following anti ragging squads are constituted to prevent any kind of ragging for academic session 2019-20.

A-College committee	**Mobile Number**	**(10:00-12:00Hrs.)**
1. Dr. M.L. Sharma	9826561674	Convener
2. Dr. D.S. Sasode	8319125882	Member
3. Dr. Ekta Joshi	7425036023	Member
4. Dr. S.G. Telang	9926507908	Member
5. Dr. Narendra Singh Gurjar	9926964912	Member

(12:00-14:00Hrs.)

1. Dr. U. C. Singh	9301887016	Convener
2. Dr. N.K.S. Bhadoria	9425757191	Member
3. Dr. RajniSasode	9425306020	Member
4. Dr. MeghaSahu	7440533084	Member
5. Dr. Ajay Kumar	9074213612	Member

(14:00-16:00Hrs.)

1. Dr. Rajesh Lekhi	9826349904	Convener
2. Dr. S.P.S. Tomar	9424990649	Member
3. Dr.P.S. Tomar	9425339307	Member
4. Dr. AnuradhGoel	9479512794	Member
5. Dr. PragatiSaini	9009509349	Member

(16:00-17:30Hrs.)

1. Dr. Rashmi Bajpai	7000030195	Convener
2. Dr. Varsha Gupta	8368231803	Member
3. Dr. Janmejay Sharma	9669711863	Member
4. Dr. C.S. Tomar	8602663295	Member
5. Dr. Avinash Singh Tomar	9893416509	Member

B- Hostel committee

1.	Dr. V.B. Singh	9926689741	Converner
2.	Dr. V.S. Kansana	9926250769	Member
3.	Dr. Naresh Gupta	8871336774	Member
4.	Dr. Amita Sharma	9131461034	Member
5.	Dr. ShashiYadav	9589541459	Member

Activities of the Committee:-

The committee monitors the events involving ragging, enquires into and report to the Dean, and works out modalities of functioning, frequency of visits, meetings etc. The committee checks the ragging menace during the college hours in and around the college premises and also makes surprise raids on hostels and other places vulnerable to incidents of ragging.

6.5.1.5. Biological waste Disposal facility

No harmful chemicals, biological, radioactive etc. are being generated by the college. However, college has formulated a committee for biological waste disposal. All operations regarding waste disposal operations by the college have been adopted as per government guidelines.

1. To formulate the system for biological waste disposal at college level.
2. To monitor biological waste disposal at college level.
3. To formulate rules and regulations for biological waste disposal as per norms.
4. To conduct timely hands on training on biological waste system for staff and students.

Accordingly, the committee has initiated, classified and formulated the biological waste management and its disposal at sectional level.

The following disposal mechanism is initiated and deployed by different sections.

Table: 16. Disposal mechanism is initiated and deployed

Name of the section	Type of waste material	Disposal mechanism
All sections	All hazardous biological and chemical waste	All hazardous biological and chemical waste is collected and categorised* at section level and segregated in colour coded bags/container
All sections	Agriculture non-hazardous degradable waste	All agriculture non-hazardous degradable waste are decomposed by adopting scientific procedure of composting

*Hazardous biological and chemical wastes categories and their segregation, collection, treatment, processing and disposal options.

The farm organic residues and biological waste of farm are converted into compost. Crop residue of *Kharif, Rabi* seed production crops residue, weeds and tree leaves are used for preparing organic manures *viz.* composts by adopting the following methods

a) Pit and heap method

b) *In situ* method

6.5.1.6. Institutional Ethics Committee for Experiment on Animals

It is not the part of the nature of the functioning of the College as the College does not conduct experiment with animal life as such, therefore such committee is not functional.

6.5.1.7. Committee for Prevention of Sexual Harassment of Women at Work Places

Table: 18. Committee for Prevention of Sexual Harassment of Women

SN	Name of the staff/ committee	Designation
1	Dr. Shobhana Gupta	Presiding officer
2	Dr. Shashi S. Yadav	Member (CEO Office)
3	Dr. Arvinder kaur	Member
4	Dr. Rajani Sasode	Member
5	Dr. Sandeepa Malhotra	Member
6	Amita Sharma	Member Secretary

A fully functional committee of senior faculty members including Hostels Wardens for this regard has been constituted in the College that takes care of all the issues related with offering the conducive environment to the women folk who have joined the college as the student and the staff. The committee ensures the protection of the rights of everyone involved. Meetings are conducted at regular intervals by the Committee, and complaints if any are redressed. During last five years, no one case available of women harassment.

6.5.2. FACULTY

6.5.2.1. Faculty Strength

College: Faculty Position during last five year

Category of Staff	Number				
	2016	2017	2018	2019	2020
Faculty	17	17	17	19	14
Technical (contractual teacher)	09	16	16	15	20
Administrative	-	-	-	-	-
Supporting	15	10	13	12	18

SN	Sanction Faculty	Faculty in Place	Vacant Position	Faculty recommended By ICAR/ UGC/ VCI/ Other regulatory bodies
1	**Professor**	**-**	**1**	**1**
2	**Associate Professor**	**1**	**1**	**2**
3	**Assistant Professor**	**6**	**20**	**26**

Faculty Position as on 01-01-2021

College of Agriculture, Gwalior	Sanctioned	In Position
Teaching	34	17
Research	24	10
AICRP	13	11
Total	**71**	**38**

As per faculty recommended by ICAR the faculty strength is not sufficient. However, the Research staffs, extension staff, contractual faculty, guest faculty, adjunct faculty are being appointed to complete the curriculum of the undergraduate and post graduate degree programme.

6.5.2.2. Faculty Profile (Department wise):
Table: 22. Department wise faculty profile

Department	Number of faculty positions sanctioned									
	Professors			Assoc. Professors			Assistant Professors			
	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Part-time Contractual Teacher
1. Agricultural Economics	-	-	-	-	-	-	2	1	1	0
2. Agricultural Extension & Communication	-	-	-	**1**	0	1	3	3	0	1
3. Agronomy	-	-	-	1	0	1	4	0	4	0
4. Entomology	-	-	-	**1**	1	0	2	2	0	0
5. Horticulture	-	-	-	**1**	1	0	1	1	0	2
6. Plant Breeding/Biotech	-	-	-	-	-	-	1	0	1	4
7. Plant Pathology	-	-	-	-	-	-	2	0	2	2
8. Soil Science and Agricultural Chemistry				**1**	0	1	3	1	2	3
9. Plant Physiology	-	-	-	1	0	1	1	1	0	2
10. Agril. Statistics	-	-	-	-	-	-	1	1	0	-
11. Veterinary Sc.	-	-	-	**1**	0	1	1	0	1	-
12. A.H. & Dairy	-	-	-	-	-	-	2	0	2	-
13. Agril. Engineering	-	-	-	-	-	-	1	1	0	-
14. Physics	-	-	-	-	-	-	1	0	1	-
15. English	-	-	-	-	-	-	1	0	1	1
16. Librarian	-	-	-	-	-	-	1	0	1	
17. PTI	-	-	-	-	-	-	1	0	1	-
Total	**0**	**0**	**0**	**7**	**2**	**5**	**28**	**11**	**17**	**15**

#TA Library

Present profile of faculty is not sufficient. However, the college is engaging contractual, guest faculties and pooled services of faculties, from KVKs.

Research and Extension

Department	Number of faculty positions sanctioned									
	Professors			Assoc. Professors			Assistant Professors			
	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Part-time Contractual Teacher
1. Agricultural Economics	**0**	0	0	**1**	0	1	0	0	0	
2. Agricultural Extension & Communication	**0**	0	0	**1**	0	1	1	0	1	
3. Agronomy	0	0	0	1	1	0	4	2	2	
4. Entomology	0	0	0	**1**	0	0	2	2	0	
5. Horticulture	**0**	0	0	**1**	0	0	2	1	1	
6. Plant Breeding	**1**	0	1	**2**	1	1	4	2	2	
7. Plant Pathology	**0**	0	0	**1**	1	0	2	2	0	
8. Soil Science and Agricultural Chemistry	**0**	0	0	**1**	1	1	2	2	0	
9. Plant Physiology	**0**	0	0	**0**	0	1	0	0	0	
10. Agril. Statistics	**0**	0	0	**1**	0	1	0	0	0	
11. Veterinary Sc.	**0**	0	0	**0**	0	0	0	0	0	
12. A.H. & Dairy	**0**	0	0	**0**	0	0	0	0	0	
13. Agril. Engineering	**0**	0	0	**0**	0	0	1	0	1	
14. Physics	**0**	0	0	**0**	0	0	0	0	0	
15. English	**0**	0	0	**0**	0	0	0	0	0	
16. Librarian	**0**	0	0	**0**	0	0	0	0	0	
17. PTI	**0**	0	0	**0**	0	0	0	0	0	
18. Agro Meteorology	**0**	0	0	**1**	0	1	0	0	0	
19. Any Discipline	**0**	0	0	**0**	0	0	0	0	0	
Total	**1**	**0**	**1**	**11**	**4**	**7**	**18**	**11**	**7**	

6.5.2.3. Credentials of the Faculty: The institution has employed competent faculty members through direct selection process.

S.No	Name	Designation	Name of Department	Profile of the faculty		Teaching/ Research
				Highest Degree	Yr. of Exp.	
1	Dr. Reeti Singh	Dean	College of Agriculture	Ph.D.	35	Administration/ Teaching/ Research
2	Dr. D.S. Sasode	Principal. Scientist	Agronomy	Ph.D.	14	Teaching/ Research
3	Dr. Ekta Joshi	Scientist	Agronomy	Ph.D.	05	Teaching/ Research
4	Dr. Varsha Gupta	Scientist	Agronomy	Ph.D.	05	Teaching/ Research
5	Dr. Janmejay Sharma	Scientist	Agronomy	Ph.D	05	Teaching/ Research
6	Dr. Rajni Singh Sasode	Scientist	Plant Pathology	Ph.D.	13	Teaching/ Research
7	Dr. R K Pandya	Principal. Scientist	Plant Pathology	Ph.D.	35	Teaching/ Research
8	Dr. U. C. Singh	Professor	Entomology	Ph.D.	37	Teaching/ Research
9	Dr. M.L. Sharma	Professor	Entomology	Ph.D.	35	Teaching/ Research
10	Dr. N. S. Bhadoriya	Professor	Entomology	Ph.D.	38	Teaching/ Research
11	Dr. N. K .S. Bhadoriya	S.T.O.	Entomology	Ph.D.	26	Teaching/ Research
12	Dr. O.P. Daipuria	Professor	Extension Education	Ph.D.	30	Teaching
13	Dr. Shobhana Gupta	Sr. Scientist	Extension Education	Ph.D.	08	Teaching/ Extension
14	Dr. H.S. Bhadoria	Professor	Agriculture Engineering	Ph.D.	30	Teaching/NCC
15	Dr. V.B. Singh	Professor	Agriculture Statics	Ph.D.	30	Teaching/ Research
16	Dr M K Tripathi	Pri. Scientist	Plant Breeding	Ph.D.	18	Teaching/ Research
17	Dr Sushma Tiwari	Scientist	Plant Breeding	Ph.D	11	Teaching/ Research
18	Dr. R.S.Sikarwar	Scientist	Plant Breeding	Ph.D	12	Teaching/ Research

19	Dr. S. K. Trivedi	Professor	Soil Science	Ph.D.	20	Teaching/ Research
20	Dr. Shashi S. Yadav	Scientist	Soil Science	Ph.D.	09	Teaching/ Research
21	Dr. R. Lekhi	Professor	Horticulture	Ph.D.	30	Teaching/ Research
22	Dheeraj Shrivastava	T.O.	Library Information Science	M.Lib	21	Teaching/ Library

Honours/ Awards/ Distinction

Dr. D.S. Sasode

- Distinguished Scientist Award, AIASA, 2017 IInd International Convention on Agriculture skill Development for Doubling farmers income at RAJUVAS, Bikaner (Raj.)
- Excellence in Research Award, Ashtha Foundation 2017, International conference MPUOAET & Rajasthan Udaipur (Rajasthan), 2017.
- Jan Utthan Niyas Gwalior Shikshak Samman – 2017.
- Jan Utthan Niyas Gwalior Shikshak Samman – 2018.
- Best poster National symposium on direction managing forage resource and live stock productivity in 21st century challenges and opportunities, March 03-04, 2017 at RVSKVV, Gwalior (M.P.)

Dr Ekta Joshi

- ICAR Nodal Officer of GRM under Institutional Development Plan National Agricultural Higher Education Project, RVSKVV, Gwalior funded from ICAR, New Delhi & World Bank for years 2019-2021•
- Excellence in Reviewing International Journal of Plant and soil science (NAAS rated journal)
- Reviewer of the Year Agronomy Journal (NAAS rating 7.81)
- Reviewer of the Year Current Agriculture Research Journal, India
- Certificate of Merit National Level Quiz on the occassion of "World Environment Day-2020" organized by the Campus Development-Nature Club &Green Audit Cell on 5 June, 2020

- Appreciation Certificate was awarded on the occasion of teacher's day for excellent teaching, research and administrative work by "Jan UtthanNyaas Society Gwalior" on 5th September, 2018
- Awarded for excellent academic performance in Pratibha Samman Samaroh organized by Jan Jagriti Samaj Sewa Kalyan Samiti, Gwalior 2018
- Awarded with "Scientist of the year award" for outstanding contribution in the field of Agronomy in an International Conference "GRISAAS" held at MPUAT, Udaipur during 2–4 December, 2017.
- Appreciation Certificate was awarded for outstanding research and excellent teaching by "Jan UtthanNyaas Society Gwalior" on 5th September, 2017
- Best poster award for the paper presented during poster session of the "National Forage Symposium" on New direction in managing forage resources and livestock productivity in 21stcentury: challenges and opportunities" in collaboration with Range management society, Jhansi, during March 03-04, 2017
- Best poster award for the paper presented during poster session of the "International conference on GRISAAS-2017during 02-04 December 2017 held at MPUAT, Udaipur (Rajasthan).
- IPNI scholar award 2012, Norcross USA for my excellent academic record and Ph.D. research work (2000 US$)
- Inspire fellowship from DST, Govt of India for doctoral degree
- Senior research fellowship from IARI, New Delhi for doctoral degree
- Gold medal in masters 2011 Dr. G.C Sahrotriya award for meritorious performance during masters
- Junior research fellowship from ICAR for masters degree 2009-2011

National talent scholarship from ICAR for under graduate programme 2005- 2009

Dr. Varsha Gupta

- **Young Scientist Award**
- Received "Young Scientist Award" by Agricultural Technology Development Society (ATDS) Ghaziabad, UP, during International Conference on Advances in Agricultural and Biodiversity Conservation for Sustainable Development (ABCD - 2017) 27 – 28 October, 2017
- **Appreciation award**

- ❖ Received appreciation certificate/award for delivering the lecture to the dealers on the topic **"Production technology of wheat crop and weed control in *Rabi* crops"** during the ***"one-year diploma course in Agricultural extension services"*** on 23rd February, 2020 at KVK, Gwalior centre, RVSKVV, Gwalior
- ❖ Received appreciation certificate/award for the contribution in successful organization of ***Krishi Vijay-2020***from 28-30 January, 2020at College of Agriculture, RVSKVV, Gwalior (M.P).

- ❖ Received appreciation certificate/award for the successful organization of Annual **Review Meeting of *Gramin Krishi Mausam Seva* and *FASAL***from 18-20 December, 2019at College of Agriculture, RVSKVV, Gwalior (M.P). Received ***appreciation certificate*** also.
- ❖ Received appreciation certificate/award for outstanding research and excellent teaching on the occasion of teacher's day, by ***"Jan UtthanNyaas Society Gwalior"*** on 5th September, 2018.

- ❖ Received honor certificate as a ***Team Manager*** for organizing the ***Summer Internship Programme*****(100hr.)** ***on "Swachchh Bharat Mission"*** successfullyduring 27th June–12th July, 2018. Organized by RVSKVV, Gwalior (M.P).
- ❖ Received letter of appreciation for smooth organization of Group meet on the topic, ***"pulses for spring and rice fallow of AINNP and MULLaRP and Arid Legume"*** during 10-11 November, 2017 at RVSKVV, Gwalior (M.P).
- ❖ Received appreciation certificate/award for outstanding research and excellent teaching on the occasion of teacher's day, by ***"Jan UtthanNyaas Society Gwalior"*** on 5th September, 2017.

- **<u>Best poster award</u>**

  Ekta Joshi, Deep Singh Sasode and **Varsha Gupta (2017):** Effect of Nutrient omission on productivity and economics of maize (*Zea mays* L.) in maize – wheat cropping system. Received collectively best poster award in poster session in "The National Forage Symposium 2017"at RVSKVV, Gwalior on March, 3-4, 2017.

Dr. Rajni Singh Sasode

- **Young Scientist award :** Society of Human Reosurce and Innovation, Agra (U.P.) India, March 19-20, 2017
- **Scientist Associate Award :** Society of Human Reosurce and Innovation, Agra (U.P.) India, March 19-20, 2017
- **IVth Teachers day Samman Samroh :** Honored by Jan Uthan Nyas Gwalior on 05.09.2016
- **Best poster award :** Collectively IInd Best poster award 3rd National Brassica Conference, ICAR, New Delhi

Dr. S. K. Trivedi

- Priyadarshani Award

Dr. Shashi S. Yadav

- Priyadarshani Award
- Best Teacher Award-2016
- Excellent in Teaching-2017

Dr. Reeti Singh

- Best teacher award 2016

Dr. R.K. Pandya

- Best teacher award 2006, Appreciation certificate by DRS

6.5.2.4. Technical and Supporting Staff:

Table: 24. Technical and Supporting staff

Designation	Sanctioned	Filled	Remarks
Teaching	**34**	**34 (14+20*)**	***Contractual during 2019
Technical & Supporting	**43**	**18**	
Farm Staff	**23**	**06**	

Supporting Technical and supporting staff: Presently institution is not having sufficient technical/ laboratory/farm staff but the process for the recruitment is in process.

S.NO.	Designation	Discipline	Pay scale	S	F	V	Present place of posting
1. 2.	Asst. Grade 1	COA GWL.	Pay level-7	1	1	0	COA GWL.
2. 2.	Asst. Grade 2	COA GWL.	Pay level-6	4	2	2	-do-
3. 2.	Asst. Grade 3	-do-	Pay level-4	5	1	4	-do-
4. 2.	Jr. Stenographer	CNP	Pay level-7	1	0	1	-
5.	HOD Stenographer	CNP	Pay level-7	10	9	1	-do-
6.	Jr. computer	CNP	Pay level-6	1	0	1	-
7.	Lab Technician	-do-	-do-	9	0	0	-
8.	mechanic	-do-	Pay level-7	1	0	1	-
9. .	Black smith	-do-	Pay level-6	1	0	1	-
10.	compounder	-do-	Pay level-4	1	0	1	-
11.	Carpenter	-do-	Pay level-6	1	0	1	-
12.	Electrician	-do-	Pay level-6	1	1	0	-do-
13.	FEO	-do-	-do-	1	0	1	-
14. 3	Driver	-do-	Pay level-4	2	0	2	-do-
15.	Pump Driver	-do-	-do-	1	0	1	-
16.	insect Setter	-do-	-do-	1	0	1	-
17.	Artist	-do-	Pay level-6	1	0	1	-
18.	Lab Attendant	-do-	pay level-3	8	0	8	-
19.	Peon/*Choukidar*/Farash/sweeper	-do-	pay level-1	8	2	6	COA GWL. COA GWL.
20.	Library Sorter	-do-	pay level-1	2	0	2	-

Technical and Supporting staff (State Res. Scheme &ICAR)

College of Agriculture, Gwalior	Sanctioned	In Position	% of Filled
Teaching	34	17	50
Research	24	10	42
AICRP	13	11	85
Total	**71**	**38**	53

6.5.3. LEARNING RESOURCES

6.5.3.1 College Library (digital)

College is using learning recourses like texts, videos, software and other ICT enabled material useful for the students.

Location of the Library – College Library is located in the College Building, College of Agriculture, Gwalior.

Table: 26. Staff Position in library

Name of Post	Sanctioned	Filled	Vacant
Librarian	1	1#	0
Library shorter	2	0	2

Books and Other Material: Year wise collection:

Table: 27. Library Statement last five years (2016 to 2020)

Detail of Books	Year's				
	2016	**2017**	**2018**	**2019**	**2020**
Book Bank- SC/ST	3953	3953	3953	3953	3953
Book Bank – OBC	1339	1339	1339	1339	1339
Book Bank – General	10600	10600	10600	10600	10600
General Books	26648	27517	27517	27746	27989
Books	1450	1450	1450	1450	1450
Total	**43990**	**44859**	**44859**	**45088**	**45331**
E-Books	16	16	16	16	16
Journal (old)	535	535	535	535	535

Table: 28. Year Wise Visitors in Library

Year	Visitors of Library
2016	**738**
2017	**632**
2018	**900**
2019	**818**
2020	**1200**
Total	**4288**

Services Available:

Traditional- Library provides traditional services under the following categories

S.no	Description	Remarks
1.	Books for reading	32000 Books Available
2.	Reference service	14000 Books Available
3.	Reading hall	Available
4.	Photocopy facility	Available
5.	CAS for faculties	Available
6.	SDI for faculties	Available

Online – Library provides online services under the following categories.

S.no	Description	Remarks
1.	Issue and return with help of KOHA	No
2.	Internet facility for searching the information	Yes
3.	E-resources are available in the e-books, e-journals, e-course etc .	CeRA , NDL , Swayam , NIPA Genx Electronic resources and solutions , Library Services
4.	Internet Service	Yes
5.	OPAC (Online Public Access Catalogue) (http://Coanopac.firstray.in/)	NO
6.	Online e-journals/virtual e-journals (J-gate) (http://www.jgate.in)	Yes
7.	E – Courses (e – *Krishishiksha*) (http://ecourses.iasri.res.in/)	Yes
8.	*Krishikosh*(Institutional Repository) (http://krishikosh.egranth.ac.in)	Yes
9.	CAS (Current Awareness Service)	Yes
10.	SDI (Selective Dissemination of Information)	Yes
11.	Software's used	Nil

Table: 29. Number of Computers/Photocopy machine/Wi Fi in library

S.no	Item .NO	Remarks
1.	Computers	10
2.	Laptop	01
3.	Photocopy machine	02
4.	*Wi Fi*	Yes
5.	Reading hall	College Library has Three reading hall having a seating capacity of **50** students.
6.	Library Management	Manually by staff
7.	Opening Hours	**9.30 AM To 6 PM**
8.	Subscription to Journals	As **CeRA**(Consortium for E- Resources in Agriculture) is available in the library, hence no need of new journals.
9.	Stocking Management	Subject Wise Classification

The college has centrally located library This is a central facility catering to the needs of all the department of the college. The library is well equipped with a large number of books and other facilities like *Krishi Kosh*, CeRA, video conferencing and multimedia. It provides information support to its teachers, scientists, extension specialists, students, and other members drawn from non-teaching staff and general public. The working hours of library are from 9.30 AM to 06.00PM. Seating capacity of 50 readers in two Halls.

6.5.3.2. Laboratories, Instructional farm, Workshops, Dairy, Ponds etc.

Table: Number of laboratories available in different departments

S. No	Departments	Name of laboratories	Equipment available
1.	Statistics	Computer Lab	Mentions as above department wise
2.	Agronomy	UG & PG/Ph.D. Lab.	
3.	Soil Science	UG & PG/Ph.D. Lab.	
4.	Plant Pathology	UG & PG/Ph.D. Lab.	
5.	Plant Breeding	UG & PG/Ph.D. Lab.	
6.	Entomology	UG & PG/Ph.D. Lab.	
7.	Pl molecular biology &Bio Technology	UG & PG/ Lab.	
8.	Environmental science	UG & PG/ Lab.	
9.	Extension education	UG & PG/Ph.D. Lab.	
10.	Agril. Economics	UG & PG/Ph.D. Lab.	
11.	Fruit science	UG & PG/Ph.D. Lab.	
12.	Vegetable science	UG & PG/Ph.D. Lab.	

Details of instructional farms

Name of Farm	Total Area (ha)	Cultivated Area (ha)	Irrigated Area (ha)	Partially Irrigated Area (ha)
College of Agril., Gwl. Farm	76.00	55.40	32.30	23.10
College of Agril., Gwl. Horti. Farm	4.40	3.00	3.00	0.00
College of Agril., Gwl. Dairy Farm	4.00	4.00	4.00	0.00

Details of facilities available in college of Agriculture, Gwalior

S.No.	Name of Facility available
1.	Administrative buildings
2.	Academic buildings
3.	Class room
4.	Examination hall
5.	ARIS Cell
6.	Laboratories
7.	Students hostels- Boys (03)
8.	Students hostels- Girls (03)
9.	Housing for staff
10.	Play-grounds open
11.	Sports complex (For indoor games)
12.	Gym complex
13.	Guest house
14.	Seed production farm
15.	Students research farm
16.	Gardens and farms for horticulture
17.	Cattle sheds
18.	Health clinic
19.	Library
20.	PHM Unit
21.	Workshops
22.	Auditorium (capacity of more than 250 participants)
23.	Yoga Club
24.	Plant tissue culture lab including all essential facilities, Cytogenetic lab and seed Technology lab in department of Plant breeding & Genetics
25.	Strengthen Molecular Biology Lab, Biochemical lab and Tissue culture Lab at Biotechnology Centre in department of Plant Molecular Biology and Biotechnology
26.	SOIL TESTING LAB in Soil Science & Agricultural Chemistry
27.	Computer lab in statistics department
28.	Cyber lab in Agriculture Extension and Communication department
29.	Others (car & two wheeler parking)

Farm Power, Machineries and Irrigation Facilities

The College has farm power, machineries *viz.*, Reversible Mould-Bold Plough, Rotary Tiller (Rotavator), Cultivator, Ridger, Tractor, Automatic Seed Drill for day to day work and teaching purpose.

Table: Irrigation infrastructure facilities:

Total cultivable land	**84.4 ha**
No. of wells	**04 - No.**
No. of bore wells	**08- Nos.**

Farm Pond: The College has 01 farm pond having dimension of 2000 m^3 for irrigation.

Dairy unit: The College has dairy unit for instruction purpose. There are 49 animals, average milk production 45 lit. /Day.

6.5.3.3. Student READY/ In-Plant Training / Internship /Experiential Learning Programmes:

Students READY and Experiential Learning Programmes:

The student READY Programme was implemented *w.e.f.* 2017-18 as per V Dean's Committee syllabus.

Implementation status of ICAR guidelines such as Student READY, NET essentiality of appointment for Assistant Professor, V Deans' Committee, BSMA Committee, Number and outlay of Green initiative projects from Education Division of ICAR, present status of All ELP modules sanctioned to the University. The point wise and crisp information of each college should be given for each with a present implementation stage.

Implementation of ICAR guidelines with respect to Student READY:

- Rural Agriculture Work Experience for 6 months.
- Experiential Learning/ Hands-on Training (ELP) 6 months

RAWE program is in accordance with the recommendation of IVth Dean's committee of the ICAR.

- The Student READY (Rural Entrepreneurship Awareness Development Yojana) programme aims to provide rural entrepreneurship awareness, practical experience in real-life situation in rural agriculture and creating awareness to undergraduate students about practical agriculture and allied sciences.
- To reorient graduates of Agriculture and allied subjects for ensuring and assuring employability and develop entrepreneurs for emerging knowledge intensive agriculture, the component envisages the introduction of the programme in all the Agricultural Universities as an essential prerequisite for the award of degree to ensure hands on experience and practical training.

The components are:

- Rural Agriculture Work Experience &
- In Plant Training/ Industrial attachment

List of experiential learning module

Four experiential learning programmes - Post harvest management (PHM) and value addition, Nursery management, Massive in vitro propagation of important horticulture and medicinal plants, and soil testing are in operational mode in the college. During the academic Session 2019-20, a total of 46 students participated in these four above mentioned ELP modules.

Name of ELP: Massive in vitro propagation of important horticultural and medicinal plants

(a) Year 2016-17

S. No.	No. & Name of student	Work assignment	Output
2016-17	**Total 12** 1. Miss. Mohini Sharma 2. Miss. Astha Bagde 3. Miss. Deeksha Gedaul 4. Miss. Nishi Mishra 5. Mr. Prakash Narayan Tiwari 6. Miss. Anu Gautam 7. Mr. Veer Singh Dhakad 8. Mr. Prem Narayan Patel 9. Mr. Mahesh Patidar 10. Mr. Om Prakash Nagar 11. Mr. Mangal Singh Verma 12. Mr. Prakash Bhagora	➢ In vitro propagation of medicinal plants ➢ Presentation on aspects of in-vitro propagation	Knowledge and skill gained by students about plant tissue culture and large scale production of tissue culture plants

(b) Year 2017-18

S. No.	No. & Name of student	Work assignment	Output
2017-18	**Total 35** 1. Anurag Sharma 2. Arti Singh 3. Deepak Tomar 4. Heena Shivvanshi 5. Piyush Upadhyay 6. Pratima Pathak 7. Priya Tiwari 8. Priyanka Singh 9. Reena Jamra 10. Anand Patel 11. BanshilalNinama 12. Dev Kumar Raghuwanshi 13. Dheerendra Kumar Bagri 14. Durgesh Panwar 15. Gayatri Singh 16. Hemant Singh Rajpoot 17. Jitendra Tadwal 18. Jyoti Ahirbar 19. Keshav Sharma 20. Manmohan Singh Rajput 21. Megha Verma 22. Mohit Manikdhive 23. Mukesh Patidar 24. Naresh Singh Meda 25. Neeraj Kumar Khare 26. Pravendra Kushwaha 27. Raghvendra Singh Jadon 28. Rakesh Shivhare 29. Beer Pratap Singh 30. Satya Prakash Chou 31. EnkumarMarkam 32. Nirmila Lodhi 33. Ravi Bansal 34. Mayaram 35. HariomRajoria	➢ In vitro propagation of medicinal plants ➢ Presentation on aspects of in-vitro propagation	Knowledge and skill gained by students about plant tissue culture and large scale production of tissue culture plants

Glimpses of ELP Activities 2017-18

Net house

Hybrid polyhouse

Laminar air flow 1 and 2

Laminar Air flow 3 and 4

Storage room

Growth chamber

Horizontal Autoclave

BOD Incubator

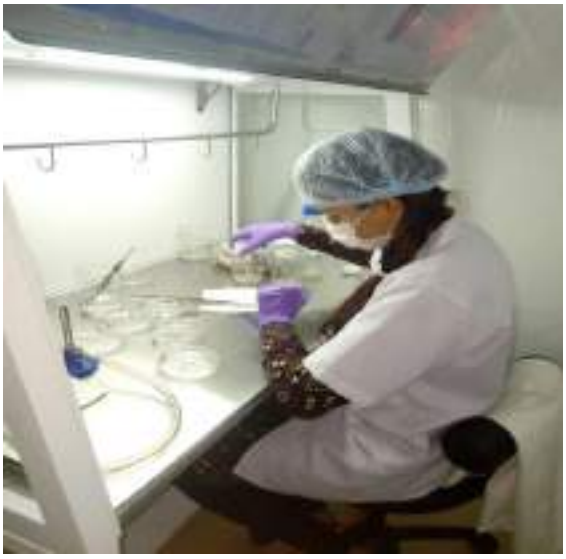
A

B

C

D

Fig. A, B, C, D. Presentation of ELP students



(c) Year 2018-19

S. No.	No. & Name of student	Work assignment	Output
2018-19	**Total 56** 1. AKANSHA SIKRWAR 2. ANAMIKA SINGH 3. ASHITA PAWAIYA 4. KHUSHBU AHIRWAR 5. NIDHI SINGH 6. NIDHI MISHRA 7. PRACHI SHARMA 8. PRIYA RAJORIYA 9. RACHNA RAJPUT 10. RITU AROLIYA 11. RUCHI RASGANIYA 12. SANTHARA BALKE 13. SHIVANI BHARDWAJ 14. SHIRHISTA RAJPUT 15. SUMAYIYA KHAN 16. SURUBHI KANER 17. SUSHIMITA ADHIKARY 18. VISHAKHA RAI 19. VISMITA SHYAMKUNA 20. YASHI S TOMAR 21. YASHIKA RAGHUVANSHI 22. PARUL SINGHAL 23. HINA MANJHI 24. KOMAL AGARWAL 25. SHRITAMA BHUNIA 26. MONIKA RAWAT 27. PURNAWATI CHOUHAN 28. PREETI MAURYA 29. PRIYA ATAL 30. POOJA SALAME	➢ In vitro propagation of medicinal plants ➢ Presentation on aspects of in-vitro propagation ➢ One project proposal ➢ Nursery visit	Knowledge and skill gained by students about plant tissue culture and large scale production of tissue culture plants

	31. MANJULA 32. VIJAY S KUSHWAH 33. BHUPINDER PATIDAR 34. BABLU UIKEY 35. GOURAV PATIDAR 36. HARENDRA S. GURJAR 37. JAIDEEP S. BHADURIYA 38. LALIT GAWANDE 39. LOKENDRA GURJAR 40. NANDKISHORE SHARMA 41. PRAVEEN SAHU 42. ROHIT CHOUDHARY 43. ROOP SINGH LODHI 44. RUPESH YADAV 45. SACHIN PATIDAR 46. SAXUO BHAKNE 47. SHIVAM DUBEY 48. SONILAL BHAVAR 49. SURESH IRPACHE 50. VINAYAK HAROD 51. VIVEK SHARMA 52. BELVENDRA SINGH PATEL 53. LAXMIKANT PANDEY 54. PRUSHOTTAM SINGH 55. SHOBHIT PATEL 56. LALIT KUMAWAT		

Glimpses of ELP Activities 2018-19











(d) Year 2019-20

S. No.	No. & Name of student	Work assignment	Output
2019-20	**Total 12** 1. Aman Rohilla 2. Akash Mahoriya 3. Arvind Rajput 4. Bramhanand Paraste 5. Deepak 6. Ganesh Pandey 7. Hardeep Singh Rai 8. Kamlesh Sisodiya OBC 9. Rishi Sharma 10. Satish Kadhera 11. Shubham Shrivastava 12. Aashish Deshmukh	➢ Presentation on aspects of in-vitro propagation ➢ One project proposal	Knowledge gained by students about plant tissue culture and large scale production of tissue culture plants

Glimpses of ELP Activities2019-20

(e) Year 2020-2021(On-line classes)

S. No.	No. & Name of student	Work assignment	Output
2020-21	**Total 06** 1. AKSHAT GUPTA 2. BHARTI RAJPUT 3. MONA 4. PRAYUSHI JAIN 5. RASHMI NARWARIYA 6. EKTA PATEL	➢ Presentation on aspects of in-vitro propagation ➢ One project proposal	Knowledge and skill gained by students about plant tissue culture and large scale production of tissue culture plants

Name of ELP Module: Nursery Management

Year 2016-17, IInd Semester

S. No.	No. of student	Work assignment	Output
2016-17	**18** **20**	In this experiential learning programme, the students were given exposure to the various nursery management practices namely sowing and treatments of seeds, thinning of seedlings, weed management practices in nursery beds watering and top dressing of fertilizers and planting of seedlings in poly-bags, pots and field. They were also given training on stacking of newly planted plants. De-potting and repotting exercise was also shown to them. Pruning and training of plants and different propagation practices were also shown to them. Application of growth regulators solution was also demonstrated. **Commercial Vegetable Production** In this programme recent cultivation practices of vegetable crops were practiced. The student were given hands-on-practice regarding raising of seedlings in poly bags, safe lifting and transplanting of seedlings, stacking and pruning of undesirable shoots. They were given exposure for efficient use of water and fertilizers and picking of fruits etc.	Students were also given hands on practice in cultivation of tomato in naturally ventilated poly-house.
2017-18	**31**	• Cleaning ,Spreading and Mixing of FYM in beds • Hoeing and leveling of beds • Irrigation of beds • Hoeing and Cleaning of walk path	• The students were exposed to each and every activities of tomato cultivation in NVP as mentioned

		• Preparation of soil media for seed sowing of tomato • Sowing of seeds (1 pkts, 10 g) of hybrid tomato var. Abhilash (Seminis, Monsanto group) in pots /Container • Bundle making of jute string, cutting of string in proper length and tying of string with steel wire inside the naturally ventilated poly-house (NVP) • Shifting of seedlings from containers • Transplanting of tomato seedlings in beds of poly-house • General care of plants-watering, hoeing, weeding etc • Application of nutrient solution by drenching to plants • Trellising of plants with string • Pruning and training of tomato plants • Spraying of insecticide & fungicide	above and by doing so they gain knowledge and developed skill in protected cultivation practices of tomato crop. • During the cultivation of tomato in NVP, the plant of tomato experienced high temperature ranging for 39 to 43^{0C} inside the poly-house during August & September 2017 and plants suffered with high rate of mortality. Approximately Rs. 8000/- was spent towards FYM, seed, jute string, water soluble fertilizer, insecticide and fungicides etc. • There was very poor/almost nil crop production of tomato and no income could be generated. • In all, it can be concluded that hardly one crop of tomato or any other vegetable crop can be grown from months of November to March in naturally ventilated poly house in Gwalior.
2019-20	**13**	Availability of quality planting material in highly essential for successful commercial fruit and vegetable cultivation. Non commercial person generally prepared small nurseries in their back yard sorely for their personal uses. However in the event of pest and disease incident natural calamity or mortality of plants at field in early stage. To address this issue student groups were provided with poly houses/net houses for production of disease free genuine planting	

		material on commercial basis in protected conditions. They were provided with structures, with accessories and initial consumable and they were trained with practical approaches at nursery college of agriculture, Gwalior, about advanced nursery management technologies like soil solarization, vegetative propagation, sowing, fertilization, prepared raising beds for winter annual flowers, raising seedling in plastic pro tray with soil less media, hybrid cucurbits in poly begs, pest and disease management activities etc. In horticulture department, College of Agriculture, Gwalior were skilled 13 students in year 2020-21 with multi dimensional practical approaches. 08 students were ready to raising genuine planting material and ready to start their own nursery business and also to be trained to unemployed rural youth for skilled labours. It will play an important role to employment generation in forthcoming years.	

Name of ELP Module: Post Harvest & Value Addition

S. No.	No. of student	Work assignment	Output
2017-18 First Semester	**34**	• Explain working operation of Vegetable crusher, Pulper, Juicer, Stem jacketed cattle, mixing tank, blending tank, Homogenizer, Pasteurizer, Boiler, Bottle washing machine and Bottle filling machine. • Explain preparation of RTS beverages like- Mango RTS, Lime/Lemon RTS, Pineapple RTS, Mango and Guava Nector. • Explain recipe of Mango, Guava, Pineapple, Apple and mix fruits jam • Preparation of orange RTS by IVth year students • Explain about FPO specifications regarding Jam, Jelly, Squash etc. • Explain regarding preservatives, limitation in preserve products like- Jam, Jelly, Squash, Cordial, RTS etc.	• Approximately Rs. 2000/- was student towards raw material regarding lime, preservation, sugar and zinger etc. PHM unit have no FPO license therefore we could not produce commercial productions. • Small quantity is prepared during ELP practical. No income could be generated.

Second Semester	**35**	• Explain working operation of Vegetable crusher, Pulper, Juicer, Stem jacketed cattle, mixing tank, blending tank, Homogenizer, Pasteurizer, Boiler, Bottle washing machine and Bottle filling machine. • Lime juice extracted from 10 kg fruit approximately 3 liter juice was stored for one and half months. • After that Lime RTS was prepared from stored lime juice. • 48 liter Lime RTS was prepared by 3 liter lemon juice through B.Sc. (Ag.) IVth year under Experiential Learning Programme during the year of 2017-18. • Mango purchase from market and pulp is extracted with the help of pulper. • 40 liter Mango RTS was prepared through stored Mango pulp by B.Sc. (Ag.) IVth year under Experiential Learning Programme during the year of 2017-18. • 8 liter Mango Nector prepared by B.Sc. (Ag.) IVth year under Experiential Learning Programme during the year of 2017-18. • Visit to KVK, Centre during the programme and explain the recipes of various products as Tomato ketchup, Aonla candy, Aonla Burphi, Aonla panziri, Chavanprash, Aonla RTS, Aonla pickle, Pind khazoor pickle. • Aonla Ladoo was prepared during the programme. • Lime peel pickle (salted) was prepared during the programme. • Lime peel pickle (sweet) was prepared during the programme. • Mango Jam was prepared during the programme. • Mixed fruit jam was prepared during the programme. • Explain about FPO specifications regarding Jam, Jelly, Squash etc. • Explain regarding preservatives, limitation in preserve products like- Jam, Jelly, Squash, Cordial, RTS etc.	• Rs. 1500/- (By the selling in university meeting, college programme and TSA meeting). • Rs.3000/- approximate by selling in other ways which was utilized by purchasing of raw material

2018-19 **Second Semester**	**75**	• FSSAI Registration granted by Food Standard Authority, Government of India. • Students also distributes the ARO Bottles during 1st RVSKVV Alumini meet and Raj Vijay Fulwari Programme held at college and university campus during 16-17 Feb 2019. • Students make exhibition stalls and sold their products as Aonla Barfi and Refreshing Dates Pan in Raj Vijay Fulwari programme. • Different products as Potato Chips, Potato Papad ,Aam Papad, Mango pickles, Lime Pickle, Chilli pickle, Jam, Aonla Candy ,Papaya pickle, Tomato pickle, etc made by ELP students • ELP students distributed Mango RTS within the college campus to students and staff members under theme of generating marketing skill.	• Rs. 12650/- (By the selling of ARO water in university meeting and college programme). • Rs. 3000/- approximate by selling the products in other ways as Mango RTS, Orange RTS, Aonla Barfi and Dates Pan.
2019-20 Second Semester	**12**	• Students make exhibition stalls and sold their products as Aonla Barfi and Refreshing Dates Pan in Raj Vijay Fulwari programme. • Different products as Potato Chips, Potato Papad ,Aam Papad, Mango pickles, Lime Pickle, Chilli pickle, Jam, Aonla Candy ,Papaya pickle, Tomato pickle, etc made by ELP students • ELP students distributed Mango RTS within the college campus to students and staff members under theme of generating marketing skill.	• Rs. 10000/- (By the selling of ARO water in university meeting and college programme).

Name of ELP Module: **Soil Testing**

S. No.	No. of student	Work assignment	Output
2019-20 Second semester	**09**	Practical in hands related to Basic Soil Testing perimeters *i.e.* pH EC, OC, available N P&K	Do to COVID 19 no output from soil testing

RAWE Programme: The students of VII semester were sent for work experience training of 6 months duration to different villages.

During the last five year i.e. **2015-16 to 2019-20**, total **314** final year (VII Semester) students of B.Sc. (Ag.) have been placed under the jurisdiction of different Zonal Agriculture Research Station, Regional Agriculture Research Station and Krishi Vigyan Kendra of the Vishwa Vidyalaya.

Placement of Students

S.No.	Year	Placement Centre's (ZARS/RARS/KVKs) Adopted villages of KVKs	Number of Students		Total
			Boys	Girls	
1	2016	KVK, Shipuri: Piprasama, Rator KVK, Aron Sarkho KVK, Ashok Nagar Sadora, Awarimaphi, Khajuriyakala	40	16	56
2	2017	KVK, Shipuri:- Rator KVK, Aron:- Sarkho, Parsoda,Khooja, Bhador KVK, Seopur: - Indrapura, Kudayata, Lalitpura	44	19	63
3	2018	**KVK, Aron**:- Sarkho, Araskheda **KVK, Seopur**: - Indrapura, Lalitpura, Galmania, Baroda, Dharampura	54	21	75
4	2019	KVK, Shipuri:- Rator KVK, Aron:- Araskheda KVK, Seopur: - Rundi and Kudayatha KVK, Datia:- Kakrua KVK Lahar:- Vaishpura KVK Ashoknagar:- Khiriyamahu& pal katori KVK Morena:- Ata	41	33	74
5	2020	KVK, Shipuri:- Rator KVK, Aron:- Araskheda KVK, Seopur: - Indrapura, Lalitpura and Galmanya	29	17	46
TOTAL			**208**	**106**	**314**

2. **Educational tour:** 8-10 days duration education tour was arranged between semester break of VII and VIII semester.

3. **Exposure visit:** 2 days duration exposure visits was arranged for VIII semester students.

Learning Outcomes

Knowledge about commercial production of various vegetables was gained by the students.

6.5.3.4. Curricula delivery through IT (smart class rooms/interactive board etc.):

This college uses smart class rooms/interactive boards for curricula delivery through IT. Smart-class room facilities have been developed in the college. During the last five years, most faculties have developed ICT enabled teaching material and practical manuals. College has audio visual teaching aid facility, and smart class rooms.

Practical/project work centred courses have been developed. The Institute gives due weight age to the innovative teaching method developed by faculties'. Best Teacher Award of the Institute is also awarded by the College.

LCD has been installed in each Lecture Room of the college and 04 Lecture have been converted into smart classrooms. PPT, YouTube, CD ROM, Websites, Email, GoogleDrive, virtual teaching webinar etc. are being brought in use.

Details of class rooms present

(a)Undergraduate (UG) Class Rooms

Class Rooms	Smart class room/ interactive Board
First year Class room	Smart class room
Second year Class room	Smart class room
Third year Class room	Smart class room
Forth year Class room	Smart class room

(b) Postgraduate (PG) Class Rooms

Department	PG Seminar hall (Equipped with AV aids)
1. Agricultural Economics	1
2. Agricultural Extension & Communication	1
3. Agronomy	1
4. Entomology	1
5. Horticulture	1
6. Genetics & Plant Breeding	1
7. Plant Pathology	1
8. Soil Science and Agricultural Chemistry	1
9. Pl molecular biology &Bio Technology	1
10. Environmental science	1

I Ph.D Class Rooms

Department	PhD Seminar hall
1. Agricultural Economics	1
2. Agricultural Extension & Communication	1
3. Agronomy	1
4. Entomology	1
5. Horticulture	1
6. Genetics & Plant Breeding	1
7. Plant Pathology	1
8. Soil Science and Agricultural Chemistry	1

6.5.4. STUDENT DEVELOPMENT:

The College through the educational efforts for the Student's Development aims at fostering and nurturing the intellect and character of students by integrating in-class and co-curricular experiences. In order to accomplish this, a wide range of educational experiences through programs and activities that complement and support the academic experience in the classroom is provided by the college.

Experiential Learning Programme is imparted to the Final Year students of the college. The students are required to work in the college on full time basis to understand the need of the module and acquire the latest practical knowledge pertinent to the topic of his/her interest.

Exposure about the latest information is provided to the students to develop them intellectually by organizing lectures by the national / international experts in the respective fields. Field visit/ industrial visit and tour are also organized by the college from time to time to make them aware of the latest trends in the market. Students are also encouraged to participate in the national / international seminars and conference to interact with the experts in the respective fields.

6.5.4.1. Student Intake and Attrition:

Student intake and attrition

Name of the	Actual students admitted in last five years					Attrition (%)				
Degree programme	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
B.Sc. (Hons.) Agriculture4yr.	82	78	80	82	82	25.6	8.9	6.25	9.75	-
M.Sc. Ag/ Horticulture										
1.Plant Pathology	07	08	12	12	10	14	-	08	17	10
2 Agronomy	08	08	12	12	13	-	-	8.3	-	-
3 Horticulture Fruit Science Vegetable Sc.	 08 06	 09 10	 12 12	 12 12	 11 12	-	-	-	-	-
4 Agriculture Economics	04	04	07	06	05	50	25	-	16.6	20.0
5 Entomology	08	08	08	11	10	0	0	0	0	0
6 Genetics and Plant Breeding	08	07	12	12	12	25	28.5	25	-	-
7 Extension Education	06	07	10	11	09	50	28.5	10	9.0	22.2
8**Plant Molecular Biology and Biotechnology**	03	03	06	04	02	-	-	-	-	-
9**Environmental Sciences**	04	04	03	04	01	-	25	-	-	-
10 Soil Science	08	08	12	12	11	12.5	12.5	-	-	-

Ph.D Ag/ Horticulture										
1.Plant Pathology	03	00	04	06	02	33	-	-	-	-
2 Agronomy	02	06	06	06	06	-	-	-	-	-
3 Horticulture Fruit Science Vegetable Sc.	 01 01	 02 04	 06 05	 06 06	 04 04	-	-	-	-	-
4 Agriculture Economics	00	01	01	01	03	-	-	-	-	-
5 Entomology	02	03	04	04	04	-	-	-	-	-
6 Genetics and Plant Breeding	00	02	02	06	04	-	-	-	-	-
7 Extension Education	00	04	03	06	05	-	-	-	16.6	-
8 Soil Science	02	06	05	06	06	50	16.6	20	-	-

Under Graduate: B.Sc. (Ag.)

Allocation of Seats		**Boys**	**Girls**	**Total**
Roster				
Free Seats	General	10	06	**16**
	ST	08	04	**12**
	SC	04	05	**09**
	OBC	11	05	**16**
Payment Seats		11	07	**18**
NRI Seats		--	--	--
Nominee/Fellow	ICAR	07	00	**07**
	EWS	03	01	**04**
Total				**82**

Details of admission in last five years

S.No.	Degree Programme	Admission year				
		2016	**2017**	**2018**	**2019**	**2020**
1	B.Sc. (Ag.)	76	82	78	80	82
2	M.Sc. (Ag.)	66	74	76	109	106
3	Ph.D. (Ag.)	25	14	26	36	49
TOTAL		**167**	**170**	**180**	**225**	**237**

Degree Programme wise Student intake and attrition last five year.

Year	B.Sc. (Ag.)		M.Sc (Ag.)		Ph.D	
	Enrolled	**Attrition**	**Enrolled**	**Attrition**	**Enrolled**	**Attrition**
2016-2017	82	21	74	09	14	05
2017-2018	78	07	76	03	26	05
2018-2019	80	05	109	04	36	01
2019-2020	82	08	106	01	49	01
2020-2021	82	00	95	04	38	00

Post Graduate: M.Sc. (Ag. /Hort.):

(A) M.Sc. (Ag.)

S. No.	Department	Free	Payment	ICAR
1.	Agronomy	06	06	--
2.	Agril. Eco. & FM	03	03	--
3.	Entomology	06	04	--
4.	Extension Education	04	06	--
5.	Plant Breeding & Genetics	06	06	--
6.	Plant Pathology	06	06	--
7.	Soil Science &Agril. Chemistry	06	06	--
8.	Plant Molecular Biology & Biotechnology	04	01	--
9	Environmental Science	02	02	--
	Total	**43**	**40**	

(B) M.Sc. (Hort.)

S. No.	Department	Free	Payment	ICAR
1.	Fruit Science	06	05	--
2.	Vegetable Science	06	06	--
	Total	**12**	**11**	

Ph.D. (Ag./Hort.):

(A) Agriculture:

S.No.	Faculty	Intake Capacity				Total
		Free seats	Payment seats	NRI	ICAR	
1.	Ph.D. Agriculture	28	14	--	--	42

(B) Horticulture:

S.No.	Faculty	Intake Capacity				Total
		Free seats	Payment seats	NRI	ICAR	
1.	Ph.D. Horticulture	08	04	--	--	12

Average Number of Students in Theory and Practical Classes:

Table: Average number of students in theory and practical classes

S.No.	Name of the Degree Programme	Batch of the students in theory classes	Batch of the students in Practical classes
B.Sc. (Hons) Agriculture			
1	2015-16	82	27x2, 28x1
2	2016-17	82	27x2, 28x1
3	2017-18	82	27x2, 28x1
4	2018-19	82	27x2, 28x1
5	2019-20	82	27x2, 28x1

Postgraduate (M.Sc.)

Name of the degree programme	Batch of student in theory	Batch of student in practical
M.Sc.(Ag./ Hort.) in 11 discipline		
1. Agricultural Economics	8	8
2. Agricultural Extension & Communication	12	12
3. Agronomy	12	12
4. Entomology	12	12
5. Soil Science and Agricultural Chemistry	12	12
6. Plant Breeding & Genetics	12	12
7. Plant Pathology	12	12
8. Fruit science	12	12
9. Vegetable science	12	12
10. Environmental science	4	4
11. Plant molecular biology &Bio Technology	8	8

PhD (Ag./Horti)

PhD (Ag./ Hort.) in 9 discipline		
1. Agricultural Economics	6	6
2. Agricultural Extension & Communication	6	6
3. Agronomy	6	6
4. Entomology	6	6
5. Soil Science and Agricultural Chemistry	6	6
6. Plant Breeding & Genetics	6	6
7. Plant Pathology	6	6
8. Fruit science	6	6
9. Vegetable science	6	6

Student strength at a glance:

Students Strength at a Glance: Last five years

S.No.	Degree Programme	Number of students				
		2016	**2017**	**2018**	**2019**	**2020**
1.	B.Sc. (Ag.)	277	303	276	275	275
	M.Sc. (Ag.)	**171**	**178**	**184**	**213**	**237**
1.	Ph.D. (Agri. /Hort.)	111	81	89	103	117
	G. Total	**559**	**562**	**549**	**591**	**629**

Gender Wise Students Strength

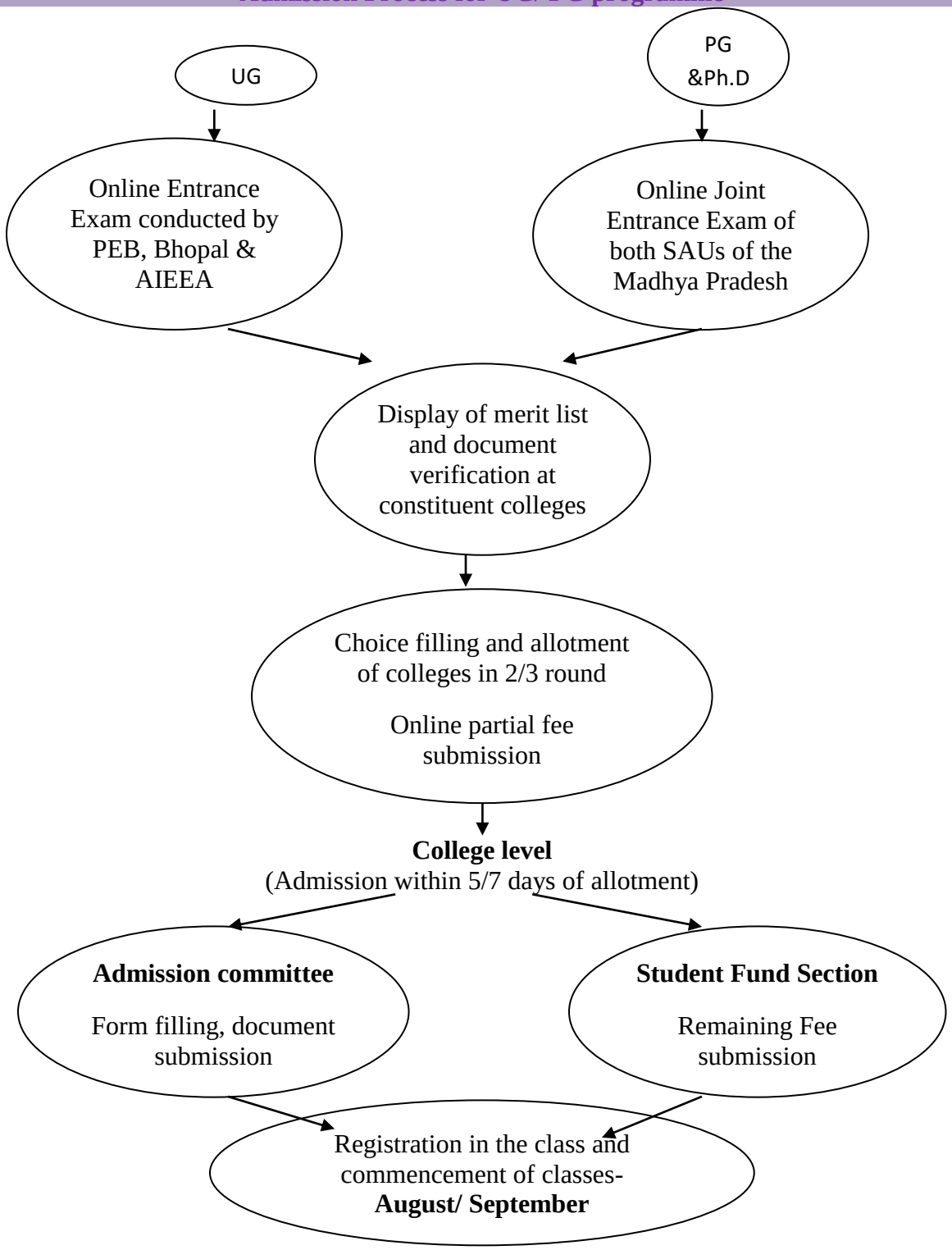
S.N	Degree Programme	Gender Wise Students Strength									
		2016		2017		2018		2019		2020	
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
1	B.Sc. (Ag.)	191	86	204	99	182	94	182	93	178	97
2	M.Sc. (Ag.)	112	59	113	65	127	57	150	63	173	64
3	Ph.D.	74	37	53	28	51	38	60	43	59	58
TOTAL		**377**	**182**	**370**	**192**	**360**	**189**	**392**	**199**	**410**	**219**
G.TOATL		**559**		**562**		**549**		**591**		**629**	

6.5.4.3 Admission Process

Under Graduate Programmes: The students are admitted through Pre Agriculture Test-- an entrance exam–tion-- conducted by VYA– (M.P. Government).

Post Graduate Programmes: Through JEE Pre PG entrance examination conducted by MP online, Bhopal (M.P.).

Admission Process for UG/ PG programme



6.5.4.4. Conduct of Practical and Hands on Training

1. **Agronomy**

   Charts/specimens of tools and implements, actual seed, weed and crop identification, different methods of sowing, irrigation layouts, live models of pressurized irrigation systems, agro-meteorological instruments, methods of fertilizer application and methods of weed management.

2. **Livestock & Dairy Management**

   Physical characteristics of different breeds, livestock; Breeding, health, feeding and management of livestock; forage cultivation and nutritional requirement of different categories of animals.

3. **Plant molecular biology &Bio Technology**

   Study of water, air and sound pollution; visits to study the ecosystem. Preparation of slides to study the cell division. Floral biology of different major crops of the region is taught and the different breeding methods used for hybridization / crop improvement in field are demonstrated. Experiments on photosynthesis, respiration, transpiration, estimation of chlorophyll content and growth are demonstrated. In plant biotechnology the technique of micro propagation in banana and sugarcane is demonstrated. Demonstration on DNA extraction and gel electrophoresis is also done. In seed technology course practical on seed sampling, preparation of seed sample, cleaning and grading of seed lot, study of physical purity, moisture, germination, seed vigour, viability and heath test is done.

4. **Agricultural Economics**

   Estimation of cost of cultivation of Crops, depreciation of farm assets, net worth and income statements, financial test ratios, break even analysis of project, study of marketing institutions such as NAFED, SWC, CWC. Etc. Economic analysis of different enterprises, partial and complete budgeting and preparation alternative farm plans, assessment of credit requirement for various crops and enterprises. Testing of economic viability of project, loan proposal formulation and assessment of repayment capacity, risk barring ability and returns on investment. Institutional finance, Marketing of Agricultural products and livestock. Input and

output markets, financial criteria for appraisal of the project. Seasonal indices of arrival and prices of Agril. Commodities.

5. **Agricultural Engineering**
   Surveying and levelling; Farm Machinery and power practical's are conducted through cut models of different systems of IC engine and tractor. Protected cultivation; Post harvest Technology.

6. **Agricultural Entomology**
   Insect morphology and anatomy; classification and identification of distinct insect pest, pest management strategies, collection and extraction of plant parasitic nematodes.

7. **Agricultural Extension & Communication:**

   Communication skills, preparation of bulletin, pamphlet, booklet; preparation of news, radio talk; channels for effective dissemination of agricultural information.

8. **Horticulture**
   Propagation methods e.g. Cutting, layering, budding and grafting and crop maximization practices like bending, notching, ringing and girdling, training and pruning. Production Technology of Vegetables and Flower Crops: Maximization of vegetable yield by *viz*., staking, turning, blanching, earthing up. Maximization of flower yield and quality by pinching, disbudding, pruning, bending. Vegetable Production: Production and marketing of various vegetables *viz*., tomato, brinjal, onion, cabbage, cauliflower, broccoli, lettuce, garlic and exotics. Preparation of value added products.

9. **Plant Pathology**
   Isolation and identification of plant diseases, disease diagnosis of field as well as horticultural crops. Isolation and identification of different beneficial microbes including bio fertilizer, bio agents, mushroom etc.

10. **Soil Science and Agricultural Chemistry**
    Physical, chemical and biological properties of soils ; recommendation for improving the soil quality, health and crop sustainability; specimens of soil forming rocks and minerals along with their properties, soil profile, tools for collection of soil and irrigation water samples. The

qualitative and quantitative analysis of carbohydrates, proteins, lipids and oils are carried out for nutritive values along with their quality in food are tested.

6.5.4.5. Examination and Evaluation Process:

Sr. No.	Name of degree programme	Examinationpattern (External/Internal)			Evaluationprocess (External/Internal)					
		Theory	Prac-tical	Viva-voce	The ory	Pr ac - tic al	Compre-hensivewrit ten	Compre-hensiveo ral	Thesise valua-tion	ThesisVi va-voce
1.	UG	Exter-nal	Inter-nal	Inter-nal	Exte r-nal	Inte r-nal	-	-	-	-
2.	PG	Inter-nal	Inter-nal	Internal	Inter-nal	Inte r-nal	-	-	-	-
3	**PhD**	Inter-nal	Inter-nal	Internal	Inter-nal	Inte r-nal				

Overall Grade Point Average (O.G.P.A.)	5.000 To 5.999	6.000 To 6.999	7.000 To 7.999	8.000 and above
Division	Pass	Second	First	First with Distinction

System of Education:

UG Programme – ACADEMIC YEAR/SESSION

- The academic Year /Session means two semesters during which a cycle of educational work is completed. It shall commence as per the Academic Calendar/ Semester schedule notified by the Vishwa Vidyalaya (V.V.) from time to time.
- Each semester shall consist of minimum 110 working days. At least 80% of the scheduled classes must be held in a semester
- The candidates admitted for UG degree programme will have to complete **Student READY** (Rural and Entrepreneurship Awareness Development Yojana) programme during VII & VIII semester as per the 'V' Deans Committee Recommendations.

  Mode of Implementation:- Experiential Learning/Hands on Training , Skill Development Training, RAWE, In Plant Training/ Industrial attachment, Students Projects.

ATTENDANCE REQUIRMENTS

- Student are expected to attend all lectures and laboratory/field practicals scheduled during a semester. Attendance of a student in a course should be at least 75% of the scheduled classes in a semester, failing which he/she will be debarred from appearing in final examination .For this purpose attendance in theory and practical classes will be counted separately.

CREDIT, CURRICULUM AND PROGRAMME OF STUDY

- Credit means contact time per week devoted by a student in class, laboratory, fieldwork, and library, etc. Accordingly, credits for a course are distributed in theory and practical separately. Normally, 1 Credit means 60 minutes contact time per week in case of theory and 120 minutes per week in case of practical.
- Course means a series of classes and work experience extended over semester.
- The students admitted in the Vishwa Vidyalaya (V.V.) shall be required to follow the course curriculum as prescribed from time to time.

The residential requirement and maximum period for degree programmes in terms of number of semesters shall be as below

Degree Programme	Residential Requirement (Semester)	Maximum period (Semester)
B.Sc. (Ag.)	8	12

Provided that, if a student has acquired the status of final year class and could not passthe prescribed courses within the maximum stipulated period laid down in the clause above, the respective Dean of Faculty after scrutiny of the case on merit and subject to good conduct of the student can extend the period for 2 semesters only. Further extension of the period for 2 more semesters may be permitted by the Vice Chancellor only on convincing grounds.

MEDIUM OF INSTRUCTION

The medium of instruction in all Colleges will be English but the teacher may explain the subject matter to the students in Hindi also. However the examinees in the faculty of Agriculture will have the option to answer questions either in English or in mixed language.

EXAMINATION AND EVALUATION

- The academic performance of the student shall be assessed through theory and practical examinations conducted during an academic session.
- Total marks assigned to a course will be 100. It will be distributed as given below.

Midterm Examination	30/40
Theory Assignment	10 (Only theory course)
Practical Examination	15/ 100 (Only practical course)
Practical Assignment	5
Theory Examination	50

A. Pattern of Midterm Examination:

1. It shall be of 30 marks for the courses with practical and theory both.
2. It shall be of 40 marks for the courses with theory only.
3. No midterm examination for the courses with practical only.
4. Maximum time for examination shall be 1 hour.
5. **(a)** Midterm examination (Theory & Practical) – Max. 30 marks

   (i) Objective type 50% (15 questions of multiple choice and / or fill in the blank type only)

   (ii) Short answer type 50% (5 questions of 3 marks)

   (b) Midterm examination (Theory only) – Max- 40 marks

   (i) Objective type 50% (20 questions of multiple choice and / or fill in the blank type only)

   (ii) Short answer type 50% (5 questions of 4 marks)
6. The portion for midterm examination shall be 50% of the proposed course curriculum.
7. Midterm examination shall be conducted as per academic calendar notified by the Vishwa Vidyalalya.

B. Pattern of Assignment Examination:

1. The objective is to prepare the notes.
2. Assignments for each topic of the syllabus will be allotted to the students. Topics will be decided at **H.O.D.** level.
3. Course teachers will guide the students for assignment preparation.
4. 50% marks for quality of write-up and 50% marks for preparation.
5. It shall be **5 marks** for the course with practical and theory both and **10 marks** in case of course with theory only.
6. Instructor shall assign separate topic related to subject for assignment to group of students at the start of session.

7. For the course with theory and practical both assignment shall be practical oriented and student must submit the assignment **on the day of practical examination**. It has to be evaluated by the external examiner.
8. For the course with **theory only**, assignment has to be submitted by the student **at least one month** before final examination.
9. The result of assignment has to be submitted **15 days prior to final examination** for the courses with theory only; whereas, for the courses with theory and practical both should be submitted with the result of practical examination.

C. Pattern of Practical examination:

1. It shall be of **15 marks** for the course with practical and theory both and **100** for the course with practical only.
2. Maximum time for practical examination shall be **2 hours** for the courses with practical and theory both and **3 hours** for the courses with practical only.
3. The following examination pattern shall be adopted for **100 and 15 marks** practical

S. No.	Particulars	Practical for 100 marks	Practical for 15 marks
a.	Exercise-I	30 marks	4 marks
b.	Exercise-II	20 marks	3 marks
c.	Exercise-III	20 marks	3 marks
d.	*Viva-voce*	20 marks	3 marks
e.	Practical record	10 marks	2 marks
Total:		**100 marks**	**15 marks**

4. One external examiner shall be appointed by the professor & Head for each practical examination. Question paper of examination and Viva-voce are the responsibility of internal and external examiner.
5. Marks shall be submitted by internal with the signature of external within THREE DAYS after completion of practical examination.
6. Date of examination shall be same at Vishwa Vidyalaya level as per the academic calendar.

D. Pattern of Final Theory Examination:

1. Question paper shall be prepared by the external examiner.
2. It shall be of **50 marks**.
3. Maximum time for the examination shall be **3 hours**.
4. **Part A**: It is a compulsory part of **10 marks** with five question (Without any option) short answer type question.
5. **Part B** : It consists of **Six questions** containing **10 marks each**. Out of six questions student shall attempt **four** questions only.
6. In multi-disciplinary courses, the question paper will be divided into Unit I and Unit II. The part A will consists 5 question of one mark each in both the units. Part B will be comprised of three questions of 10 marks in each unit and the student has to attempt any tow questions from each unit. Separate answer books for each unit will be provided to the examiners.

E. Evaluation:

1. Evaluation shall be internal by course instructor of other college.
2. Student shall pass theory and practical examination separately.
3. To pass theory examination student shall score 50% marks i.e. Midterm + Assignment + Final (in the courses without practical)
4. To pass practical examination student shall score 50% marks i.e. Practical + Assignment or Practical only.

39. Relative weightage to the various examinations conducted Class-work and records maintained during a semester

Examination Weightage (%)

Credit	Midterm	Theory Assignment	Final theory	Practical	Practical Assignment	Total
3(2+1)	30	-	50	15	5	100
2(2+0)	40	10	50	-	-	100
1(0+1)	-	-	-	100	-	100

Grading and declaration of class

Stages for declaration of classes for UG programme

The minimum passing marks in theory or practical shall be 50%. If a student fails to obtain 50% marks either in theory or practical or both examinations, he/she shall be deemed to have failed in theory or practical or both respectively and shall have to reappear in the theory or practical examination as the case may be. Marks secured by a student will be converted into Overall Grade Point Average (OGPA) on 10 point scale.

Grading as per Vth Dean Committee report

System of Education:

PG Programme – ACADEMIC YEAR/SESSION

The residential requirement and maximum period for Post degree programmes in terms of number of semesters shall be as below

Degree Programme	Residential Requirement (Semester)	Maximum period (Semester)
M.Sc. (Ag.)	4	8

ATTENDANCE REQUIRMENTS

- Student are expected to attend all lectures and laboratory/field practical's scheduled during a semester. Attendance of a student in a course should be at least 75% of the scheduled classes in a semester, failing which he/she will be debarred from appearing in final examination .For this purpose attendance in theory and practical classes will be counted separately.

EXAMINATION AND EVALUATION

- The academic performance of the student shall be assessed through theory and practical examinations conducted during an academic session.
- Mid- term examinations conducted at college level by the Associate Dean consist of the theory paper of one-hour duration. The semester end theory and practical examinations are of minimum of 3 hours duration.

Total marks assigned to a course will be 150. It will be distributed as given below.

Mid-term examination	20
Practical examination	50
Final theory examination	80
One credit is equal	50 marks

REQUIREMENT FOR THE AWARD OF DEGREE

In order to become eligible for Master degree programme, a student should have passed a minimum credit load of course work, comprehensive examination and research work with a minimum OGPA under 10 point scale as per details below:

Min credit load	Thesis credits	Min OGPA
35	20	6.50

For Master Programme minimum passing marks in theory and practical is 60%, but the student has to obtain minimum 6.50 grade for passing in a course.

Requirement of comprehensive examination

- A candidate admitted to Master degree programme must pass a written comprehensive examination covering entire courses of major and minor fields of studies. He/she would be eligible for taking comprehensive examination provided:

a. Has pursued his/her studies at least for two semesters.

b. He/she has completed 75% course work separately in major and minor fields.

Ph.D. Programme – ACADEMIC YEAR/SESSION

The residential requirement and maximum period for Post degree programmes in terms of number of semesters shall be as below

Degree Programme	Residential Requirement (Semester)	Maximum period (Semester)
Ph. D. (Ag.)	6	10

ATTENDANCE REQUIRMENTS

- Student are expected to attend all lectures and laboratory/field practical's scheduled during a semester. Attendance of a student in a course should be at least 75% of the scheduled classes in a semester, failing which he/she will be debarred from appearing in final examination .For this purpose attendance in theory and practical classes will be counted separately.

EXAMINATION AND EVALUATION

- The academic performance of the student shall be accessed through theory and practical examinations conducted during an academic session.
- Mid- term examinations conducted at college level by the Associate Dean consist of the theory paper of one-hour duration. The semester end theory and practical examinations are of minimum of 3 hours duration.

Total marks assigned to a course will be 150. It will be distributed as given below.

Mid-term examination	20
Practical examination	50
Final theory examination	80
One credit is equal	50 marks

REQUIREMENT FOR THE AWARD OF DEGREE

For Master programme minimum passing marks in theory and practical is 60%, but the student has to obtain minimum 6.50 grade for passing in a course.

Requirement of comprehensive examination

- A candidate admitted to Master degree programme must pass a written comprehensive examination covering entire courses of major and minor fields of studies. He/she would be eligible for taking comprehensive examination provided:

c. Has pursued his/her studies at least for two semesters.

d. He/she has completed 75% course work separately in major and minor fields.

Table: Total credits of course offered department wise in Post Graduate: M.Sc. (Ag. /Hort.):

S. No.	Subject/Department	Total Credits							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Agronomy	14	09	21	19	21	19	21	19
2.	Agricultural Economics &	07	13	17	22	17	22	17	22
3.	Entomology	08	12	16	21	16	21	16	21
4.	Extension Education	11	09	18	18	18	18	18	18
5.	Plant Breeding & Genetics	12	08	20	16	20	16	20	16
6.	Plant Pathology	13	12	22	19	22	19	22	19
7.	Soil Science &Agril.	12	10	22	19	22	19	22	19
8.	Fruit Science	12	08	22	16	22	16	22	16
9.	Vegetable Science	12	08	22	16	22	16	22	16
10.	Pl. Molecular Biology & Biotech	-	-	21	17	21	17	21	17
11.	Environmental Science	-	-	21	20	21	20	21	20

Table: Course offered department wise in Ph. D. (Ag. /Hort.):

S. No.	Subject/Department	Courses offered (No.)							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Agronomy	07	07	06	06	06	06	06	06
2.	Agricultural Economics &	07	07	06	06	06	06	06	06
3.	Entomology	08	07	07	06	07	06	07	06
4.	Extension Education	07	07	06	06	06	06	06	06
5.	Plant Breeding & Genetics	07	07	06	06	06	06	06	06
6.	Plant Pathology	07	07	06	06	06	06	06	06
7.	Soil Science &Agril. Chemistry	07	08	06	07	06	07	06	07
8.	Fruit Science	07	06	06	05	06	05	06	05
9.	Vegetable Science	08	06	07	05	07	05	07	05

Table: Total credits of course offered department wise in Ph. D. (Ag. /Hort.):

S. No.	Subject/Department	Total Credits							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Agronomy	13	10	17	15	17	15	17	15
2.	Agricultural Economics &	10	11	16	17	16	17	16	17
3.	Entomology	11	09	18	15	18	15	18	15
4.	Extension Education	12	12	16	18	16	18	16	18
5.	Plant Breeding & Genetics	09	12	13	16	13	16	13	16
6.	Plant Pathology	12	09	17	13	17	13	17	13
7.	Soil Science &Agril.	09	12	15	17	15	17	15	17
8.	Fruit Science	12	09	17	15	17	15	17	15
9.	Vegetable Science	14	09	19	13	19	13	19	13

6.5.4.6. NCC/NSS/RVC Units:

The following B.Sc. (Agri.) volunteers have been admitted to the first year NSS programme during the year 2016 to 2020.

Table: Numbers of volunteers admitted to NSS programme during last five year-

College of Agriculture, Gwalior	2016	2017	2018	2019	2020
Student registered the course	32	25	32	58	112
Students participated in the camp	3	5	3	9	9
➢ Awards	➢ NSS Volunteer Shivan Pathak participated in NSS State level Leadership Training Camp at Narsinghpur (M.P.) and was awarded "Youth Age Champion For Child Protection" Gold Medal by UNICEF. ➢ NSS Volunteer Shivan Pathak participated in NSS National level Unity Camp at District Godavari (Andhra Pradesh)				
Activities, AIDs awareness day, International women's day, Awareness Programme on Smart city, NSS day celebration, Blood donation camp, Parthenium eradication day, Environment day, Nutritional Deficiency problems in Pregnant women & Beti bacho abhiyan					

Table: Numbers of activities performed in NSS programme during last five year-

S.No.	Particulars	Years				
		2016	2017	2018	2019	2020
1	No. of students enrolled	32	25	32	58	112
2	AIDs awareness day	1	-		1(29)	
3	International women's day	1	-		1(32)	
4	Awareness Programme/ (Smart city)	1	1	1(32)	1(29)	1(42)
5	NSS day celebration	-	1		1(24)	
6	Blood donation camp		1		1(31)	
7	Parthenium eradication day		1		1(23)	
8	Environment day		1		1(85)	
9	Plantation of saplings of some trees in village			1(41)		
10	Nutritional Deficiency problems in Pregnant women			1(21)	1(29)	1(32)
11	Beti bachoabhiyan				1(29)	35
12	Celebration of Teachers' Day					
13	Participation in Ek Abhiyan-Dharti Shringaar Programme at Jiwaji University, Gwalior					1(7)

S.No.	Particulars	Years				
		2016	2017	2018	2019	2020
14	Movie Screening related to Swachhat					1(72)
15	Rangoli Competition on Beti Bacho Beti Padhao and Nasha Mukti					1(19)
16	Debate Competition on ''गॉधीजी के सपनों का भारत''					1(78)
17	Role Play (Nukkad Natak)on topic स्वच्छता/सामाजिक कुरूतियज्ञू					1(81)
18	Participation in Atma raksha Prakshishan Camp at LNIPE, Gwalior.					20 Girl NSS Volunteers
19	Participation in State Level Camp					NSS Volunteer Shivan Pathak participated in NSS State level Leadership Training Camp at Narsinghpur (M.P.) and was awarded "Youth Age Champion For Child Protection"Gold Medal by UNICEF.
20	Participation in National Level Camp					NSS Volunteer Shivan Pathak participated in NSS National level Unity Camp at District Godavari (Andhra Pradesh)

National Cadet Corps (NCC)

Regular Activities:

Two days in a week regular parade training for B and C certification 65odicum65e organized to cadets for learning about the NCC activities (Firing, Physical workout, game, teaching about war, parade etc.). CATC Camp, Army attachment camp and other social activities (Tree plantation, adaptation of statue, cleaning of public park, adaptation of slum area, yoga day, NCC day, Kargil Vijay Diwas, participation in social awareness programme, deputation of cadets for district level activities and celebration and national events) assigned by the group head quarter NCC also carried out.

Table: Numbers of volunteers admitted to NCC programme during last five year-

S.No.	Particulars	Years				
		2016	**2017**	**2018**	**2019**	**2020**
1	Enrollment	107	107	53	53	53
2	"B" Certificate exam and passed	15	8	13	13	18
3	"C" Certificate exam and passed	5	7	04	10	13
4	No. of cadets attended the CATC camp	21	21	19	28	31
5	**Others**					

Lecture on Organic farming and soil pollution delivered for cadets on 9 July 2019	
Celebration of National Unity Day on 31.10.18	 
NCC Cadets presenting Guard of honor to Hon'ble V.C. Prof. S.K. Roa on the occasion of Republic Day and independence day	

	
Cadets participated in International Yoga Day 2016 and 2015at SAF Ground	 

Regular Activities:

1. The series of guest lectures on various topics are being organized for the overall social and personality development of the NSS volunteers.
2. Celebration of various days from time to time *viz.*, International Yoga day, Teachers day, World AIDS day, and NSS Foundation day, Independence Day, Republic day, International Women's day, etc.
3. Every year the tree plantation programme is being organized during the month ofJune and July.
4. Every year the blood donation programme is being organized and volunteers donate blood enthusiastically.
5. Undertaking *Shramdaan*/ Cleaning campaign from time to time under the "*SwachhBharat Mission*" in which the college campus, hostel premises, lecture halls, roads, civil hospital etc. are kept clean and tidy and the collected dried leaves and otherbiomass is used for composting.
6. Collection of glass and plastics is done regularly and the collected plastic is beingsent for recycling.

Special Camp Activities:

The seven days' residential special camp is being organized every year in the adopted village where various programme are undertaken as follows:

1. Cleaning of roads, schools, temples and *gram panchayat* premises.
2. Guest lectures on various topics.
3. Tree plantation programme.
4. Animal vaccination programme.
5. Rallies for awareness on various social issues among the public.
6. Cultural programme on social theme.
7. Visits to different places for social development of volunteers.

Scholarships Received

Scholarships received to students

S. No.	Name of Students	Number of department	type of scholarship	Funding agency
1	Mr. Roop Singh Dangi	**Agronomy (Ph.D.)**	NFOBC	UGC (Ministry of Social justice and Empowerment Govt. of India, New Delhi)
2	Ku. Neelam Singh	**Agronomy (Ph.D.)**	INSPIRE	Department of Science and Technology Govt. of India
3	Vikas Mandloi	Ph.D.(Fruit science)	National Fellowship for OBC	by UGC
4	Pramod Ku. Yadav	Plant Breeding	National Fellowship for OBC	UGC

6.5.4.7. Language Laboratory

The majority of the students (80%) are from tribal area. The students lack communication skills as they are weak in English. With an aim to have command and proficiency on language conventional mode of instruction has been adopted for teaching English and communication skills to the undergraduate students of B.Sc. (Agri.).Students are encouraged to communicate in English in the college as well as outside. Extra classes for enhancement of communication skills, improvement of vocabulary etc are conducted so that the students can benefit from them.

6.5.4.8.Cultural Center

College of Agriculture, Gwalior has one cultural hall. Different instruments *viz.*, *Tabla*, Harmonium, Dholki, *Dhol*, *Lezim*, Saxophone *etc*. are kept for the use of the students. Students of this college use this facility for learning and playing different instruments. They also use cultural hall for their practice and preparation for participation in different events like Inter collegiate cultural activities, state level debate and elocutions competitions etc. Beside above referred centre at the college the students have also performed exceedingly well over the other constituent colleges of the university. The following table exhibit the performance of the college in various inter college cultural competitions.

Personality Development Activity

Year	Activities	Winner	Runner
2016	Skit	**Winner**	
	Mono Acting		**Runner**
	Cartooning		
	Patriotic Song		
	One Act Play		
	Clay Modeling		
2017	Mime	Winner	
	One Act Play		Runner
	Extempore		
	Clay Modeling		
2018	One act play	**Winner**	-
	Patriotic Sing		-
	Solo Song		-
	Mime		-
	Cartooning	-	**Runner**
	Poster Making	-	
2019	One act play	**Winner**	-
	Folk dance		-
	Patriotic Song		-
	Mime		
	Mono Acting		
	Cartooning		
	Poster Making		
	Solo Song		
	Extempore		
	Quiz Competition		
	Skit	-	**Runner**
	Elocution	-	
	Group Song	-	
	Debate (Against)	-	
	On spot Painting		
2020	One act play	**Winner**	-
	Folk dance		-
	Debate (for)		-
	On spot painting		-
	Clay modeling		-
	Group song		
	Mono acting		
	Cartooning		
	Skit	-	**Runner**
	Poster making	-	
	Solo song	-	
	Mime		
	Collage		

6.5.4.9. Personality Development

Every year the workshops are conducted to develop the soft skills of the students of the College. Resource persons of repute are invited every year to impart the knowledge of GD, Interview Skills and Communication Skills that help in the overall development of the employability skills of the students and make them ready to be absorbed by any institute worldwide.

6.5.5 PHYSICAL FACILITIES

6.5.5.1 Hostels

Table: Details of hostel facility available

SN	Name of Hostel	No. of Hostel	Total capacity	Students/per room
1	**Boys hostel**	**03**	**234**	**2**
2	**Girls hostel**	**02+1***	**116**	**02**

- **New girls hostels reedy with 32 rooms**

Table: Facilities available in the hostel

Particular	Boys Hostel	Girls hostel
Mess facility	Available-01 Contractual-01	Available-01 Co-operative mess
Drinking water	Water cooler with water filter -1	Water cooler with filter-1
Indoor games	Available Chess Table Tennis	Available Chess Table Tennis
Hot water	Solar system	Solar system
News paper	Hindi & English news papers	Hindi & English news papers

Cleaning

The cleaning of hostel premises is being done with the help of contractor. The cleanliness in the hostel premises is maintained and monitored regularly by supporting staff. The students and staff participated in cleanliness drive in the hostel.

Transport facility

In case of emergency the college bus & vehicles are made available for immediate medication and exposure visits to the student.

6.5.5.2. Examination hall

Table: 48. Details of examination hall facility

Building	No. of halls	Capacity
Examination Hall	01	120
Class room	05	50/class room

6.5.5.3. Sports and Recreation Facilities

Table: Sports facilities available

The following Infrastructure of Physical Education is available in the collage.

S.No	Infrastructure	Number	Approximate area
1	Football ground	01	100x100 meter
2	Sports Complex	01	50x30 meter
3	Kabaddi ground	01	20x15 meter
4	Volley Ball ground	02	25x 15 meter Coach
5	Kho-Kho ground	01	35x25 meter
6	Gymnasium	01	13x7 meter

Sports Activities last five years:

S. No	Year	Level of Competition	Awards (Medals)			Remarks
			Gold	Silver	Bronze	
1	2016	Inter Collegiate	12	03	01	Won Over All Competition
2	2017	Inter Collegiate	10	05	01	Won Over All Competition
		All India Inter – Universities				This College won silver Medal in Athletics Events in All India Inter Agricultural Universities Sports & Games Meet
3	2018	Inter Collegiate	12	05	01	Won over all Championship
4	2019	Inter Collegiate	16	05	04	Won over all Championship
5	2020	Inter – Collegiate	**13**	**08**	**03**	COA Gwalior won the Over All Championship in the Inter Collegiate Sports & Games meet 2019-20
6		All India Inter – Universities	**01**	**-**	**-**	This College Student Sh. Manish Sharma (M.Sc.) won Gold Medal in Athletics Events in 20th All india Inter Agricultural Universities Sports & Games Meet–2019-20, heald at SVVU, Tirupati (A.P.)

Day to day management

The college is having Badminton, Table Tenis, Carrom, Chess, Volley Ball, Khao-Kho, Kabaddi, Athletics and Gyming facilities for the college students.The students are using these facilities daily in morning (6-8 am) and in the evening (5-7 pm) daily except Sunday. On Sunday the sports complex remains opened from 6 to 8 am only.

The College is not having separate space to accommodate Table Tenis, Carrom and Chess due to which the practices of all Indoor Games hinders as these are placed in Badminton Hall to facilitate the students of the college. The Athletics ground is simply a ground having black cotton soils which tuns in to bad shape during summer and rainy season due to swelling and shrinking problem of the soil. The ground needs construction of Running Track and Arernas for Javaline, Discuss & Shotput Throughs along with Long and High Jump Facilities. Hence there is a need to strengthen these facilities so that the college students will performe better at State as well as National level.

6.5.5.4. Auditorium

A Auditorium having 376 seating capacity using for cultural activity, seminars, conference, convocation etc The auditorium is also used for educational and co-curricular activities every fortnightly. Lectures on Career Development, Personality Development and Motivational Development are organized by Eminent Personals in different fields.

6.5.5.5. Exhibition Hall/Museum

Exhibition hall / museum facility

Name of Department	Name of Exhibition Hall	Purpose
College	Exhibition Hall	College has display boards for various ornamental plants, varieties, improved cultivation practices, methods of irrigations, soil and water conservation devices, Farm Machinery tools, agro meteorological instruments, garden tools and implements, seed samples, various crop Pest , diseases, animal component, procedure of soil sampling, soil& water analysis, communication skills, pamphlet, booklets etc.

2019.5.7.. RESEARCH FACILITIES

College has Post graduate degree programmes. So separate staffs are sanctioned for research.

6.5.6.1. Undergraduate/ Post Graduate Laboratories and Equipment's

List of equipment's available in different division laboratories

S.No	Name of department	UG & PG/ Ph.D. Laboratory	Name of equipment
1	Agronomy	02	Air circular hot air oven Core Sampler Kit V-notch Double Beem UV Visible spectrophotometer Rotatory flask shaker Electronic kel plus superior microprocessor LCD projector Honda weed cutter / Bruss cutter Kisankraft sell Propelled weeder self propelled walk behind PUSA STFR meter kit (Digital Soil Testing Mini Lab) Unbranded kjeldahi Digestion cum Flame Photometer Tensiometer Analytical Digital Balance Micro kjeldhal Digestion & distillation assembly Seed germinator Seed counter
2	Soil Science	03	Flame Photometer, Yadder Apparatus, UV Spectrophotometer, EC meter, Ph meter, Tensiometer, Nitrogen analyzer, Shakers, Hot air oven, Bouycous hydrometer, centrifuge machine, hot plate, COD, Distil water unit, etc
3	Plant Pathology	02	Students Microscopes Microscopes with 100 x Objectives BOD incubator Laminar air flow Deep freezer Centrifuge haemocytometer Hot air Oven Autoclave Trinocular microscope Binocular Stereo Microscope Binocular stereo Zoom microscope Spectrophotometer Ultra centrifuge PCR Gel doc Environment controlled indoor chamber Centrifuge UV-Vis Spectrophotometer

S.No	Name of department	UG & PG/ Ph.D. Laboratory	Name of equipment
4	Plant Breeding	02	Laboratory Chemical stand Mini Magnetic Steris Water Bath Hot Plate Auto Clave Vacuum Pump Centrifuge Over Head Projector Hand Grinder Microscope Gas Cylinder (1-8Kg.) P.H. Meter Electronic Weighing Machine Seed Germinator Cooling Centrifuge Seed Blower Seed Precision Divider Moisture Meter Micro pipette Hot Air Oven Auto clave Microwave Oven Micro processor based PH meter
5	Entomology	02	Electronic top pen balance Corcyra cage Power spry Blind Cloth Insect killing jar, aspiratory Collecting net, Stretching board Whatman stander filter paper Honey pouch pedaling machine Electro phoresis with power supply Make SterozoomTrinocullar microscope with digital Camera 74odicum Deep Freezer Digital Type Pen Balance Cropt Oven

S.No	Name of department	UG & PG/ Ph.D. Laboratory	Name of equipment
6	Pl molecular biology &Bio Techn	02	Deep Freezer Gel Rocker Magnetic stirrer Tinifuge Voltage Digital Orbital Shaker Vortexer Analytical Electronic Balance Dry Bath Vertical Reading Microscope Microscope Light Attachment Reflecting Microscope Microscope Microscope spankers Microscope zeips winkle Dissecting Microscope Binocular Demonstration Eye Pice Distillation Plant copper Microscope Dissecting (Round base) Microscope (Glory Sciontificallrs) Lux Meter Oxygen Cylinder of unit twithdolly Res Binocular Microscope
7	Environmenta l science	01	Photosynthesis System' Pressure Chamber, HPLC, Rotatory Evaporator , Bench Top Chiller, Open Tope Chamber , Face/Fate/Faoe , Lysimeter, Digital Sound Label Meter , Soil TDS Digital Conductivity Meter SE 239, LUX Digital Meter, Digital Hand Refractometer, Soil Ph Moisture, Pathological Microscope SE 373,

S.No	Name of department	UG & PG/ Ph.D. Laboratory	Name of equipment
8	Extension education	02	Cyber lab.
9	Agril. Economics	02	Cyber lab.
10	Fruit science	01	Hand Refractometer Digital Refractometer Refrigerator Electronic weighing balance Pan Balance
11	Vegetable science	01	Hand Refractometer Digital Refractometer Refrigerator Electronic weighing balance Pan Balance

6.5.6.2. Research Contingencies

Department	Allotment(In lakh)	Expenditure	Balance
2018-19			
Agronomy	1.90	173700	16300
Soil Science	1.60	101515	58485
Plant Pathology	0.80	74966	5034
Plant Breeding	1.10	73325	36675
Entomology	1.20	109616	10384
Pl molecular biology &Bio Techn	0.30	4544	25456
Environmental science	0.30	30000	0
Extension education	0.70	55613	14387
Agril. Economics	0.25	11553	13447
Horticulture	2.90	267998	22002
Total	11.05	902830	202170
2019-20			
Agronomy	2.30	220939	9061
Soil Science	2.50	125839	124161
Plant Pathology	1.10	53861	56139
Plant Breeding	1.40	127548	12452
Entomology	2.10	110651	99349
Pl molecular biology &Bio Techn	0.70	33875	36125

Department	Allotment(In lakh)	Expenditure	Balance
Environmental science	0.30	16315	13685
Extension education	0.80	58452	21548
Agril. Economics	0.35	35000	0
Horticulture	4.20	415515	4485
Total	15.75	1197995	377005
2020-21			
Agronomy	2.40	106599	133401
Soil Science and Agricultural chemistry	2.40	94074	145926
Plant Pathology	2.20	110533	109467
Plant Breeding	2.40	222184	17816
Entomology	2.10	83538	126462
Pl molecular biology &Bio Technology	0.50	27346	22654
Environmental science	0.40	20861	19139
Extension education and communication	1.20	112183	7817
Agril. Economics	0.30	30000	0
Horticulture	4.60	230629	229371
Total	**18.50**	**1037947**	**812053**

6.5.7 OUTCOME/OUTPUT

6.5.7.1. Student Performance in National Examinations

Table: .Number of students qualified NET in last five years

S.No.	Name of department	Number of students qualified NET					TOTAL
		2016	2017	2018	2019	2020	
1	Agronomy	02	01	13	02	01	19
2	Soil Science	0	02	0	04	01	07
3	Plant Pathology	02	01	02	02	00	07
4	Plant Breeding	0	0	03	02	0	05
5	Entomology	02	03	03	02	01	11
6	Environmental science	0	0	0	0	0	0
7	Extension education	0	0	0	01	0	1
8	Agril. Economics						
9	Horticulture (Fruit science & Vegetable science	02	03	03	01	05	14
	Total	**08**	**10**	**24**	**14**	**08**	**64**

6.5.7.2. Students Placement Profile

Provide detailed information in tabular form about student performance in ARS/and other national examinations/State level examinations or equivalent. Year wise placement profile shall be provided

Table: Profile of student placements

S.No.	Name of employer Organization	Years				
		2016	2017	2018	2019	2020
1	State Government	04	21	14	16	11
2	Private sector	04	23	34	5	03
3	SRF	-	3	4	6	4
4	Self employed	-	3	12	22	14
Total		**08**	**50**	**64**	**48**	**32**

6.5.7.3. Awards/Recognitions/Certificates

List of students given certificates

S.No	Name of students	Name of award	Year	Name of Society/ Agency/department
1	Rohan Sharma (Extension)	Best poster presentation Award	2016	ISEE, New Delhi
2	Ms. Lalita Nargawe (Extension))	Best Thesis Award	2018	Astha Foundation Meerut U.P.
3	Ms. Lalita Nargawe (Extension))	Best poster presentation Award	2018	Astha Foundation Meerut U.P.
4	Ms. Lalita Nargawe (Extension))	Best poster presentation Award	2018	ISEE, New Delhi
5	Mr. Roop Singh Dangi	Best Master Thesis Award	2019	Agronomy
6	Ku. Anjir Pandey	Best Master Thesis Award	2019	Agronomy
7	Mr. Pawan Kumar Para	Best Research Scholar Award	2019	Agronomy
8	Ms. Nishi Mishra	Aastha foundation and awarded best thesis award	2019	Plant molecular biology &Bio Technology
9	Munesh Ku Kushwah	Best Thesis awarded by ATDS, U.P.	2019	Plant Breeding (Ph.D.)
10	Sh. Manish Sharma (M.Sc.)	Gold Medal in athletics – high jump in 20th All India Inter Agricultural Universities Sports & Games Meet–2019-20, held at SVVU, Tirupati (A.P.)	2019	Extension

- University Gold Medal was awarded to two students of M.Sc.(Ag.) N Manoj Kumar (2014-15 Ent. Batch) & Ku. Amita Pachouri (2013-14 Pl. Path. Batch).
- University Gold Medal was awarded to three students of Ph.D. Nisha Bhadauria (2011-12 Agro. Batch), Sourabh Gupta (2013-14 Agro. Batch), & Ku. Artika Singh Kushwah (2015-16 Agro. Batch)

Cultural Activities:

Year	Activities	Winner	Runner
2016-17	Mime and One Act Play	Winner	
	Extempore and Clay Modeling		Runner
2017-18	One act play, Patriotic Sing, Solo Song and Mime	**Winner**	
	Cartooning and Poster Making		**Runner**
2018-19	One act play, Folk dance, Patriotic Song, Mime, Mono Acting, Cartooning, Poster Making, Solo Song, Extempore and Quiz Competition	**Winner**	
	Skit, Elocution, Group Song, Debate (Against) and On spot Painting		**Runner**
2019-20	One act play, Folk dance, Debate (for), On spot painting, Clay modeling, Group song, Mono acting and Cartooning,	**Winner**	
	Skit, Poster making, Solo song, Mime and Collage		**Runner**
2020-21	No Activities conducted due to COVID 19 pandemic	N/A	**N/A**

Sports activities intercollegiate

S. No	Year	Level of Competition	Awards (Medals)			Remarks
			Gold	Silver	Bronze	
1	2016-17	Inter Collegiate	10	05	01	Won Over All Competition
		All India Inter – Universities				This College won silver Medal in Athletics Events in All India Inter Agricultural Universities Sports & Games Meet
2	2017-18	Inter Collegiate	12	05	01	Won over all Championship
3	2018-19	Inter Collegiate	16	05	04	Won over all Championship
4	2019-20	Inter – Collegiate	**13**	**08**	**03**	COA Gwalior won the Over All Championship in the Inter Collegiate Sports & Games meet 2019-20

		All India Inter – Universities	**01**	**-**	**-**	This College Student Sh. Manish Sharma (M.Sc.) won Gold Medal in Athletics Events in 20th All india Inter Agricultural Universities Sports & Games Meet–2019-20, heald at SVVU, Tirupati (A.P.)
5	**2020-21**	No Activities conducted due to COVID 19 pandemic	N/A	**N/A**		

List of students (PG/Ph.D.) who have getting scholarship/type of scholarship/funding agency .

S. No.	Name of Students	Number of department	type of scholarship	Funding agency
1	Mr. Roop Singh Dangi	**Agronomy (Ph.D.)**	NFOBC	UGC (Ministry of Social justice and Empowerment Govt. of India, New Delhi)
2	Ku. Neelam Singh	**Agronomy (Ph.D.)**	INSPIRE	Department of Science and Technology Govt. of India
3	Vikas Mandloi	Ph.D.(Fruit science)	National Fellowship for OBC	by UGC
4	Pramod Ku. Yadav	Plant Breeding	National Fellowship for OBC	UGC

Honors / Awards / Recognition to the centre

Faculty Award

Details of faculty award received during last five year

S.No.	Name of person	Name of the Award	Awarding Organization
Year :2016-17			
1	Dr. A.K. Barholia Associate Professor	Best Poster Presentation	Indian Society of Extension Education, IARI, New Delhi
2	Ekta Joshi, Deep Singh Sasode, and Varsha Gupta	Best Poster Award	The National Forage Symposium 2017 at RVSKVV, College of Agriculture, Gwalior on March, 3-4, 2017
3	Rajni singhsasode	Young Scientist Award,	Society of Human Resources and Innovation Agra (U.P.) INDIA
4	Rajni singhsasode	Scientist Associate Award	Society of Human Resources and Innovation Agra (U.P.) INDIA
5	Pramod K.F., V. Gupta, Rajni S.	Best poster Award IInd	3rd National Brassica Conference, IARI, New Delhi

	Sasode, D.R. Chobe and Reeti Singh		
6	Dr. Satya Prakash Singh Tomar	SPPS Fellow award 2017	Society of Plant Protection Science, ICAR-NCIPM, New Delhi
7	Dr. Satya Prakash Singh Tomar	Appreciation award 2016	Indian Society of Extension Education
8	Dr. Satya Prakash Singh Tomar	BEST RESEARCHER AWARD and certificate of Excellence 2016	Educationexpo TV, Mumbai (India)
9	Dr. Satya Prakash Singh Tomar	Award of honour 2016	Januthan Nyas , Gwalior (M.P.)
10	Dr. Satya Prakash Singh Tomar	Award of honour 2016	Gwalior Vikas Samiti , Gwalior (M.P.)
11	Dr. Satya Prakash Singh Tomar	Best Outstanding Scientist award 2016	IJTA and Serials publication New Delhi, India.
12	Chetan M. Bondre	Scientist Associate Award	Society for scientific development of Agriculture and Technology
13	Chetan M. Bondre	Fellow Award	Society of Human Resource and Innovation, Agra (UP) India
14	Dr. Shashi S. Yadav	Excellence in teaching	Society of scientific and social development Meerut U.P. India
15	Dr. Priyadarshini A. Khambalkar	Young scientist	Society of scientific and social development Meerut U.P. India
16	Dr. Narendra Singh Gurjar	Scientist associate	Society of human resource and innovative agriculture (U.P.) India
17	Dr.M.K.Tripathi	"Excellence in teaching Award" for outstanding contribution in the field of Biotechnology	AASTHA Foundation
Year :2017-18			
1	Dr. G.S. Rawat	Krish iVigyan Gaurav(2017)	Bhartiya Krishi Anushandha Samiti, Karnal
2	Dr Ekta Joshi	Best poster award	International conference on GRISAAS- 2017 during 02-04 December 2017 held at MPUAT, Udaipur (Rajasthan)
3	Dr Ekta Joshi	Scientist of the year award	International Conference “GRISAAS” held at MPUAT, Udaipur during 2–4 December, 2017
4	Dr Ekta Joshi	Appreciation Certificate	On the occasion of teachers day for outstanding research and excellent teaching by “Jan UtthanNyaas Society Gwalior” on 5th September, 2017
5	Dr. Deep Singh Sasode	Excellence in Research Award	Astha Foundation during International Conference on “Global research initiatives for Sustainable

			Agriculture and Allied Sciences (GRISAAS-2017)" during 2-4 December, 2017 held at MPUA&T, Udaipur (Rajasthan)
6	Dr. Deep Singh Sasode	Distinguished Scientist Award	All India Agrcultural Student Association (AIASA) during 2nd National Agriculture Convention on "Agricultural Skill Development for Doubling Farmers Income" on 7th October, 2017 at RAJUVAS, Bikaner (Rajasthan).
7	Dr. Deep Singh Sasode	Appreciation award	Best research and excellent teaching on the occasion of teacher's day by "Jan Utthan Nyaas Society Gwalior" on 5th September, 2017.
8	Dr. Varsha Gupta	Young Scientist Award	Agricultural Technology Development Society (ATDS) Ghaziabad, UP, during International Conference on Advances in Agricultural and Biodiversity Conservation for Sustainable Development (ABCD - 2017) 27 – 28 October, 2017.
9	Dr Rajni Singh sasode	Appreciation Certificate	On the occasion of teachers day for outstanding research and excellent teaching by "Jan UtthanNyaas Society Gwalior" on 5th September, 2017
10	Dr. Varsha Gupta	Appreciation award	Best research and excellent teaching on the occasion of teacher's day by "Jan Utthan Nyaas Society Gwalior" on 5th September, 2017.
11	Dr. Varsha Gupta	Scientist of the Year	Astha Foundation during International Conference on "Global research initiatives for Sustainable Agriculture and Allied Sciences (GRISAAS-2017)" during 2-4 December, 2017 held at MPUA&T, Udaipur (Rajasthan).
12	Ekta Joshi, Deep Singh Sasode and Varsha Gupta	Best poster award	The National Forage Symposium 2017" at RVSKVV, Gwalior on March, 3-4, 2017
13	Dr. Narendra Singh Gurjar	Young Scientist	Aastha Foundation
14	Dr. Priyadarshini A. Khambalkar	Best oral Full Paper Presentation	3rd International Conference Biresource & Stress Management 8-11 Nov. 2017

15	Dr. S.P.S. Tomar	Outstanding young person award for the year 2017	JCI Gwalior on dated 18th April, 2017.
16	Dr. R.S. Sikarwar	Scientist of the Year	GRISAAS Udaipur ,Dec,02-04,2017
17	Dr. Sushma Tiwari	Scientist of the Year	GRISAAS Udaipur ,Dec,02-04,2017
Year 2018-19			
1	Dr. P.D. Singh	Prashasti Patra was conferred in the "7th Shikshak Samman Samaroh"	Utthan Nyas, Gwalior (M.P.)
2	Dr. P.D. Singh	Certificate of Appreciation conferred in the Inter-Collegiate Cultural Meet "Anugoonj"	College of Agriculture, Gwalior (M.P.)
3	Dr. R. Lekhi	Best Poster Presentation	Rajmata Vijayraje Scindia Krishi Vishwa Vidyalaya, Gwalior, Madhya Pradesh
4	Dr. R. Lekhi	Best Poster Presentation	Department of Horticulture Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur, Madhya Pradesh
5	Dr. R. Lekhi	Krishi Vigyan Gaurav	Bhartiya Krishi Anusandhan Patrika
6	Dr. D.S. Sasode	Certificate of Honor	Jan jagritisamajseva kalian samiti, Gwalior
7	Dr. D.S. Sasode	Best teacher award	Jan uthanNyas, Gwalior
8	Dr .Ekta Joshi	Best teacher award	Jan uthanNyas, Gwalior
9	Dr. Ekta Joshi	Certificate of Honor	Jan jagritisamajseva kalian samiti, Gwalior
10	Dr. Varsha Gupta	Best teacher award	Jan uthanNyas, Gwalior
11	Dr M K Tripathi	Science Renown Award in Plant Biotechnology	Bioinformatics Technologies of India, Bareilly, U. P. India
12	Dr M K Tripathi	Distinguished Scientist Award	AASTHA Foundation
13	Dr Sushma Tiwari	Eminent Scientist of the year award	National Environmental Science Academy, New Delhi on 15/12/2018
14	Dr Sushma Tiwari	Prestigious Scientist award	Bioinformatics Technologies of India, Bareilly on 24/11/18
15	Dr. R. S. Sasode	Best teacher award	Jan uthanNyas, Gwalior
Year :2019-20			
1	Dr.V.S.Kandalkar	Best teacher award of the year	Gwalior Vikas Samiti,Gwalior
2	Dr Sushma Tiwari	Chaudhary Charan Singh Award	Global Environment and Social association (GESA), New Delhi
3	Dr Sushma Tiwari	Fellow Award	Global Environment and Social association (GESA), New Delhi

SEMINAR/ SYMPOSIUM-(ATTENDED/ ORGANIZED)

Seminar/ Symposium / Workshop organized

Date	Topic	Number of participant	Photograph
International seminar (01)			
07-10 March 2016	Global Ravine Conference -2016 (Managing Ravines for Food & Livelihood Security)	**>250**	 
National Seminar			
19-21 August, 2015	Organic Ameliorants For Soil Resilience and Environmental Securities	**>200**	

			
20 – 23, October 2016	81st Annual Convention of Indian Society of Soil Science, New Delhi	**450**	 
Feb. 26-28, 2015.	ISEE National seminar on the theme of "Extension Innovations and Methodologies for Market – Led Agricultural Growth and Development	More than 300.	

December 12-13, 2015	National Conference on "Global Research Initiative for Sustainable Agriculture and Allied Sciences (GRISAAS-2015)	200	
November 28-30, 2016	ISEE National seminar on the theme of "Information & Communication Management Concerning Climate Smart Agriculture for Sustainable Development and Poverty Alleviation"	More than 200	
January 30, 2017	Agri & Food Processor's Conclave: Associated Chambers of Commerce and Industries of India (ASSOCHAM)	More than 300	 
WORKSHOP			
10-11 November, 2017	Annual Group Meet on Pulses for Spring, Summer and Rice fallow cultivation of AICRP on MULLaRP and Arid Legumes	More then 140	

Seminar/ Symposium / Workshop attended

Date	Topic	Number of faculty participant	Venue
Department of plant breeding and Genetics			
20th to 23rd, October, 2016	81st Annual Convention of Indian Society of Soil Science and National Seminar from	**07**	RVSKVV, Gwalior
10-13, November 2016	International Conference on Integrated Land Use Planning for Smart Agriculture –An Agenda for sustainable Land Management	**02**	ICAR- NBSS & LUP, Nagpur.
February 25-26, **2017**.	National Conference on "Emerging Trends in Agricultural Sciences and its impact on Sustainable Livelihood" (ETAS-2017),	**02**	Shobhit University, Meerut
February 23-24, **2019**.	National conference on "Resilience and Resource Management Including ICT for Sustainable Agriculture and Biotechnology"	**02**	M.P.S. group of Institutions, Agra, (UP) India.
10-11 june 2020	Applications of Biotechnological Tools in Crop Improvemenet	**04**	Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya Gwalior
30 April-02 may 2020	Application of omics in climate smart Agriculture	**01**	Mahatma Phule krishi Vidyapeeth, Rahuri
Agronomy			
February 27-28, 2016	attended an annual workshop of All India Coordinated Research Project (AICRP) on Weed Management	01	MPUAT, Udaipur
7- 10 March, 2016	Attended and paper presented through poster in Global Ravine Conference on Managing Ravines for Food and Livelihood Security	01	RVSKVV, Gwalior (M.P.)
April 24-27, 2016	I have attended an annual workshop of All India Coordinated Research Project (AICRP) on Groundnut	01	Dharwar, Karnataka
22 – 24th May, 2016	Attended XXXIIth Annual Group Meet of NNRP on Kharif pulses and Arid Legumes Research Workers and presented results of all centre of AICRP on Arid Legumes in Agronomy discipline	01	University of Agricultural Sciences, Bengaluru (Karnataka)
5-7 August, 2016	Attended National Seminar on "Human Values And Professional Ethics"	01	RVSKVV, Gwalior
20-23 October	Outstanding contribution in successful organization of the "81st Annual	01	RVSKVV, Gwalior

2016	Convention of Indian Society of Soil Science"		
November 28-30, 2016	Attended National Seminar on Information and Communication Management concerning Climate Smart Agriculture for Sustainable Development and Poverty Alliviation"	01	Indian Society of Extension Education, New Delhi
29-30, November, 2016	Attended and presented results of all centre of AICRP on Arid Legumes in Agronomy decipline in Group Meet on Mungbean and Urdbean for Spring, Summar & Rice Fallow Cultivation of AICRP on MULLaRPand Arid Legumes	01	Swami Keshwanand Rajasthan Agricultural Univeristy, Beechwal, Bikaner (Raj.)
30 January, 2017	Attended National Seminar on AGRI & FOOD PROCESSOS'S CONCLAVE: FINANCE TECHNOLOGY MARKETEMERGING"	01	Assoc ham, New Delhi
march 03-04, 2017	National forage symposium on "New direction in managing forage resources and livestock productivity in 21stcentury: challenges and opportunities"	01	RVSKVV, Gwalior
6-8 May, 2017	Attended and presented results of all centre of AICRP on Arid Legumes in Agronomy decipline in Annual Group meet on Kharif Pulses of AICRP on MULLaRPand Arid Legumes	01	GBPUA & T, Pantnagar
3-4 July, 2017.	Attended two days training programme organized by expert committee of CRISP	01	RVSKVV, Gwalior
27 – 28 October, 2017	Attended International Conference on Advances in Agricultural and Biodiversity Conservation for Sustainable Development (ABCD - 2017)	01	CCS University, Meerut UP
2-4 December, 2017	Attended and presented achievement of the AICRP on Arid Legumes, Gwalior in Golden Jubilee and National Symposium on Pulses for Nutritional Security and Agricultural Sustainability	01	ICAR-IIPR, Kanpur (U.P.)
15-16 February, 2018	Attended National Conference on "*Current trends in plant science and molecular biology for food security and climate resilient agriculture*"	01	NESA, New Delhi and RVSKVV, Gwalior (M.P)
28-30 April, 2018	Attended and presented results of all centre of AICRP on Arid Legumes in Agronomy discipline in Annual Group	01	SDAU, S.K. Nagar, Gujarat

	meet on Kharif Pulses of AICRP on MULLaRPand Arid Legumes		
25-27 September, 2018	Attended three days training programme on "Developing Winning Research Proposals in Agricultural Research"	01	NAARM, Hyderabad
21-24 November 2018.	Attended International Conference on " Weeds and Society: Challenges and Opportunities" and presented a poster paper entitled, " Effect of different weed management practices on growth and yield of potato under organic cropping system" in the ISWS Golden Jubilee International Conference	01	ICAR-Directorate of Weed Research, Jabalpur
01/04/2019	Attended one day workshop for the formulation of Institutional Development Plan (IDP) under	01	NAHEP project, RVSKVV, Gwalior (M.P.)
2-3 March, 2019	Participated and poster presented in 2 days national seminar on "Strategies for Soil Health Management Achievement & Researchable Issues"	01	RVSKVV, Gwalior
01/04/2019	Attended one day workshop for the formulation of Institutional Development Plan (IDP) under NAHEP project	01	RVSKVV, Gwalior
25-27 May, 2019	Attended Annual Groundnut Workshop of AICRP on Groundnut	01	Andhra University, Vizag, Andhra Pradesh
07/07/2019	Attended one day workshop of Institutional Development Plan	01	NAHEP on at RVSKVV, Gwalior
1 to 21th Feb. 2020	Attended 21 days winter school training on Good agricultural practices & value chain management in high value low volume horticultural crop	01	NRCSS, Ajmer, Tabiji, Rajasthan

Details of winter/summer school and short term courses -

S. No.	**Name of staff**	**Topic**	**Place**
1	Dr. Janmejay Sharma Scientist (Agronomy) 3 (Weeks)	ICT applications in Agricultural Education & Extension	ICAR-NARM, Hyderabad during 19 Feb to 10 Mar 2020
2	Dr. Ekta Joshi Scientist (Agronomy) 3 (Weeks)	Good agricultural practices & value chain management in high value low volume horticultural crop	NRCSS, Ajmer, Tabiji, Rajasthan – reg. During 1 to 21th Feb. 2020
3	Dr. Varsha Gupta Scientist (Agronomy) 3 (Weeks)	"Research and development in organic farming: Current status and way forward" during 1-21 June, 2019	Centre of Advance Faculty Training on Organic Farming, Directorate of Research, at MPUA&T, Udaipur (Raj)

4	Dr. Sushma Tiwari 3 (Weeks)	Next generation sequencing and its application to crop science	Centre for advanced faculty training CAFT, NRCCPB New Delhi
5	Dr. R.S. Sikarwar Scientist (Pl.breeding)	Winter school 3 (Weeks	CPRI-Regional station, Meerut (UP)
6	Dr. Shashi S. Yadav Scientist (Soil Science)	Training on Conservation Agriculture-based Sustainable Intensification a six week online course 31 March 2020	Completed online training program (ag MOOCs)
7	Shri. H. K. Trivedi (Scientist- Plant pathology)	Plant Biosecurity" from 1st September to 30th November, 2019.	organized by National Institute Plant Health Management, Hyderabad from
8	Dr. D.S. Sasode (Sr. scientist-agronomy)	"Recent advances in production, protection and processing (PPP) technologies under utilized and exotic horticulture crops" on1-21 November, 2017	SKN Agriculture University, Jobner Jaipur (Raj.)

DISTINGUISHED VISITORS

Abroad visits details:

S.No	Name of Scientists	Name of place	Year	Purpose
1	Dr. S. K. VERMA,	France and Spain	May 10th to May 20th, 2018	Chief Ministers Foreign exposure to farmers .Team of 18 farmers visited France and Spain along with nodal officer DDA Hosangabad

Distinguished visitors details:

Date	Name and designation of visitors	Photograph
07/10/2019	Dr.Rachit Saxena, Sr.Scientist,(ICRISAT,Hydrabad)	
	Dr Mangla Rai, Former DG, ICAR, New Delhi	
DEPARTMENT OF AGRONOMY		
21.03.2016	Dr. Khankhane, Scientist at DWR , Jabalpur and Nodal officer	

24.02.2017	Dr. P.J. Khankhane, Nodal Officer, DWR, Jabalpur	
23.09.2017	Dr. Shiv Sevak, Nodal Scientist, IIPR, Kanpur	
29.01.2018	Dr. P.K. Singh, Director, DWR, Jabalpur	
25.02.2019	Dr. P.K. Singh Director, DWR, Jabalpur with DWR Scientist	
August, 2019	Dr. T. Radha Krishna, DGR, Junagarh	

6.5.7.4. Employability

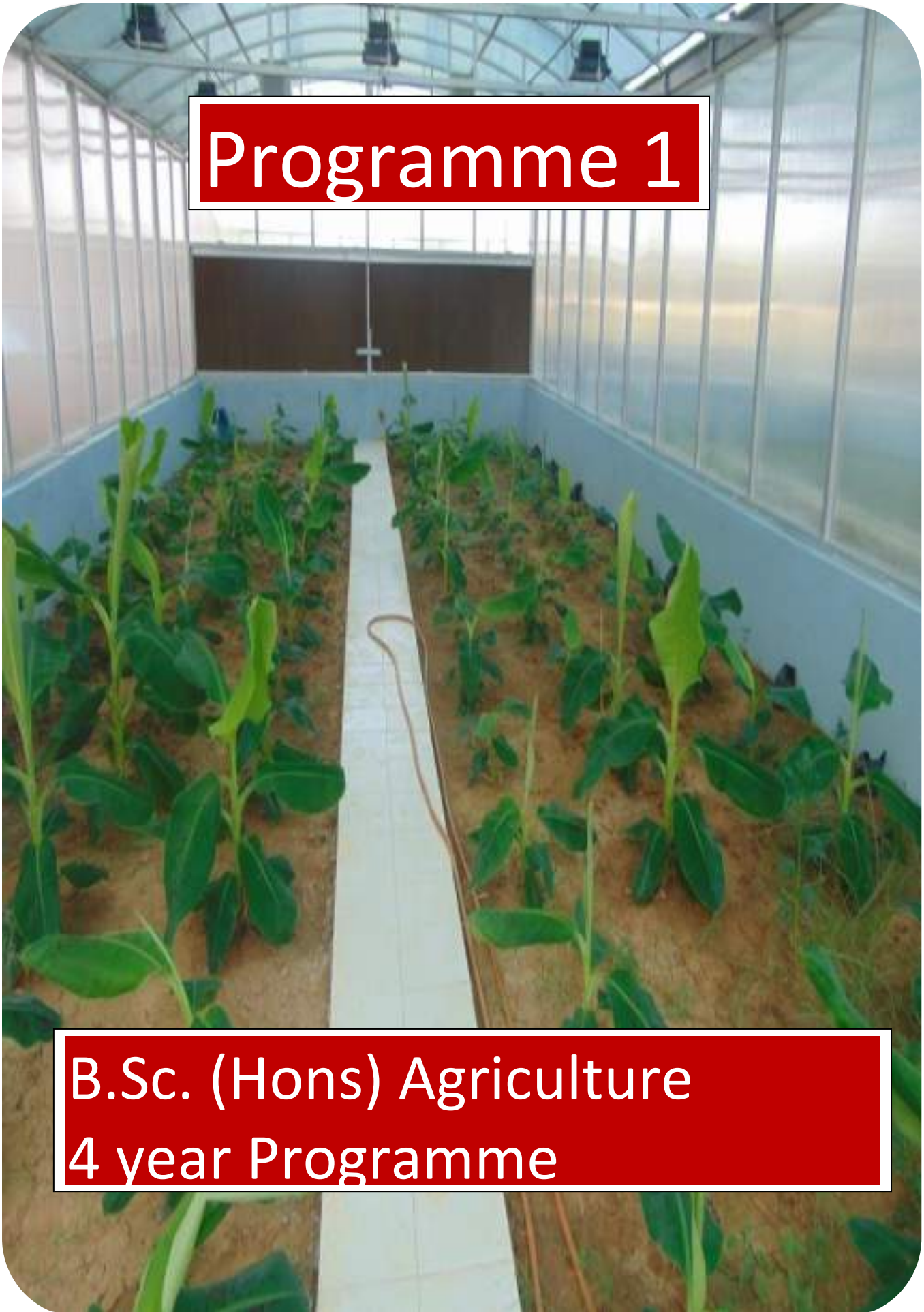
With the implementation of the V Dean's Committee since 2017-18 Agricultural Education has been able to gain new momentum and it has opened up new horizons for the students of the Agricultural Universities.

Since the inception, students of the College of Agriculture, Gwalior are being trained in Agronomy, Animal Husbandry and Dairy Science, Plant Physiology, Agricultural Economics, Entomology, Engineering, Extension, Horticulture, Plant Pathology, Soil Science &Agricultural Chemistry and Statistics. Regarding professional employability, which is in demand in the present scenario, students are imparted intensive training related to technical, entrepreneurial,

communication skills, leadership skills and a well-developed personality. In order to meet these, during the first six semesters students get instructions and training in all the above subjects and in Semester VII they undergo RAWE and in the final semester they are imparted training in Experiential Learning. After the completion of the undergraduate degree programme, the students of this college become adept in plant disease diagnosis, farm advisory and production practices, dairy and poultry farming, advanced irrigation systems for water management, organic farming, and agro-entrepreneurial skills. Students find placement in the Central and State governments through various competitive examinations while a large number of students get placed in the private sector organizations and Government of India Undertakings such as the finance sector. Team work, leadership qualities and interpersonal skills help to refine the students in their post academic career and other endeavours thus helping in their holistic development.

6.5.9. Certificate (Applicable when SSR is submitted for Programme)

I, the **Dean, College of Agriculture**, **Gwalior hereby** certify that the information contained in **Sections 6.4 and Section 6.5.1 to 6.5.7.4** is furnished as per the records available in the college and degree awarding university.



Programme 1

B.Sc. (Hons) Agriculture
4 year Programme

6.4 About the College

6.4.1. Brief History of the Degree Programme: Clearly mention in which year the degree program was initiated along with its objective and accomplishments

HISTORY

The college of Agriculture Gwalior was established in the year 1950. This is the oldest college of Madhya Bharat State. In the beginning this college was affiliated to Agra University and later on to Vikram University Ujjain. This college has celebrated its golden jubilee in the year 2000. After the establishment of Jawaharlal Nehru Krishi Vishwa Vidyalaya Jabalpur in the year1964, this college has been affiliated to it. On 19th August 2008 a new Agriculture University namely Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya came into existence after bifurcation of JNKVV, Jabalpur with its head quarter in Gwalior and this college has become the main campus of Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya. The Central Research Farm of the college (Regional Agriculture Research Station) was established in 1916.

Objectives of initiating UG programme:

The College adopts the following goals and objective which permeate in offering of various curricula, and undertake research and extension activities by its departments to:

- Provide world-class education to our students.
- Maintain a strong basic and applied research programme to support all segments of agriculture and allied sectors through enhanced agriculture productivity and environment sustainability.
- Serve the rural society through extension activities by disseminating research based knowledge.
- Assist stakeholders through value-added endeavours, bio-based products, bio-processing, crop diversification etc.
- Monitor climate change impacts on agriculture systems and develop mitigation strategies adopting inter-disciplinary approaches

MANDATES

- To serve as a centre of higher education, research and extension in the field of agriculture and allied sciences.
- To disseminate technologies to farmers, extension personnel's and organizations engaged in agricultural development through various need based extension programs.

6.4.2. Faculty Strength:

(a) In Place Faculty and Deviation from Fifth Dean's Committee

S.N.	Sanctioned Faculty	Faculty		Vacant position	Faculty recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation from fifth dean's committee
		Sanctioned	In place			
1	Professor	-	-	-	3	-3
	Principle scientist	01	-	01	-	-
2	Associate Professor	07	02	05	08	-6
	Senior Scientist	12	04	08	-	-
3	Assistant Professor	25	09	16	34	-25
	Scientist	15	07	08	-	-

(b).Detail Of Teaching Arrangements Made For Completion of Curriculum

S.N.	**Name of Department**	**Faculty arrangement**			
		Deputation (Shifted faculty from extension and research stream)	**Research (In addition to Project Research work)**	**Extension (In addition to KVK and Directorate of Extension work)**	**Guest**
A. Division/Department					
1.	Agricultural Economics	**-**	**-**	**-**	**01**
2	Agricultural Extension & Communication	**01**	**-**	**01**	**01**
3	Agronomy	**-**	**04**	**04**	**-**
4	Entomology	**01**	**-**	**01**	**-**
5	Horticulture	**02**	**-**	**03**	**04**
6	Genetics and Plant Breeding	**-**	**05**	**-**	**02**
7	Plant Pathology	**-**	**03**	**-**	**02**
8	Soil Science and Agricultural Chemistry	**-**	**01**	**02**	**02**
9	Plant Molecular Biology and Bio technology	**-**	**02**	**-**	**01**
10	Environmental Science	**-**	**-**	**01**	**01**

B. Section					
1	Biochemistry and Crop Physiology	**-**	**-**	**-**	**-**
2	Agril. Statistics	**-**	**-**	**-**	**01**
3	A.H. & Dairy	**-**	**-**	**01**	**-**
4	Agril. Engineering	**-**	**-**	**01**	
5	English	**-**	**-**	**-**	**01**

6.4.3. **Technical and supporting staff**:

A. Departmental Administrative Staff and Deviation from Fifth Dean's Committee:

S.N.	Sanctioned Staff	Staff		Vacant position	Staff recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation from fifth dean committee	Remarks on involvement in multiple programme
		S	In place				
1	Assistant	10	4	6	11	-7	Involved in various work at different farms under the college
2	Lab Assistant	9	0	9	19	-19	N/A
3	Field Assistant	15	5	1	13	-8	Involved in various work at different farms and hostels under the college
4	Attendant/ Messenger	8	3	5	-	+3	N/A
	Total	42	12	21	43	-31	

B. Details of College Technical and Supporting staff and deviation from fifth Dean's committee:-

S.N.	Sanctioned Staff	Staff		Vacant position	Staff recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation from fifth dean committee	Remarks on involvement in multiple programme / Contract staff
		Sanctioned	In place				
1	PS to Dean	-	-	-	01	-1	Contracted
2	Assistant Administrative Officer	-	-	-	01	-1	Not in place
3	Assistant Academic Officer	-	-	-	01	-1	Responsibility held by a Scientist
4	Assistants	1	1	0	03	-2	N/A
5	Steno/ Computer Operators	2	0	2	01	-1	N/A
6	Driver	2	0	2	01	-1	Driving is done by daily wagers
7	Farm Manager (Asstt. Prof.) / Dairy Manager	2	0	2	01	-1	Responsibility held by KVK Tech. Officer
8	Store Keeper	1	0	1	01	-1	Responsibility held by field extension officer of a research project
9	Instrumentation Asstt. Engineer	-	-	-	01	-1	N/A
10	Instrumentation Technician/Lab Asstt.	-	-	-	01	-1	N/A
11	Asstt, Librarian	1	0	1	01	-1	Responsibility held by Tech. Asstt. (VV Library)
12	Library Asstt./ Clerk	-	-	-	1	-1	N/A
13	Shelf Asstt.	2	0	2	1	-1	Responsibility held by daily wagers(03 no.) and contracted

							person (01)
14	Physical Education (Asstt. Prof.)	1	0	1	1	`-1	Contracted
15	Attendant	-	-	-	1	-1	N/A
16	Warden	-	-	-	2	-2	N/A
17	Care Taker/Asstt.	-	-	-	2	-2	N/A
18	Sub Engineer	1	1	0	-	+1	Working for civil
19	Junior Engineer	-	-	-	1	-1	N/A
20	Security Assistant	-	-	-	1	-1	N/A
	Total						

Note:-Presently institution is not having sufficient technical/ laboratory/farm staff but the process for the recruitment is in process.

6.4.4 Classrooms and Laboratories: 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. Lists major equipments, 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.

No. of lecture rooms with seating capacity	One with seating capacity of 70
No. of lecture rooms with LCD	4
No. of smart class-rooms	4
No. of labs under Dean's office with specialized purpose	Ten Under graduate Labs.
Farm facilities (farm/Dairy/Horticulture unit)	Yes (84.40Ha)
Workshops	Computer lab
Any other instructional units being utilized for the award of the Degree Programme	• Seminar Rooms and examination halls with two hundred Fifty capacity • Smart Auditorium 300 capacity. • Indoor and outdoor play ground

Dimensions of Classrooms:

S.N.	Name of Classrooms	Length (Metre)	Width (Metre)
1.	B.Sc.(Ag.)Ist year	11.00	7.30
2.	B.Sc. (Ag.)IInd year	11.00	7.30
2.	B.Sc. (Ag.)IIIrd year	11.00	7.30
4.	B.Sc. (Ag.)IVth year	11.00	7.30

A Mention theory and practical batches for UG Programme

Year	Theory				Practical			
	1st year	2nd year	3rd year	4th year	1st year	2nd year	3rd year	4th year
2016-17	01	01	01	04	03	03	03	04
2017-18	01	01	01	04	03	03	03	04
2018-19	01	01	01	04	03	03	03	04
2019-20	01	01	01	04	03	03	03	04
2020-21	01	01	01	04	03	03	03	04

6.4.5. Conduct of Practical and Hands-on-Training:

Agronomy

Charts/specimens of tools and implements, actual seed, weed and crop identification, different methods of sowing, irrigation layouts, live models of pressurized irrigation systems, agro-meteorological instruments, methods of fertilizer application and methods of weed management.

Livestock & Dairy Management

Physical characteristics of different breeds, livestock; Breeding, health, feeding and management of livestock; forage cultivation and nutritional requirement of different categories of animals;

Plant Biotechnology

Study of water, air and sound pollution; visits to study the eco system.Preparation of slides to study the cell division. Floral biology of different major crops of the region is taught and the different breeding methods used for hybridization / crop improvement in field are demonstrated. Experiments on photosynthesis, respiration, transpiration, estimation of chlorophyll content and growth are demonstrated. In plant biotechnology the technique of micro propagation in banana and sugarcane is demonstrated. Demonstration on DNA extraction and gel electrophoresis is also done. In seed technology course practical on seed sampling, preparation of seed sample, cleaning and grading of seed lot, study of physical purity, moisture, germination, seed vigour, viability and heath test is done.

Agricultural Economics

Estimation of cost of cultivation of Crops, depreciation of farm assets, net worth and income statements, financial test ratios, break even analysis of project, study of marketing institutions such as NAFED, SWC, CWC. etc. Economic analysis of different enterprises, partial and complete budgeting and preparation alternative farm plans, assessment of credit requirement for various crops and enterprises. Testing of economic viability of project, loan proposal formulation and assessment of repayment capacity, risk

barring ability and returns on investment. Institutional finance, Marketing of Agricultural products and live stock.Input and output markets, financial criteria for appraisal of the project. Seasonal indices of arrival and prices of Agril. Commodities.

Agricultural Engineering

Surveying and leveling; Farm Machinery and power practicals are conducted through cut models of different systems of IC engine and tractor. Protected cultivation; Post harvest Technology.

Agricultural Entomology

Insect morphology and anatomy; classification and identification of distinct insect pest, pest management strategies, collection and extraction of plant parasitic nematodes.

Agricultural Extension & Communication:

Communication skills, preparation of bulletin, pamphlet, booklet; preparation of news, radio talk; channels for effective dissemination of agricultural information.

Horticulture

Propagation methods *e.g.*Cutting, layering, budding and grafting and crop maximization practices like bending, notching, ringing and girdling, training and pruning. Production Technology of Vegetables and Flower Crops: Maximization of vegetable yield by *viz*., staking, turning, blanching, earthing up. Maximization of flower yield and quality by pinching, disbudding, pruning, bending. Vegetable Production: Production and marketing of various vegetables *viz*., tomato, brinjal, onion, cabbage, cauliflower, broccoli, lettuce, garlic and exotics. Preparation of value added products.

Plant Pathology

Isolation and identification of plant diseases, disease diagnosis of field as well as horticultural crops. Isolation and identification of different beneficial microbes including bio fertilizer, bio agents, mushroom etc.

Soil Science and Agricultural Chemistry

Physical, chemical and biological properties of soils ; recommendation for improving the soil quality, health and crop sustainability; specimens of soil forming rocks and minerals along with their properties, soil profile, tools for collection of soil and irrigation water samples. The qualitative and quantitative analysis of carbohydrates, proteins, lipids and oils are carried out for nutritive values along with their quality in food are tested.

- **RAWE Programme:** The students of VII semester were sent for work experience training of 6 months duration to different villages.

During the last five year i.e. **2015-16 to 2019-20**, total **314** final year (VII Semester) students of B.Sc. (Ag.) have been placed under the jurisdiction of different Zonal Agriculture Research Station, Regional Agriculture Research Station and Krishi Vigyan Kendra of the Vishwa Vidyalaya.

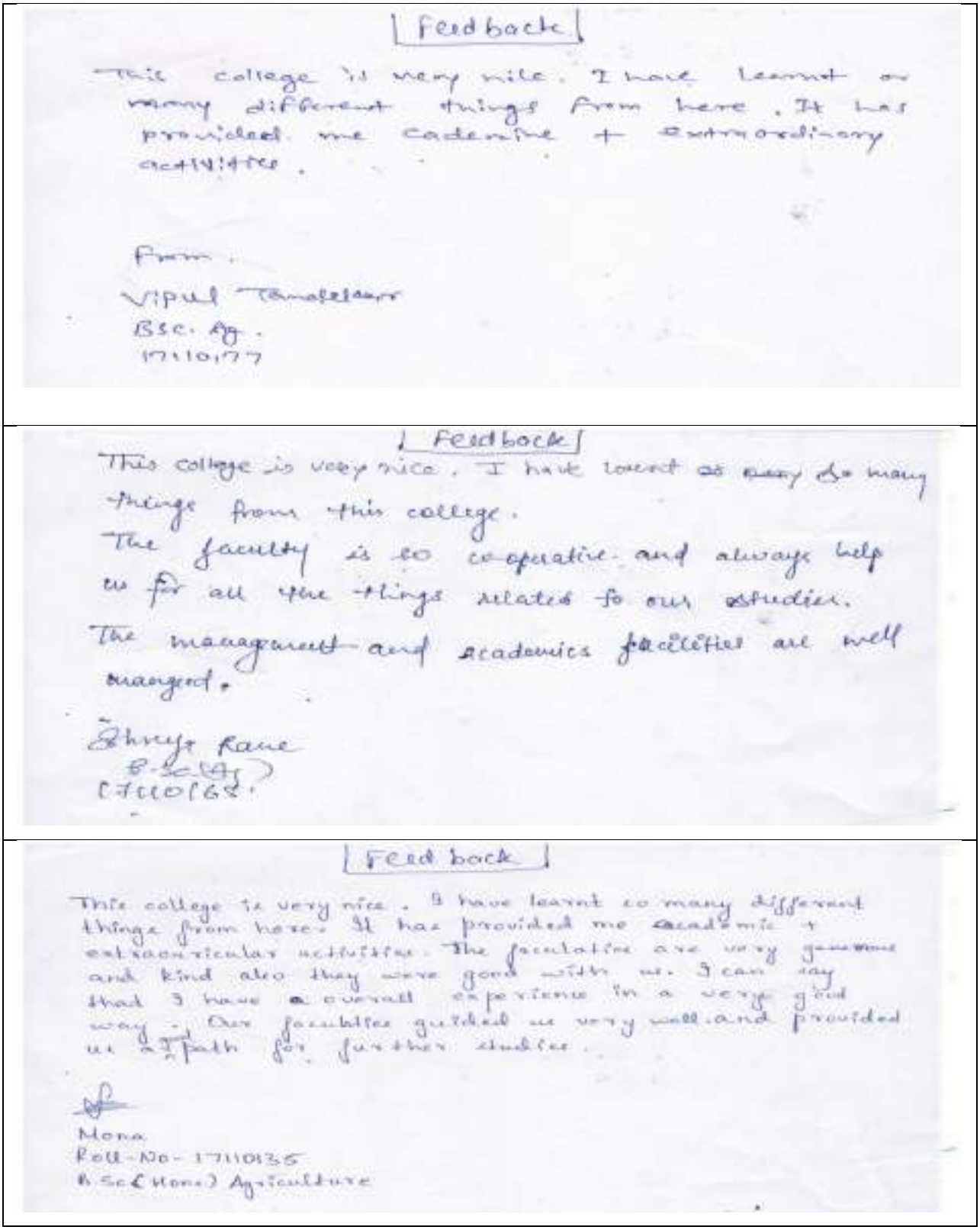
Placement of Students

S.No.	Year	Placement Centre's (ZARS/RARS/KVKs) Adopted villages of KVKs	Number of Students		Total
			Boys	Girls	
l	2016	KVK, Shipuri: Piprasama, Rator KVK, Aron Sarkho KVK, Ashok Nagar Sadora, Awarimaphi, Khajuriyakala	40	16	56
2	2017	KVK, Shipuri:- Rator KVK, Aron:- Sarkho, Parsoda,Khooja, Bhador KVK, Seopur: - Indrapura, Kudayata, Lalitpura	44	19	63
3	2018	**KVK, Aron**:- Sarkho, Araskheda **KVK, Seopur**: - Indrapura, Lalitpura, Galmania, Baroda, Dharampura	54	21	75
4	2019	KVK, Shipuri:- Rator KVK, Aron:- Araskheda KVK, Seopur: - Rundi and Kudayatha KVK, Datia:- Kakrua KVK Lahar:- Vaishpura KVK Ashoknagar:- Khiriyamahu& pal katori KVK Morena:- Ata	41	33	74
5	2020	KVK, Shipuri:- Rator KVK, Aron:- Araskheda KVK, Seopur: - Indrapura, Lalitpura and Galmanya	29	17	46
TOTAL			**208**	**106**	**314**

- **Educational tour:** 8-10 days duration education tour was arranged between semester break of VII and VIII semester.
- **Exposure visit:** 2 days duration exposure visits was arranged for VIII semester students.
- **Learning Outcomes**
  Knowledge about commercial production of various vegetables was gained by the students.

6.4.6 Supervision of students in PG/Ph.D Programmes: NOT APPLICABLE FOR UG PROGRAMME

6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers etc.):



Feedback

This college is very nice. I have learnt so many different things from here. It has provided me academic + extraordinary activities.

From,
Vipul Tamaleekar
BSc. Ag.
17110177

Feedback

This college is very nice. I have learnt so many things from this college.
The faculty is so co-operative and always help us for all the things related to our studies.
The management and academics facilities are well managed.

Shreya Rane
B.Sc(Ag)
17110168.

Feed back

This college is very nice. I have learnt so many different things from here. It has provided me academic + extracurricular activities. The faculties are very generous and kind also they were good with us. I can say that I have a overall experience in a very good way. Our faculties guided us very well and provided us a path for further studies.

Mona
Roll-No- 17110135
B.Sc(Hons.) Agriculture

Feedback

I Akshat gupta, Bsc 4th yr student 17110106
I want to say that as a student of this college, I learnt a lot during my graduation time. In each and every semester, I learnt new things and clear all my basics and practical knowledge.

I learnt all because of our college dean, faculty and other staff. Each department has its own laboratory and staff which help me in every aspect.

I also awarded 1st Runner up certificate and medal in "Agni Unifest 2020" organised in Raipur Chattisgarh. In singing and this is because of our college cultural team.

My college always enhance and identify my talent. Thanks a lot to all the faculty, staff and dean of COA gwalior.

I got highest marks in my UG and in this also my subject teachers play a major

Feedback

As a student I have learned a lot from college of Agriculture gwalior madhya pradesh.

There is a very good Environ-ment for studie.

Teacher professor is very friendly.

college of Agriculture gwalior is providing very good product for farmers help

college of Agriculture gwalior playing a vital role to growth of surrounding Agriculture community & contributing to development of Agriculture in madhya pradesh.

I am a student of B.Sc. (Agr) IV- year.

I want that this college should be Accredited by ICAR.

There is a lot of faculty & Availability of all type of equipment which is required for research.

SANDEEP ARYA
College of Agriculture gwalior (M.P.)

FEEDBACK

College of Agriculture, Gwalior has the immense facility Related to Work, Hostel, Efficiency everything is Good. The Teaching Staff are Very Co-operative they explain us very well. They are very efficient at their work. The GWALIOR Campus has the Very Soothing environment how studies. The library facilities are excellent all the Programmes and everything is very good.

EKTA PATEL
BSc (Ag) hons
Ekta Patel

Feed back

This college is very nice. I have learnt so many different things from here. It has provided me academic plus extra curricular activities. The faculties are very generous and kind also they have excellent knowledge. I can say that I have overall experience in a very good way. Our faculties guided us very well.

Vivek Sharma
Roll No 17110178
V. Sharma
Bsc (Ag)

6.4.8 Student intake and attrition in the programme for last five years: Year wise information on sanctioned strength, actual intake and attrition in the last five years of the Degree Programme, in the tabular form, shall be provided.

Student intake and attrition

Name of the	Actual students admitted in last five years					Attrition (%)				
Degree programme	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
B.Sc. (Hons.) Agriculture 4yr.	82	78	80	82	82	25.6	8.9	6.25	9.75	-

6.4.9. ICT application in teaching and practical for curricula 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.

Yes, the faculty members of the College of Agriculture Gwalior are using ICT in teaching and practical. There are lecture rooms and seminar rooms with computer, LCD projector and internet connection. All faculty members have computer, printer and internet connection in their offices. There is Wi-Fi facility for faculty, staff and students. This infrastructure provides opportunities for the use of ICT in quality teaching, research and extension. The faculty members use power point presentations, YouTube, emails and CD ROM in teaching different courses.

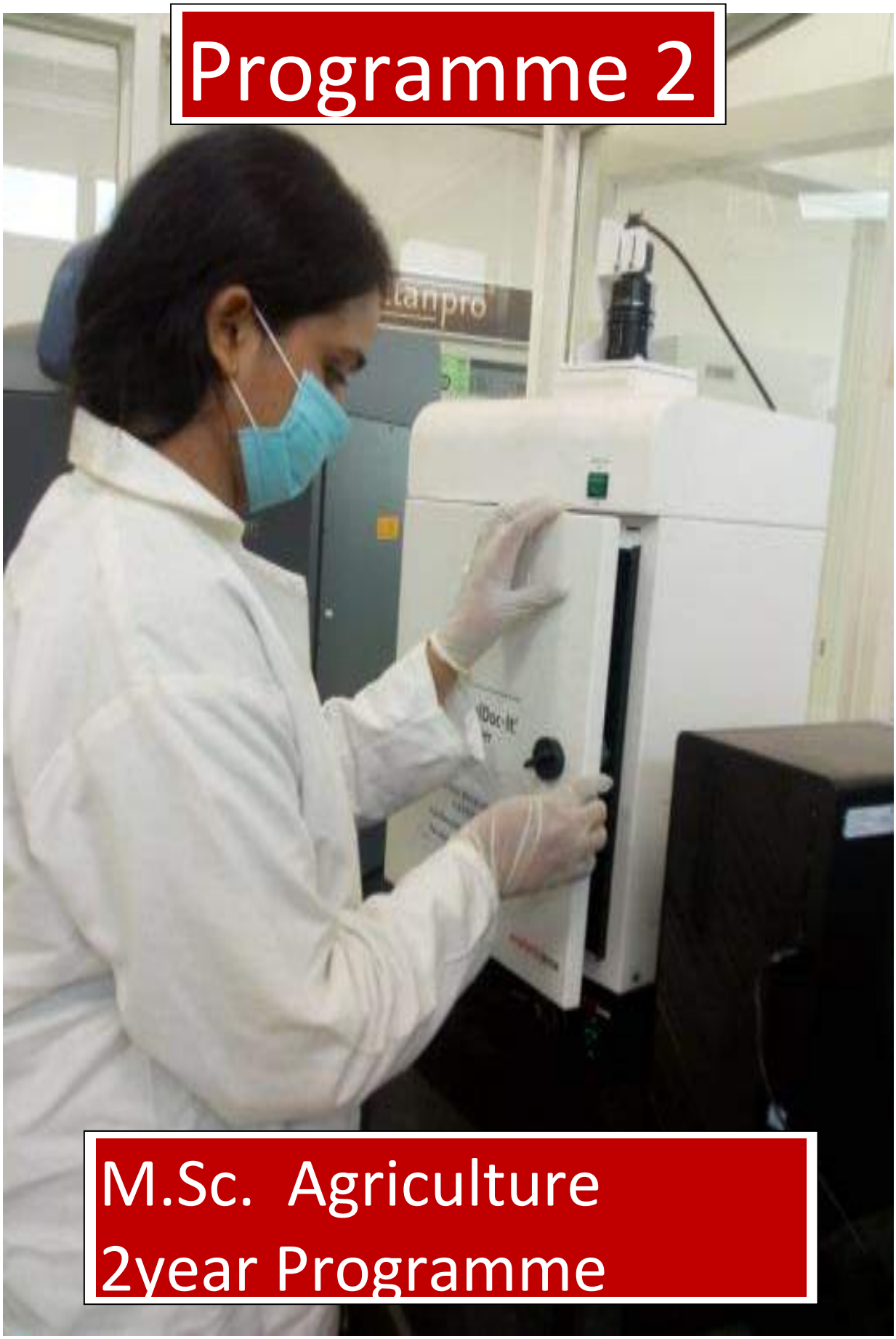
The College of Agriculture, Gwalior has upgraded four class room into smart class room for teaching of post graduate students using smart class room/interactive board. The teaching of undergraduate students is being done using projector based teaching facility in 04 class rooms.

6.4.10. The information pertaining to 6.4.1 to 6.4.9 shall be provided for each one of UG and PG Degree Programmes, separately, and to be presented College-wise.

6.4.11. Since the accreditation of Programmes is related to the All India Admission from ICAR and also having weightage for College accreditation, therefore the data presented in the section 6.4 is liable to the verification at any stage.

6.4.12. Certificate (Applicable when SSR is submitted for Programme) I, the Dean, hereby certify that the information contained in the Section 6.4.1 to 6.4.9 is furnished as per the records available in the college, and degree awarding university.

Programme 2



M.Sc. Agriculture
2year Programme

.4 About the College History

The college of Agriculture Gwalior was established in the year 1950. This is the oldest college of Madhya Bharat State. In the beginning this college was affiliated to Agra University and later on to Vikram University Ujjain. This college has celebrated its golden jubilee in the year 2000. After the establishment of Jawaharlal Nehru Krishi Vishwa Vidyalaya Jabalpur in the year1964, this college has been affiliated to it. On 19th August 2008 a new Agriculture University namely Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya came into existence after bifurcation of JNKVV, Jabalpur with its head quarter in Gwalior and this college has become the main campus of Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya. The Central Research Farm of the college (Regional Agriculture Research Station) was established in 1916.

DETAILS OF DEPARTMENT STARTED FOR PG

Department	**Degree programme**	**Year Started**
1. Agronomy	PG	1959
2. Entomology	PG	1957
3. Extension	PG	1961
4. Economics	PG	2009
5. Soil Science	PG	1957
6. Pl. Breeding	PG	1959
7. Pl Pathology	PG	1957
8. Horticulture (Fruit Science)	PG	1974 (2009)
9. Horticulture (Vegetable Science)	PG	1974 (2009)
10.Plant Molecular Biology & Biotechnology	PG	2016
11.Environmental Science	PG	2016

1. M.Sc. (Ag.) Agronomy-

6.4.1 Brief History of PG Degree Programme

- Agronomy Section/Department was established in the year 1951.
- Dr. R. Mishra was the founder Head of Agronomy Section/Department.
- The college was start post graduate instructions in Agronomy in 1957.
- No. of seats in M.Sc. (Agronomy) :- 12
- Total M.Sc. (Ag) Agronomy Degree was awarded up to 2018-19 : - 354

Objective

- To provide under and post graduate teaching and develop human resources for agricultural universities, research institutes and other development departments.
- To share responsibility of transfer of technologies to the farmers and others users in the state and across the state
- To provide leadership in crop and cropping system based agronomic research by developing new approaches and concepts of sustainable crop production suited to farmers and
- To develop suitable crop production technologies to enhance the production and productivity of major crops and cropping systems.

6.4.2 Faculty Strength

S. No.	Sanctioned Faculty	Faculty in place	Vacant position	Faculty recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
1	Professor	-	-	01	-1
2	Associate Professor	0	01	01	-1
3	Assistant Professor	0	04	04	-4

Agronomy Faculty in Research/Extension

S. No	Faculty Name	Designation	Remark
1	Dr. S.P.S. Tomar	CAS: Pr. Scientist (Agronomy)	ICAR-Wheat IMPScheme
2	Dr. D.S. Sasode,	Sr. Scientist	ICAR Weed Control Project Working as HoS
3	Dr. Shailendra Singh Kushwah	Sr. Scientist	DES, RVSKVV, Gwalior
4	Dr. RPS Tomar	Scientist	DES, RVSKVV, Gwalior
5	Dr. B.S. Kasana	Scientist	DES, RVSKVV, Gwalior
6	Dr. Sudheer Singh Bhadauria	Tech. Officer/ Asstt. Prof.	DES, RVSKVV, Gwalior
7	Dr. Janmejay Sharma	Scientist	ICAR Guar Project
8	Dr. Ekta Joshi	Scientist	ICAR New Centre oilseed Groundnut
9	Dr. Varsha Gupta	Scientist	ICAR Weed Control Project

6.4.3 Technical and Supporting staff

S.N.	Sanctioned Technical and Supporting staff	in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
01	Lab technician	00	01	2	-1
02	Stenographer / Assistant	02	00	1	+1
03	Field Extension Officer	02	00	3	-1

Existing Supporting Staff:

S.No.	Staff Name	Designation	Remark
01	Sh. Shivnarayan Kushwah	FEO	ICAR Guar Project
02	Sh. Y.K. Singh	FEO	ICAR Weed Control Project
03	Sh. Gajendra Singh Yadav	Assistant Gr. II	ICAR New Centre oilseed Groundnut
04	Sh. Shubham Chouhan	Steno	Non Plan

6.4.4 Classrooms and laboratories:

Classrooms:-

S. No.	Class Rooms/ Laboratories / Field	Numbers	Student Capacity
1.	PG Class Room	01	20
2.	Seminar Room	01	50
3.	Aris cell	01	05
4.	Department library	01	06
5.	Experimental Field	01	Yes

Laboratories:-

S.No.	Name of department	PG Laboratory	Name of equipment
1	Agronomy	01	Air circular hot air oven Core Sampler Kit V-notch Double Beem UV Visible spectrophotometer Rotatory flask shaker Electronic kel plus superior microprocessor LCD projector Honda weed cutter / Bruss cutter Kisankraft sell Propelled weeder self propelled walk behind PUSA STFR meter kit (Digital Soil Testing Mini Lab) Unbranded Kjeldahl Digestion cum Flame Photometer Tensiometer Analytical Digital Balance

			Micro Kjeldhal Digestion & distillation assembly Seed germinator Seed counter

Postgraduate (PG) Class Rooms

Department	PG Seminar hall (Equipped with AV aids)
Agronomy	1

6.4.5: Conduct of practical and hands-on-training

Charts/specimens of tools and implements, actual seed, weed and crop identification, different methods of sowing, irrigation layouts, live models of pressurized irrigation systems, agro-meteorological instruments, methods of fertilizer application and methods of weed management.

6.4.5.1: credits of course

Total credits of course offered department wise in Post Graduate:

S. No.	Subject/Department	Course Offered							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Agronomy	05	03	07	06	07	06	07	06

S. No.	Subject/Department	Total Credits							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Agronomy	14	09	21	19	21	19	21	19

6.4.6. Supervision of Students in PG Programmes:

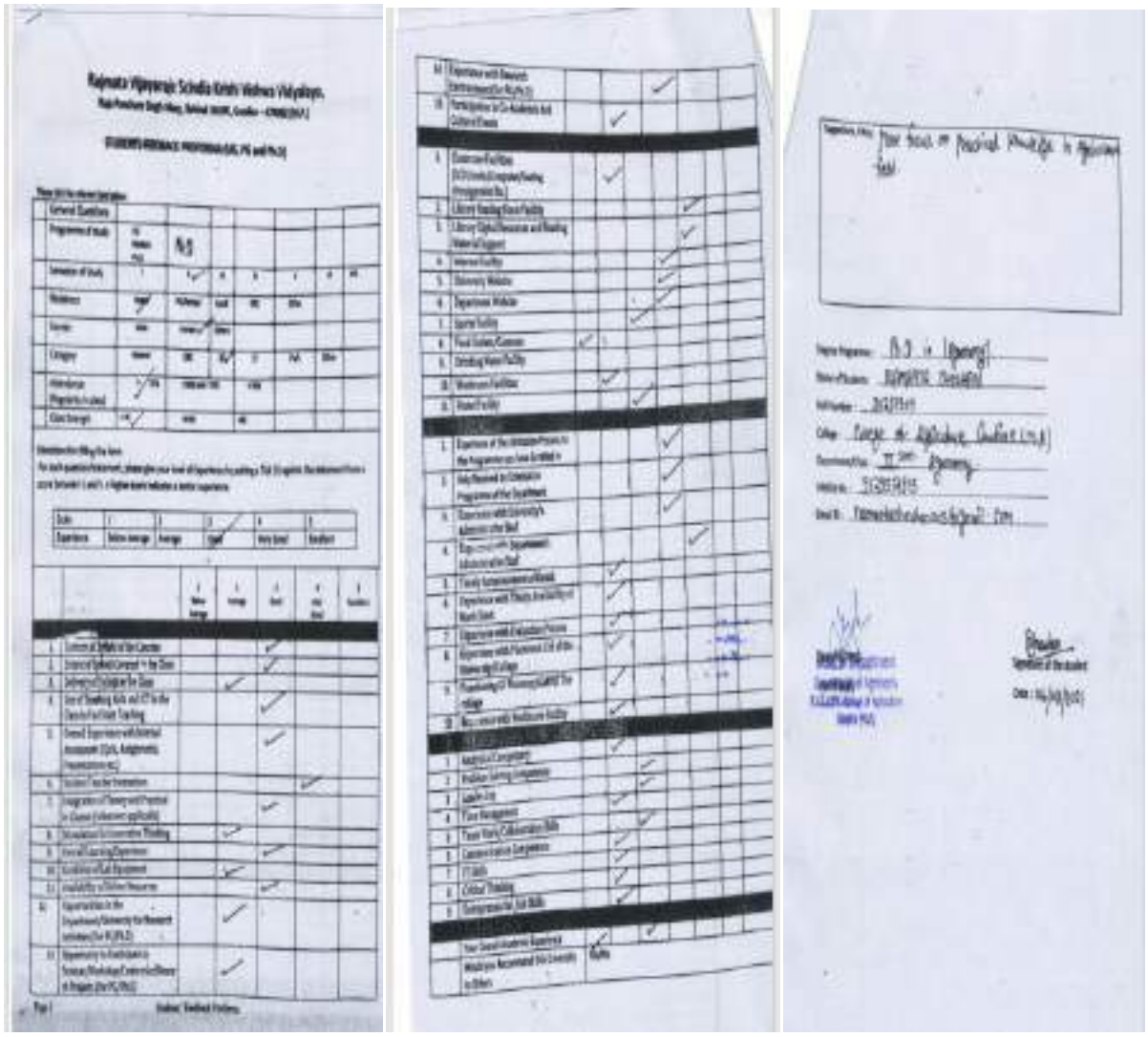
- As per ICAR guidelines, PG Students are supervised timely by the advisory committee headed by the major advisor. Head of Department and Director Instructions also monitor the research work of the students.
- Advisory committee constitutes three members 1 Supporting + 1 Minor and one major advisor.
- Before submitting the synopsis as well as thesis, the synopsis seminar and result seminar respectively are conducted.

- At present there are 4 permanent faculties along with attached teacher qualified for PG Programmes. Maximum intake rate are 12 students. At a time 2 to 3 students are working under one faculty.

Details of M.Sc. programme offered by the Department

S.No.	Name of department	Thesis submitted in PG				
		2016	2017	2018	2019	2020
1	Agronomy	07	07	09	06	10

6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers etc.):



- Feedback from M.Sc. (Ag) Agronomy is normally collected online as well as offline for their overall experience and suggestions for improvement of the programme. It is

observed that most of the students are satisfied with the research facilities and support of the staff. At the same time, students needed more practical knowledge and offline classes for clearing the concept. To resolve the issue, more practical classes have been conducted as well as theoretical classes were also conducted for the preparation of NET, JRF and SRF examinations. Students were advised to go to library and search of the research papers and literature related to advance agricultural research for updating their knowledge and improving their thesis research work. Special lectures and short-term training on advance agricultural technological aspects were also conducted for updating the knowledge and clearing the concepts of the students. Students also pointed out that moreover, Job-oriented classes should be organized.

6.4.8 Student intake and attrition in the programme for last five years

Name of the	Actual students admitted in last five years					Attrition (%)				
Degree programme	2016-17	2017-18	2018-19	2019-20	2020-21	2016-17	2017-18	2018-19	2019-20	2020-21
Agronomy	08	08	12	12	13	-	-	8.3	-	-

6.4.9. ICT application in teaching and practical for curricula delivery:

Yes, the faculty members of the College of Agriculture Gwalior are using ICT in teaching and practical. There are lecture rooms and seminar rooms with computer, LCD projector and internet connection. All faculty members have computer, printer and internet connection in their offices. There is Wi-Fi facility for faculty, staff and students. This infrastructure provides opportunities for the use of ICT in quality teaching, research and extension. The faculty members use power point presentations, YouTube, emails and CD ROM in teaching different courses.

The College of Agriculture, Gwalior has upgraded four class rooms into smart class room for teaching of post graduate students using smart class room/interactive board. The teaching of post graduate students is being done using projector based teaching facility in 01 PG class rooms.

6.4.12. Certificate (Applicable when SSR is submitted for Programme):

OFFICE OF THE DEAN

COLLEGE OF AGRICULTURE, GWALIOR (M.P.)

Tel- 0751-2341691

Email- dean.gwalior@rvskvv.net

No./Dean/Estt./2021/2911 Date- 17/11/2021

CERTIFICATE

I, the **Dean, College of Agriculture, Gwalior** hereby certify that the information contained in Sections 6.4.1 to 6.4.9 are furnished as per the record available in the college and degree awarding university.

17/11/2021

DEAN

Signature of the Dean of the College with Date & Seal

Gwalior (M.P.)

2. M.Sc. (Ag.) Plant Pathology

6.4.1: Brief History of PG Degree Programme

- The Department was established in 1957 as post graduate department but in 1968 post-graduation was transferred to College of Agriculture, Jabalpur.
- After that the M.Sc. was again started in 1991 and Ph.D. was started in 2011-12.
- The Department have presently 12 seats in M.Sc. (Ag.) A total 140 thesis were submitted by the M.Sc. (Ag.) students of this Department.

Objectives

- To produce good students at UG/PG and Ph.D. level having good knowledge of Plant Pathology so that they can serve better in different organizations at national and international level.
- To develop skills among the students for their self employment generation,
- To manage the pathological problems of various crops cultivated in the state.
- To develop low cast environment friendly management strategies of various crop diseases which are hurdles in obtaining optimum yield of crops.

To impart trainings to extension workers regarding identification and management of crop diseases

6.4.2: Faculty strength

S.No.	Sanctioned Faculty	Faculty in place	Vacant position	Faculty recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation from recommended position
1	Professor	-	-		-
2	Associate Professor	0	01	01	-1
3	Assistant Professor	0	02	02	-2

Existing Faculty of Research:

S.No.	Name	Designation	Remark
1	Dr. Reeti Singh	Principal Scientist	IERP
2	Dr. R.K. Pandya	Principal Scientist	AICRP on Pearlmillet
	Dr.Rajni Sasode	Scientist	AINP on Arid Legume
3	Dr. Jagdish Kumar Patidar	Contractual Teacher	
4	Dr. Pramod Kumar Fatehpuria	Contractual Teacher	

6.4.3: Technical and supporting Staff Supporting Staff

S.N.	Sanctioned Technical and Supporting staff	in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
01	Lab technician	01	01	2	-1
02	Assistant	0	-	1	-1
03	Field Asstt.	0	-	1	-1
04	Peon	01	0	-	+1

Existing Contractual Supporting Staff:-

S.No.	Name
1	Mr. Shrawan Krishna, Computer operator, contractual
2	Dr. Vivek Bhanwar, Unskilled

6.4.4 Classrooms and Laboratories

Laboratories:-

S.No.	Name of department	PG Laboratory	Name of equipment
1	Plant Pathology	01	Students Microscopes Microscopes with 100 x Objectives BOD incubator Laminar air flow Deep freezer Centrifuge haemocytometer Hot air Oven Autoclave Trinocular microscope

			Binocular Stereo Microscope Binocular stereo Zoom microscope Spectrophotometer Ultra centrifuge PCR Gel doc Environment controlled indoor chamber Centrifuge UV-Vis Spectrophotometer

Postgraduate (PG& Ph.D.) Class Rooms

Department	PG Seminar hall (Equipped with AV aids)
Plant Pathology	1

6.4.5.: Conduct of practical and hands-on-training

On Farm Production of bio-control Agents" (*Trichoderma, Pseudomonas, Corcyra, Trichogramma, Reduviid bugs,* NPV and *Bauveria basiana)*

6.4.5.1: credits of course

Credits of course offered department wise in Post Graduate:

S. No.	Subject/Department	Course Offered							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Plant Pathology	05	04	08	07	08	07	08	07

Credits of course offered department wise in Post Graduate:

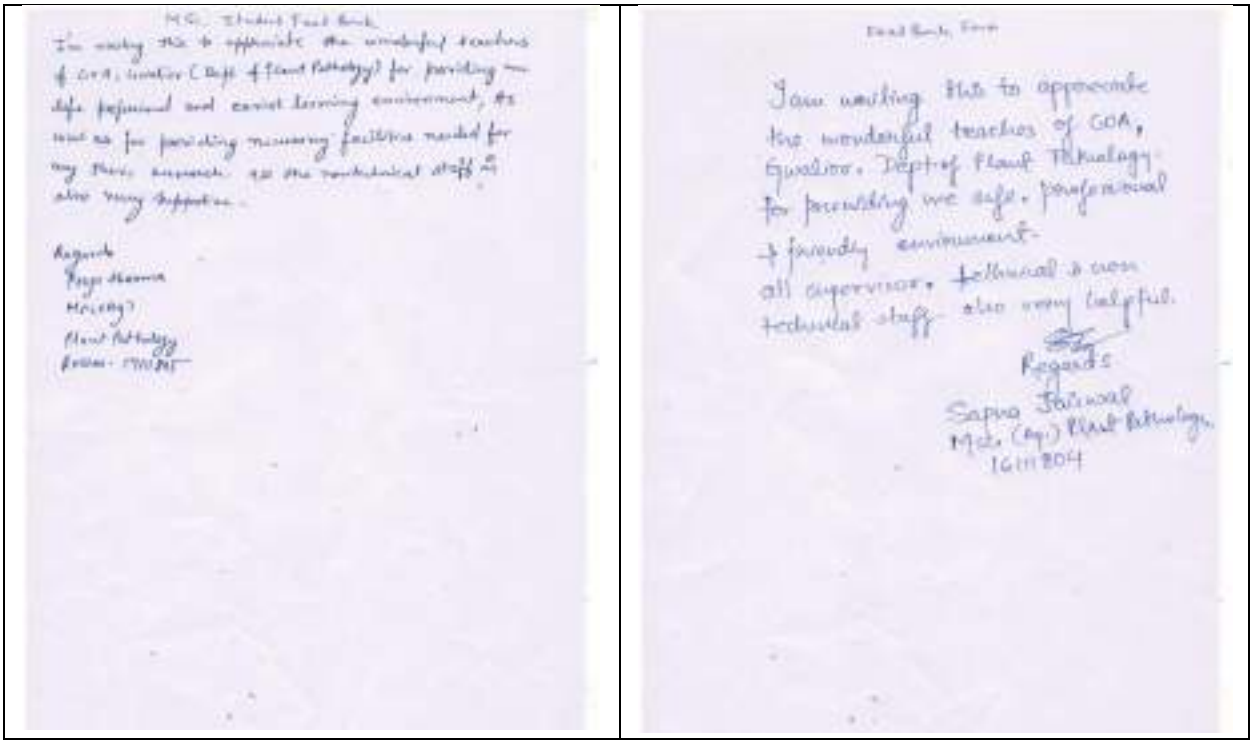
S. No.	Subject/Department	Total Credits							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Plant Pathology	13	12	22	19	22	19	22	19

- **6.4.6. Supervision of Students in PG Programmes:**
- As per ICAR guidelines, PG Students are supervised timely by the advisory committee headed by the major advisor. Head of Department and Director Instructions also monitor the research work of the students.
- Advisory committee constitutes three members 1 Supporting + 1 Minor and one major advisor.
- Before submitting the synopsis as well as thesis, the synopsis seminar and result seminar respectively are conducted.
- At present there are 3 permanent faculties along with one contractual teacher qualified for PG/PhD Programmes. Maximum intake rate is 12. At a time 3 to 4 students are working under one faculty.

Department wise thesis submitted in last five years

S.No.	Name of department	Thesis submitted in PG				
		2016	2017	2018	2019	2020
1	Plant Pathology	06	08	09	07	06

6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers etc.):



- Feedback from M.Sc. (Ag) Plant Pathology is normally collected online as well as offline for their overall experience and suggestions for improvement of the programme. It is observed that most of the students are satisfied with the research facilities and support of the staff. At the same time, students needed more practical knowledge and offline classes for clearing the concept. To resolve the issue, more practical classes have been conducted as well as theoretical classes were also conducted for the preparation of NET, JRF and SRF examinations. Students were advised to go to library and search of the research papers and literature related to advance agricultural research for updating their knowledge and improving their thesis research work. Special lectures and short-term training on advance agricultural technological aspects were also conducted for updating the knowledge and clearing the concepts of the students. Students also pointed out that moreover, Job-oriented classes should be organized.

6.4.8 Student intake and attrition in the programme for last five years:

Student intake and attrition

Name of the	Actual students admitted in last five years					Attrition (%)				
Degree programme	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
Plant Pathology	07	08	12	12	10	14	-	08	17	10

6.4.9. ICT application in teaching and practical for curricula delivery:

Yes, the faculty members of the College of Agriculture Gwalior are using ICT in teaching and practical. There are lecture rooms and seminar rooms with computer, LCD projector and internet connection. All faculty members have computer, printer and internet connection in their offices. There is Wi-Fi facility for faculty, staff and students. This infrastructure provides opportunities for the use of ICT in quality teaching, research and extension. The faculty members use power point presentations, YouTube, emails and CD ROM in teaching different courses.

The College of Agriculture, Gwalior has upgraded four class rooms into smart class room for teaching of post graduate students using smart class room/interactive board. The teaching of post graduate students is being done using projector based teaching facility in 01 class rooms.

6.4.12. Certificate (Applicable when SSR is submitted for Programme):

OFFICE OF THE DEAN
COLLEGE OF AGRICULTURE, GWALIOR (M.P.)

Tel- 0751-2341691
Email- dean.gwalior@rvskvv.net

No./Dean/Estt./2021/2911 Date- 17/11/2021

CERTIFICATE

I, the **Dean, College of Agriculture, Gwalior** hereby certify that the information contained in Sections 6.4.1 to 6.4.9 are furnished as per the record available in the college and degree awarding university.

17/11/2021

DEAN

Signature of the Dean of the College with Date & Seal
Gwalior (M.P.)

3. M.Sc. (Ag.) Soil Science

6.4.1 Brief History of PG Degree Programme

Dr. D.P. Motiramani was the founder Head Soil Science and Agricultural Chemistry.

- Department start functioning - 1950
- PG started - 1957
- The first batch passed out - 1959
- Ph.D started - 2009
- Following projects were started in the Department –
- 1. Pre irrigation soil survey in 1956,
- 2. Soil testing scheme in 1956

All above projects and schemes were transferred to J.N.K.V.V. in October 1964, and continued under the J.N.K.V.V. till August 2008, the time when R.V.S.K.V.V. was established in 2008 the department is working under the administrative control of R.V.S.K.V.V.

Objectives

- To offer courses in different disciplines of Soil Science & Agricultural chemistry for the undergraduate degree programme in Agriculture, Horticulture, Agricultural Engineering and Forestry, and Master's and Doctoral Degree Programme in Soil Science and Agricultural Chemistry.
- To exchange information with other scientists and extension staff engaged in similar pursuits through field trials, training, group discussion, symposia, seminar, conference and publications.
- To carry out the fundamental and applied researches on soils, especially in pedology, soil classification, soil physics, soil fertility, soil microbiology, plant nutrition, agricultural chemicals and farm and industrial wastes utilization.
- Under graduate and post graduate teaching and training of scientist, teacher of ICAR, SAU's and state agriculture Department under Centre of Advanced Faculty Training (CAFT) and other programmes.
- Technology transfer and other activities.

6.4.2 Faculty Strength -

S.No.	Sanctioned Faculty	Faculty in place	Vacant position	Faculty recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
1	Professor	-	-	-	-
2	Associate Professor	0	01	01	-1
3	Assistant Professor	1	02	02	-1

Existing Faculty:-

S.No.	Name of Employee	Designation	Remark
1	Dr. S.K. Trivedi	Professor & Head	CAS Prof. posted in Non Plan
2	Sh. P S Tomar	Sr. Scientist	CAS-S.S. in Soil Test Scheme
3	Dr. Shashi S. Yadav	SMS (Soil Science)	Deputed from DES,RVSKVV
4	Dr. Amita Sharma	Scientist (Agro forestry)	Deputed from KVK
5	Dr. PA Khambalkar	Guest Faculty	-
6	Dr. Narendra Singh Gurjar	Guest Faculty	-
7	Prof. V.S.Tomar	Adjunct Faculty	Retd. Vice Chancellor, RVSKVV, Gwalior & JNKVV, Jabalpur
8	Prof. D.L.N. Rao	Adjunct Faculty	Retd. Director, IISS, Bhopal

6.4.3 Technical and Supporting Staff.-

S.N.	Sanctioned Technical and Supporting staff	in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
1	**Lab Assistant**	00	03	2	-2
2	**Assistant**	0	0	1	-1
5	**FEO /Field Asstt.**	01	00	1	-
6	**Messenger / Driver***	0	01	1	-1

S.No.	Name of department	PG Laboratory	Name of equipment
1	Soil Science	02	Flame Photometer, Yadder Apparatus, UV Spectrophotometer, EC meter, pH meter, Tensiometer, Nitrogen analyzer, Shakers, Hot air oven, Bouycous hydrometer, centrifuge machine, hot plate, COD, Distil water unit, etc

***Post is sanctioned under research scheme**

Existing Supporting Staff:

S.No.	Name	Remark
1	**Sh. D.S. Bhadouria**	**Regular FEO**
2	**Rajesh**	**Contractual Computer Operator**
3	**Lala**	**Contractual Helper**

6.4.4 Classrooms and Laboratories

S. No.	Class Rooms/ Laboratories / Field	Numbers	Student Capacity
1.	PG Class Room	01	30
2.	Seminar Room	01	50
3	Soil testing Lab	01	20
4	Microbiology Lab	01	06
5.	Experimental Field	01	2.2 ha

Postgraduate (PG.) Class Rooms

Department	PG Seminar hall (Equipped with AV aids)
Soil Science and Agricultural Chemistry	1

6.4.5: Conduct of practical and hands-on-training

Physical, chemical and biological properties of soils ; recommendation for improving the soil quality, health and crop sustainability; specimens of soil forming rocks and minerals along with their properties, soil profile, tools for collection of soil and irrigation water samples. The qualitative and quantitative analysis of carbohydrates, proteins, lipids and oils are carried out for nutritive values along with their quality in food are tested.

6.4.5.1: credits of course

Total credits of Course Offered department wise in Post Graduate:

S. No.	Subject/Department	Course Offered							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Soil Science &Agril.	04	03	07	06	07	06	07	06

S. No.	Subject/Department	Total Credits							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Soil Science &Agril.	12	10	22	19	22	19	22	19

6.4.6. Supervision of Students in PG Programmes:

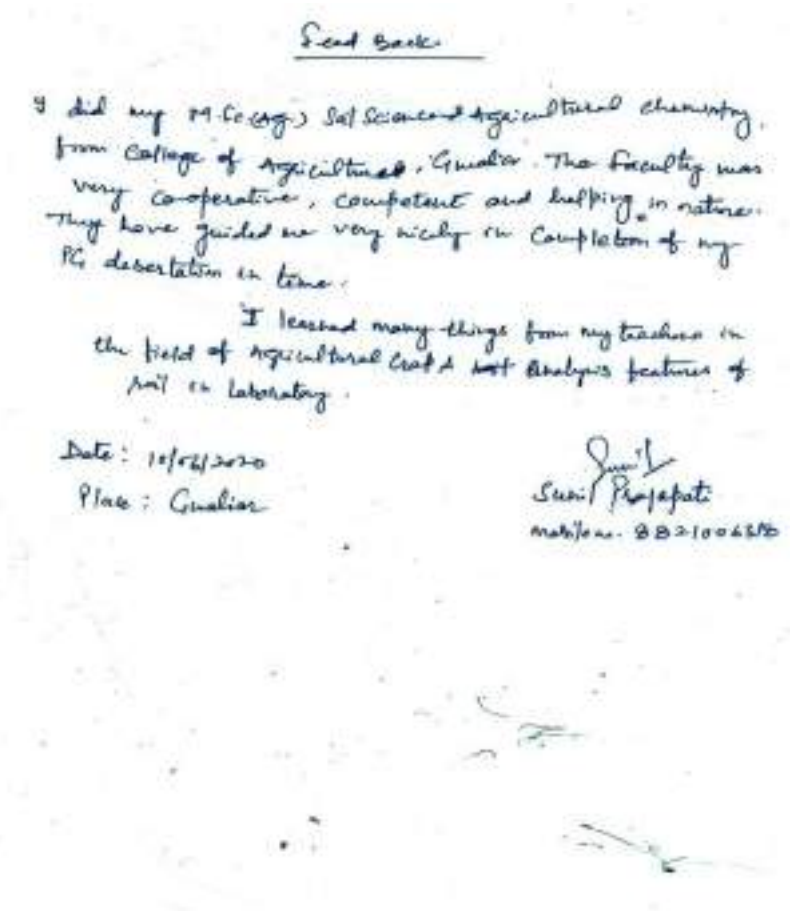
- As per ICAR guidelines, PG students are supervised timely by the advisory committee headed by the major advisor. Head of Department and Director Instructions also monitor the research work of the students.
- Advisory committee constitutes three members (1 Agricultural Statistics (Supporting) + 1Agronomy (Minor)) and one major advisor.
- Before submitting the synopsis as well as thesis, the synopsis seminar and result seminar respectively are conducted.

- At present there are 2 permanent faculties along with two contractual teacher qualified for PG/PhD Programmes. Maximum intake rate is 12. At a time 2 to 3 students are working under one faculty.
-

➢ **Department wise thesis submitted in last five years**

S.No.	Name of department	Thesis submitted in PG				
		2016	2017	2018	2019	2020
1	Soil Science	06	07	08	07	09

6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers etc.):



Seed Bank

I did my M.Sc (Ag.) Soil Science and Agricultural chemistry from College of Agriculture, Gwalior. The faculty was very cooperative, competent and helping in nature. They have guided me very nicely in completion of my PG dissertation in time.

I learned many things from my teachers in the field of agricultural Craft & lab Analysis features of soil in laboratory.

Date: 10/08/2020
Place: Gwalior

Sunil Prajapati
mobile no. 8821006858

➢ Feedback from M.Sc. (Ag) Soil Science & Agricultural Chemistry is normally collected online as well as offline for their overall experience and suggestions for improvement of the programme. It is observed that most of the students are satisfied with the research facilities and support of the staff. At the same time, students needed more practical knowledge and offline classes for clearing the concept. To resolve the issue, more

practical classes have been conducted as well as theoretical classes were also conducted for the preparation of NET, JRF and SRF examinations. Students were advised to go to library and search of the research papers and literature related to advance agricultural research for updating their knowledge and improving their thesis research work. Special lectures and short-term training on advance agricultural technological aspects were also conducted for updating the knowledge and clearing the concepts of the students. Students also pointed out that moreover, Job-oriented classes should be organized.

Students:

- The campus is green and eco-friendly. The office staffs in the college is cooperative and helpful. Online educational resources, Internet facility are available and accessible in the library
- The prescribed books / reading materials are available in the library, the buildings / classrooms are clean and well maintained are accessible to disabled persons. Equipment in the lab(s) is in good working condition, Results are displayed by the college. The functioning of the placement cell in the college is satisfactory. Continuous efforts are taken by the college to improve the quality of teaching and learning
- The college takes interest in strengthening its ties with industries, professional bodies etc. The college promotes student exchange, internship etc. Programmes for providing new opportunities to students. The mentoring process of the college helped me to identify my strengths and face challenges The overall teaching and mentoring process of the college is excellent.

Parent's feedback:

- Admission procedure easy and smooth.
- Infrastructure and lab facility, Work Culture observed are excellent.
- Library, Sports and cultural activities Other facilities are provided by the college
- Student's counseling activities and guidance organized nicely.
- Better Use of Information and communication technology in the college.
- Academic Discipline (*i.e* timely conduct of lectures, practical's and related activities) very well maintain.
- Impressive improvement in soft skills, knowledge, ethics, morality, observed by us while our children's studying in college.

- Examination system adopted by the college Evaluation and Feedback mechanism Placements were excellent.

6.4.8 Student intake and attrition in the programme for last five years: Year wise information on sanctioned strength, actual intake and attrition in the last five years of the Degree Programme, in the tabular form, shall be provided.

Student intake and attrition

Name of the	Actual students admitted in last five years					Attrition (%)				
Degree programme	2016-17	2017-18	2018-19	2019-20	2020-21	2016-17	2017-18	2018-19	2019-20	2020-21
M.Sc. (Ag.) Soil Science	08	08	12	12	11	12.5	12.5	Nil	Nil	Nil

6.4.9. ICT application in teaching and practical for curricula delivery:

Yes, the faculty members of the College of Agriculture Gwalior are using ICT in teaching and practical. There are lecture rooms and seminar rooms with computer, LCD projector and internet connection. All faculty members have computer, printer and internet connection in their offices. There is Wi-Fi facility for faculty, staff and students.

This infrastructure provides opportunities for the use of ICT in quality teaching, research and extension. The faculty members use power point presentations, YouTube, emails and CD ROM in teaching different courses.

6.4.12. Certificate (Applicable when SSR is submitted for Programme):

OFFICE OF THE DEAN

COLLEGE OF AGRICULTURE, GWALIOR (M.P.)

Tel- 0751-2341691
Email- dean.gwalior@rvskvv.net

No./Dean/Estt./2021/2411 Date- 17/11/2021

CERTIFICATE

I, the **Dean, College of Agriculture, Gwalior** hereby certify that the information contained in Sections 6.4.1 to 6.4.9 are furnished as per the record available in the college and degree awarding university.

17/11/2021

DEAN

Signature of the Dean of the College with Date & Seal

College of Agriculture
Gwalior (M.P.)

4 M.Sc. (Ag.) Genetics & Plant Breeding

6.4.1. Brief History of PG Degree Programme

- The department of Plant Breeding & Genetics established in the year 1980.
- M.Sc. (Ag.) Plant Breeding & Genetics degree courses started in the year 1980 at JNKVV, College of Agriculture, and Gwalior.
- The departments have well equipped U.G. & P.G. laboratories. Efforts have been made for Ph.D. Programme since inception of RVSKVV, Gwalior.
- The first batch of Ph.D. student enrolled in 2010-11.
- Department of Plant Breeding & Genetics changed rename as department of Genetics & Plant Breeding in the year 2016.
- Total 7 courses at U.G. level, 7 courses at P.G. level and 5 courses at Ph.D. level are being taught.
- No. of seats in M.Sc. (Ag.). G&PB are 12.
- Total no of M.Sc. (Ag.) G&PB degree was awarded up to 2019-20 are 144.
- No. of seats in Ph.D. G&PB are 6.
- Total no of Ph.D. G&PB degree was awarded up to 2019-20 are 13.

Objectives & Accomplishment:

Objectives:

- To undertake basic and applied research on Genetics & Plant Breeding.
- To impart education and entrepreneurship skills in crop improvement applied to agriculture for sustainable development.
- To provide information about development of high yielding varieties for human welfare.
- To provide applied training to farmers, youth and rural women.
- Training of graduate students to understand seed technologies processes**.**

Mandate:

Teaching:

To produce students having applied and basic knowledge to take care of crop improvement and varietal development programme.

Research:

- To contribute towards betterment of agriculture in respect to crop improvement programme to improve yield, nutritional quality and resistant/tolerant against different biotic and abiotic stresses.

Extension:

- To disseminate new developed varieties among farmers.
- To provide breeder/certified/nucleus seeds of higher quality to farmers for higher production and enhancement of national GDP.

6.4.2. Faculty Strength: The faculty strength of the Degree Programme needs 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.

S. No.	Sanctioned Faculty	Faculty in place	Vacant position	Faculty recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
1	Professor	Nil	00	1	-1
2	Associate Professor	Nil	00	1	-1
3	Assistant Professor	Nil	01	2+1	-3

Present Staff position in 2021

S. No	Faculty Name	Designation	Remark
01	**Dr. V.S. Khandalkar**	Principle Scientist	Working as CAS -Professor & Head and Principal Breeder, AICRP Wheat(Retired in 2020)
02	Dr. M.K. Tripathi	Senior Scientist	Working as Principal Breeder, AICRP pearl millet
03	Dr. R.S. Sikarwar	Scientist	Working as Breeder, AICRP Groundnut
04	Dr. N.S. Bhadauria	Scientist	Deputed from KVK to Research Scheme
05	Dr. Sushma Tiwari	Scientist	Working as Breeder, Minor Millet improvement project

6.4.3. Technical and Supporting staff: The position of the technical and supporting staff of the Degree Programme including farm and field workers need to be mentioned for both sanctioned and in- place.

S.N.	Sanctioned Technical and Supporting staff	in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
01	Lab technician	00	02	02	-2

	Assistant / Stenographer	01	0	01	-
02	Lab attended	01	01 (Provided by VV)	-	+1
03	Field Assistant	00	2	2	-2
04	Peon	00	01	-	-

Present Staff position in 2021

S. No	Faculty Name	Designation	Remark
01	Mr. Y.M. Indapurkar	Technical Officer	Working as PRO at RVSKVV
02	Mr. Rajendra Dhamdhere	LDC-II	
03	Mr. Saurabh Thengahe	Stenographer Grade-3	
04	Dr. Munesh K. Kushwah	Guest faculty	Joined in January 2021
05	Dr. Ravindra Solanki	Guest faculty	Joined in January 2021
06	Mr. Abhay Saxena	TSL	
07	Mr. Rajesh Pal	Cont. Computer Operator	

6.4.4. Classroom and laboratories

6.4.4.1. Details of Classroom: 01 PG classroom with 50 seating capabilities

Classrooms

S. No.	Classrooms	Seating Capacity
01	PG	30

Laboratories

S. No.	Laboratories	Detail
01	Seed testing lab	PG/Ph.D.
02	Molecular Biology lab	PG/Ph.D.
03	Plant Tissue culture lab	PG/Ph.D.
04	Cytogenetics lab	PG/ Ph.D.

6.4.4.2. Details of Laboratories:

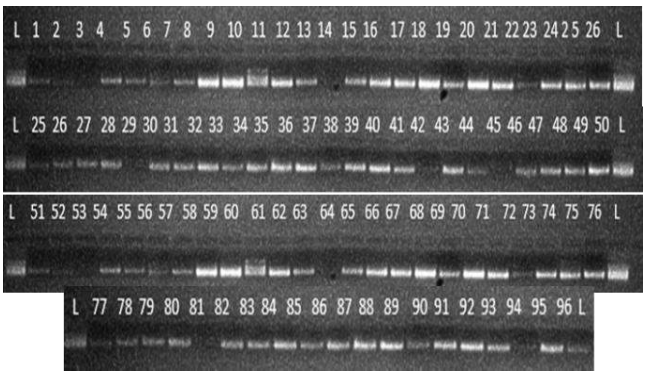
A List of equipment's available in different division laboratories

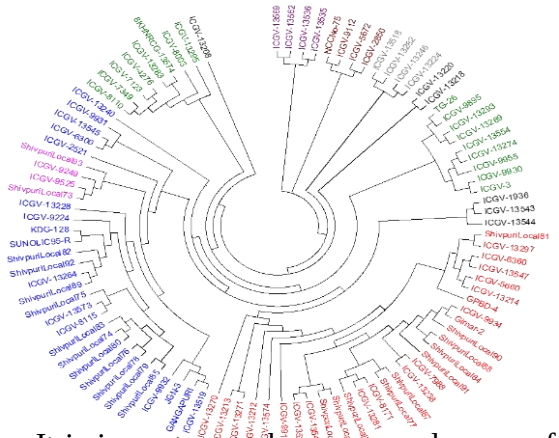
S.No.	Name of department	PG Laboratory	Name of equipment
	Genetics & Plant Breeding	01	Mini Magnetic Staner Water Bath Hote Plate Single Auto Clave Vacuum Pump Cent refuse Over Head Projector Hand Grinder Microscope Gas Cylinder (1-8Kg.) P^H. Meter Electronic Weight Machine Seed Germinator Cooling Centrifuge (Rime) Seed Blower Dacota Seed Precision Divider Moisture Meter Micro pipette kit model 7012/ Borosil Hot Air Oven (Model 126/science Enterprise) Auto clave (Model Se-101) Microwave Oven-Samsung Micro processor based PH meter Deep Freezer Gel Rocker "jyoti" make Magnetic stirrer capacity Tinifuge Voltage 6000/15000 Digital Orbital Shaker Vortexer Analytical Electronic Balance Dry Bath Vertical Reading Microscope Gas cylinder for Co-Z Reflacting Microscope Microscope (Zeipswinkel) Microscope spancer Microscope zeips winkle Dessexcting Microscope Binocular Demonstration Eye Pice Distillation Plant copper Microscope Dissecting (Round base) Microscope (Glory Sciontificallrs) Lux Meter Oxygen Cylinder of unit twithdolly Res Binocular Microscope Microscope Light Attachment

B List of equipment's available in different division laboratories

S.No.	Name of department	PG Laboratory	Name of equipment
1	**Department of Plant molecular Biology and Biotechnology**	**1. Plant Tissue culture Lab** **2. Plant Molecular Biology Lab** **3. Genomics Lab** **4. Proteomics Lab**	Electronic Analytical Balance High throughput horizontal electrophoresis Horizontal electrophoresis system with power supply System Rotary vacuum flash evaporator Liquid Nitrogen container (2 Lit) Liquid Nitrogen container (10 Lit) Liquid Nitrogen container (50 Lit) Liquid Nitrogen container (25 Lit) UV-VIS spectrophotometer (Micro volume spectrophotometer) Vertical electrophoresis unit Ice flakers Gradient thermal cycler Transbolt apparatus Incubator shaker Refrigerated incubator with illumination and shaker Refrigerated High speed micro centrifuge Ultra sonicator Horizontal laminar air flow cabinet Hot air oven Fraction collector Tissue lyzer Bio-safety cabinet Chiller circulating water bath Water bath DNA hybridizer vacuum blotter with UV cross linker pH meter Computer desktop full HD 23.8" Computer desktop full HD 21.45” Computer printers BOD Incubator Inverted microscope with photographic attachment Trinocular zoom stereoscopic microscope with photographic attachment and desktop Gel Documentation System Biolistc (Gene) Gun Table top high speed refrigerated centrifuge UV-Vis spectrophotometer (regular) Hybridization oven cum shaker RT PCR(Real Time PCR with HRM) Digital Thermal Cycler Micromanipulator System Electroporator for protoplast fusion

			Refrigerated Ultra Centrifuge Gas chromatography Soxlet apparatus Research microscope Elisa reader cum washer Multimode microplate reader Laboratory refregeratoors Deep freezer -20oC Deep freezer -80oC Ultra pure water purification system Distillation Unit





6.4.5. Conducts of Practical and hand on training:- 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.

- Field visit, Research Trial setup and hybridization.
- Variety development and maintenance.
- Practical and hands on training in Plant Genomic DNA isolation, Quantification, PCR using SSR and RAPD markers, Electrophoresis, and phylogenetic analysis for diversity assessment.
- Plant tissue culture and micro propagation.

6.4.5.1: credits of course

Total course offered department wise in M.Sc.

S. No.	Subject/Department	Course Offered							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Genetics & Plant Breeding	04	03	07	06	07	06	07	06

S. No.	Subject/Department	Total Credits							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Genetics & Plant Breeding	12	08	20	16	20	16	20	16

6.4.6: Supervision of Students in PG programmes:

- Advisory committee of the Students, Head of the Department, Dean and D.I. of the university are supervise time to time. Advisory committee constitutes three members 1 Supporting + 1 Minor and one major advisor.
- Before submitting the synopsis as well as thesis, the synopsis seminar and result seminar respectively are conducted.
- At present there are 03 faculties qualified for PG/PhD Programmes. Maximum intake rate is 12 in M.Sc. and 6 in Ph.D. At a time 3 to 4 students are working under one faculty.

Department wise thesis submitted in last five years

S.No.	Name of department	Thesis submitted in PG				
		2016	2017	2018	2019	2020
1	Genetics & Plant Breeding	07	08	05	08	05

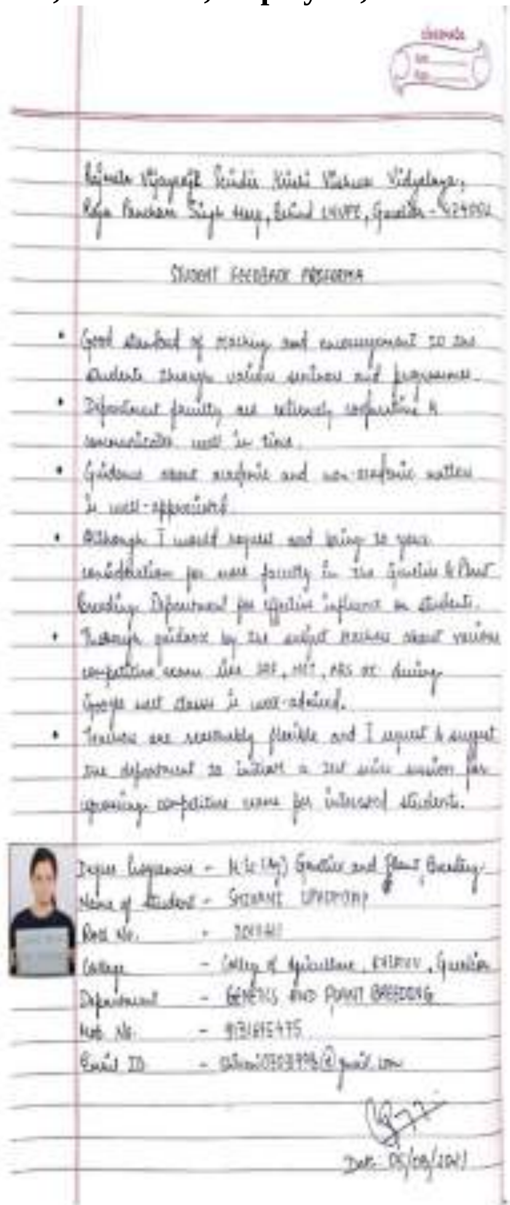
6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers etc.):


Dept of Genetics & Plant Breeding
College of Agriculture, Gwalior

The department of genetics & plant breeding has proved to be a stepping stone to my development. It has all the facilities for learning the practical aspects of this subject. The
The faculty is well experienced and helpful.

The Dept has increased my knowledge and facilitated the curiosity for research.

Name - Rahul Vishwakarma
([illegible])
M.Sc (Ag) Genetics & plant breeding
College of Agriculture, R.V.S.K.V.V.
Gwalior


Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya,
Raja Pancham Singh Marg, Behind ..., Gwalior - 474002

STUDENT FEEDBACK PROGRAMME

- Good standard of teaching and encouragement to the students through various seminars and programmes.
- Department faculty are extremely comfortable & communicates well in time.
- Guidance about academic and non-academic matters is well-appreciated.
- Although I would request and bring to your consideration for more faculty in the Genetics & Plant Breeding Department for effective influence on students.
- Thorough guidance by the subject teachers about various competitive exams like JRF, NET, ARS etc. during course well classes is well-admired.
- Teachers are reasonably flexible and I request & suggest the department to initiate a new class session for upcoming competitive exams for interested students.

Degree Programme - M.Sc (Ag) Genetics and Plant Breeding
Name of Student - SHIVANI UPADHYAY
Roll No. - [illegible]
College - College of Agriculture, RVSKVV, Gwalior
Department - GENETICS AND PLANT BREEDING
Mob. No. - [illegible]
Email ID - [illegible]

Date: 05/08/2021

➢ Feedback from M.Sc. (Ag) Genetics & Plant breeding is normally collected online as well as offline for their overall experience and suggestions for improvement of the programme. It is observed that most of the students are satisfied with the research

facilities and support of the staff. At the same time, students needed more practical knowledge and offline classes for clearing the concept. To resolve the issue, more practical classes have been conducted as well as theoretical classes were also conducted for the preparation of NET, JRF and SRF examinations. Students were advised to go to library and search of the research papers and literature related to advance agricultural research for updating their knowledge and improving their thesis research work. Special lectures and short-term training on advance agricultural technological aspects were also conducted for updating the knowledge and clearing the concepts of the students. Students also pointed out that moreover, Job-oriented classes should be organized.

6.4.8. Student intake and attrition in the programme for last five years: Year wise information on sanctioned strength, actual intake and attrition in the last five years of the Degree Programme, in the tabular form, shall be provided.

Student intake and attrition

Name of the	Actual students admitted in last five years					Attrition (%)				
Degree programme	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
M.Sc. (Ag.) Genetics & Plant Breeding	**08**	**07**	**12**	**12**	**12**	25	28	0	0	0

6.4.9. ICT application in teaching and practical for curricula 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.

Yes, the faculty members of the College of Agriculture Gwalior are using ICT in teaching and practical. There are lecture rooms and seminar rooms with computer, LCD projector and internet connection. All faculty members have computer, printer and internet connection in their offices. There is Wi-Fi facility for faculty, staff and students. This infrastructure provides opportunities for the use of ICT in quality teaching, research and extension. The faculty members use power point presentations, YouTube, emails and CD ROM in teaching different courses.

6.4.12. Certificate (Applicable when SSR is submitted for Programme):

OFFICE OF THE DEAN

COLLEGE OF AGRICULTURE, GWALIOR (M.P.)

Tel- 0751-2341691

Email- dean.gwalior@rvskvv.net

No./Dean/Estt./2021/2911 Date- 17/11/2021

CERTIFICATE

I, the **Dean, College of Agriculture, Gwalior** hereby certify that the information contained in Sections 6.4.1 to 6.4.9 are furnished as per the record available in the college and degree awarding university.

17/11/2021

DEAN

Signature of the Dean of the College with Date & Seal

College of Agriculture
Gwalior (M.P.)

5. M.Sc. (Ag.) Plant Molecular Biology and Biotechnology

6.4.1. Brief History of PG Degree Programme:

- Department established in year 2015.
- PG started in year 2016-17
- Establishment of Biotechnology Center at RVSKVV-COA, Gwalior from 2017-2019 for Rs 2430.0 lakhs funded by MANDI Board, M.P. Bhopal.
- Experimental Learning Programme of B. Sc. (Ag) students on "Massive *in vitro* propagation of important horticultural and medicinal plants" Started since 2017 funded by ICAR for Rs 82.0 Lakhs.
- MPCST funded project on "Evaluation of groundnut germplasm for foliar disease resistance and fatty acid composition using marker assisted selection approaches" started in 2019-2021 Rs 9.30 Lakhs.
- Establishment of Gene Bank at Biotechnology Centre, RVSKVV, Gwalior Rs 925 lakhs funded by M.P. State Agricultural Marketing Board, (M.P.) from 2019-2022BARC funded project on field and laboratories facilities for groundnut.

Objectives & Accomplishment:

Objectives:

- To undertake research, teaching and training in modern areas of Plant Molecular Biology and Biotechnology.
- To generate valuable human resources through M. Sc. & Doctoral programmes, short and long-term trainings and intra and inter-institutional linkages.
- Training of graduate students to understand plant biotechnological processes by conducting Experiential Learning Programmes.
- To provide diploma to Metric and Intermediate students to understand plant biotechnological processes.
- To provide applied training to farmers and rural women.

Mandate:

Teaching

- To produce students to take care of crop improvement programme through advance biotechnological aspects.

Research

- To contribute towards betterment of agriculture in the state using molecular breeding, transgenic and plant tissue culture approaches.

Extension

- To emphasize on the development of products, processes and patents by means of biotechnological means.
- To provide applied training to youth, farmers and rural women.

6.4.2. Faculty Strength: The faculty strength of the Degree Programme needs 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 is made to complete the curriculum, it should be clearly mentioned in the report.
*

S. No	Post Name	Sanctioned	Filled	Vacant
01	Professor & Head	01	00	01
02	Associate Professor	01	00	01
03	Assistant Professor	03	00	03

***Note: All posts have been sent for sanction from the State Government.**

Present Staff position working for the department

S.N.	Name	Designation	Expertise
1.	Dr. M K Tripathi	Professor and HOD	Plant tissue culture, Molecular breeding, Transgenics. Plant Breeding
2.	Dr. Sushma Tiwari	Scientist	Molecular Breeding, functional Genomics
3.	Dr. S. S. Bimal	Contractual Teacher	Plant Molecular Biology and Biotechnology

6.4.3. Technical and Supporting staff: The position of the technical and supporting staff of the Degree Programme including farm and field workers need to be mentioned for both sanctioned and in- place.

S.N.	Sanctioned Technical and Supporting staff	in place	Vacant position
01	Lab technician	00	01
02	Stenographer	01	00
03	Lab attended	00	01

***Note: All posts have been sent for sanction from the State Government.**

Present Staff position working for the department

S.N.	Name	Designation	Expertise
1.	Miss Ritu Sakya	Stenographer	Computer Science & typing

6.4.4 Classrooms and Laboratories: 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. Lists major equipments, 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.

6.4.4.1. Details of Classroom:

01 PG classroom with 50 seating capabilities

01 Conference room with all modern facilities

6.4.4.2. Details of Laboratories: 04

1. Plant Molecular Biology & Genomics
2. Plant Tissue Culture
3. Transgenics
4. Biochemical Analysis
5. Bioinformatics & Data analysis (Under development)

6.4.5 Conduct of Practical and Hands-on-Training: 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.

- Practical and hands on training in Plant Genomic DNA isolation, Quantification, PCR using SSR and RAPD markers, Electrophoresis, and phylogenetic analysis for diversity assessment.
- Bioinformatics softwares, NCBI, Gene bank data deposition.
- Plant tissue culture and micro propagation.
- Transgenics development in plants.

6.4.5.1: credits of course

Total course offered department wise in M.Sc.

S. No.	Subject/Department	Course Offered							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Plant molecular Biology and Biotechnology	07	07	07	07	07	07	07	07

S. No.	Subject/Department	Total Credits							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Plant molecular Biology and Biotechnology	21	17	21	17	21	17	21	17

6.4.6 Supervision of students in PG Programmes:

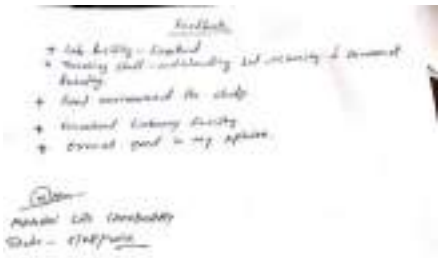
- As per ICAR guidelines, PG Students are supervised timely by the advisory committee headed by the major advisor. Head of Department and Director Instructions also monitor the research work of the students.
- Advisory committee constitutes three members 1 Supporting + 1 Minor and one major advisor.
- Before submitting the synopsis as well as thesis, the synopsis seminar and result seminar respectively are conducted.
- At present there are 2 permanent faculties along with one contractual teacher qualified for PG Programmes. Maximum intake rate is 06. At a time 2 to 3 students are working under one faculty.

S. No.	Year	Batch	Number of Students
1	2016-17	1	04
2	2017-18	2	04
3	2018-19	3	06
4	2019-20	4	05
5	2020-21	5	03

Department wise thesis submitted in last five years

S.No.	Name of department	Thesis submitted in PG				
		2016	2017	2018	2019	2020
1	Plant Molecular & Biotechnology	--	--	--	03	03

6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers *etc*.):



- Feedback from M.Sc. (Ag) Plant molecular biology and biotechnology is normally collected online as well as offline for their overall experience and suggestions for improvement of the programme. It is observed that most of the students are satisfied with the research facilities and support of the staff. Some of the issues like start of Ph.D. programme are among one of the prime requirements. It has not been started due to lack of the faculty. At the same time, students needed more practical knowledge and offline classes for clearing the concept. To resolve the issue, more practical classes have been conducted as well as theoretical classes were also conducted for the preparation of NET, JRF and SRF examinations. Students were advised to go to library and search of the research papers and literature related to advance agricultural research for updating their knowledge and improving their thesis research work. Special lectures and short-term training on advance agricultural technological aspects were also conducted for updating

the knowledge and clearing the concepts of the students. Students also pointed out that moreover, Job-oriented classes should be organized.

6.4.8. Student intake and attrition in the programme for last five years: Year wise information on sanctioned strength, actual intake and attrition in the last five years of the Degree Programme, in the tabular form, shall be provided.

Degree Program	Actual student admitted in last five years					Attrition (%)				
M.Sc(Ag.)	2016-17	2017-18	2018-19	2019-20	2020-21	2016-17	2017-18	2018-19	2019-20	2020-21
	04	04	06	05	03	25	25	0	20	33

6.4.9. ICT application in teaching and practical for curricula 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.

Yes, the faculty members of the College of Agriculture Gwalior are using ICT in teaching and practical. There are lecture rooms and seminar rooms with computer, LCD projector and internet connection. All faculty members have computer, printer and internet connection in their offices. There is Wi-Fi facility for faculty, staff and students. This infrastructure provides opportunities for the use of ICT in quality teaching, research and extension. The faculty members use power point presentations, YouTube, emails and CD ROM in teaching different courses.

6.4.12. Certificate (Applicable when SSR is submitted for Programme):

OFFICE OF THE DEAN

COLLEGE OF AGRICULTURE, GWALIOR (M.P.)

Tel- 0751-2341691

Email- dean.gwalior@rvskvv.net

No./Dean/Estt./2021/ 2911 Date- 17/11/2021

CERTIFICATE

I, the **Dean, College of Agriculture, Gwalior** hereby certify that the information contained in Sections 6.4.1 to 6.4.9 are furnished as per the record available in the college and degree awarding university.

17/11/2021

DEAN

College of Agriculture

Gwalior (M.P.)

Signature of the Dean of the College with Date & Seal

6. M.Sc. (Ag.) Entomology

6.4.1 Brief History of PG Degree Programme:

Department started functioning in 1954.

PG began in 1964.
Ph.D. started in 2009.

Objectives:

- To teach the UG/PG & Ph.D. students regarding various aspects of Entomology.
- To find out successful aspects of IPM for minimizing the losses caused due to insect pest in mustard, pigeon pea, soybean, sesame & vegetable.
- To raise the socioeconomic condition of farmers with respect to IPM.

Mandate:

Teaching:

To impart knowledge to the students for developing the new human resource for teaching, research and extension activities.

Research:

Conduction of various field & lab experiments to develop of technology of IPM for major crops of the area.

Extension:

Conduction of various training programmes to the farmers & extension workers of state Agriculture Department for transfer of technology of IPM.

6.4.2. Faculty Strength:

S.No.	Sanctioned Faculty	Faculty in place	Vacant position	Faculty recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
1	Professor	Nil	Nil	-	-
2	Associate Professor	01	Nil	01	-
3	Assistant Professor	02	Nil	02	-

Present Staff position in 2021

S. No	Faculty Name	Designation	Remark
01	Dr. U.C.Singh	Professor & Head	-
02	Dr. N.S.Bhadauria	Professor	Working as Deputy Registrar
03	Dr. M.L.Sharma	Professor	-

6.4.3. Technical and Supporting staff:

The position of the technical and supporting staff of the Degree Programme including farm and field workers need to be mentioned for both sanctioned and in- place.

S.N.	Sanctioned Technical and Supporting staff	in place	Vacant position	Faculty recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
01	Assistant	-	-	01	-1
02	Lab technician	00	00	-	-
03	Stenographer	00	00	-	-
04	Lab attended	00	00	01	-1
05	Peon	00	00	-	
06	Field Asstt.	-	-	01	-1

Present Staff position in 2021

S. No	Faculty Name	Designation	Remark
01	Mr. Munesh Parihar	Cont. Computer Operator	-
02	Mr. Deepak Kushwah	Cont. Peon	-

6.4.4 Classrooms and Laboratories:

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. Lists major equipments, 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.

Classrooms

S. No.	Classrooms	Seating Capacity
01	PG	30

Laboratories

S. No.	Laboratories	Detail
01	PG lab	01

6.4.5 Conduct of Practical and Hands-on-Training:

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-trainings per the curriculum and meeting above mentioned requirements.

- Field visit, Research Trial setup and hybridization.
- Variety development and maintenance.
- Practical and hands on training in Plant Genomic DNA isolation, Quantification, PCR using SSR and RAPD markers, Electrophoresis, and phylogenetic analysis for diversity assessment.
- Plant tissue culture and micro propagation.

6.4.5.1: credits of course

Total course offered department wise in M.Sc.

S. No.	Subject/Department	Course Offered							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Entomology	07	08	07	08	07	08	07	08

S. No.	Subject/Department	Total Credits							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Entomology	16	21	16	21	16	21	16	21

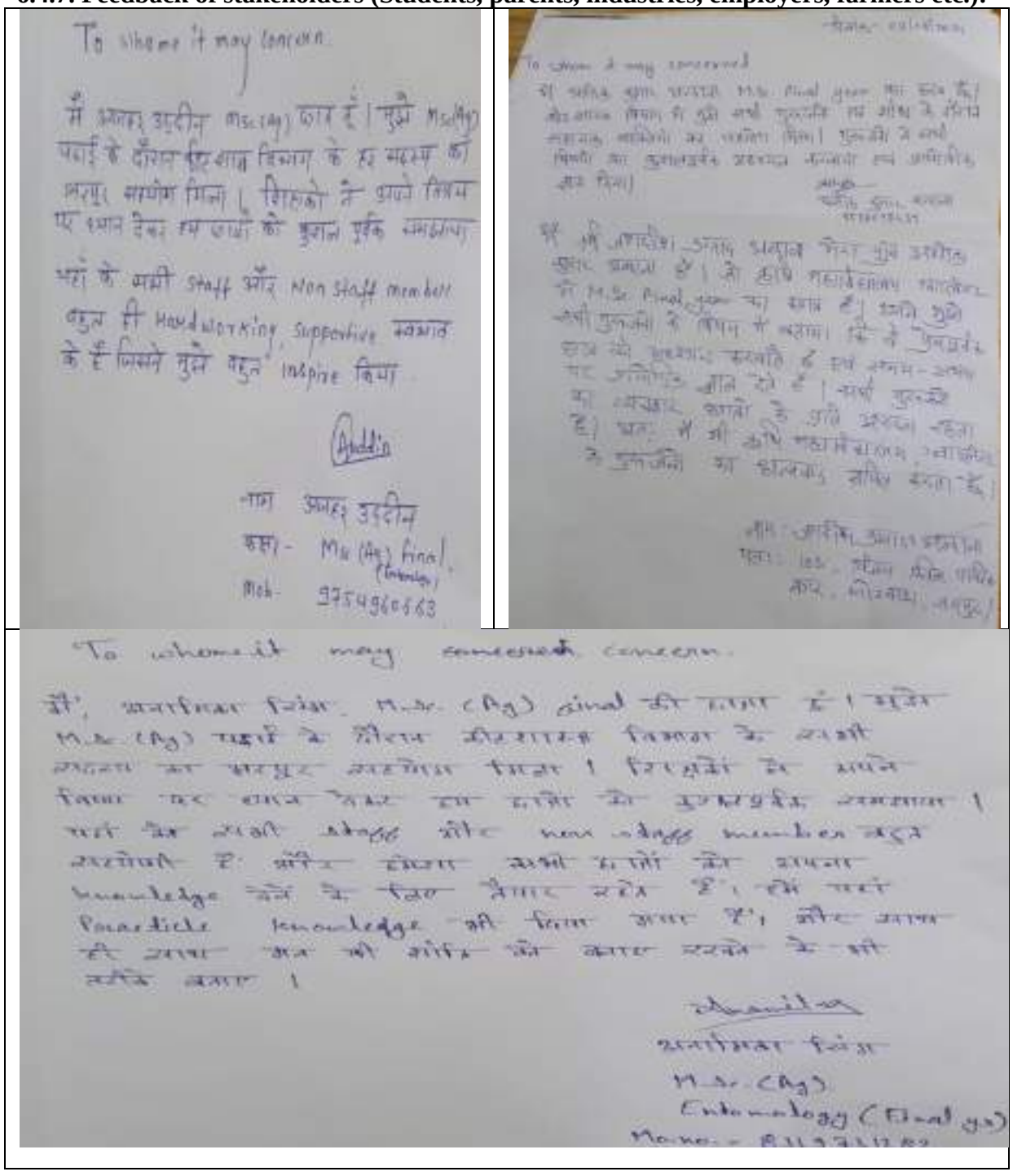
6.4.6. Supervision of Students in PG Programmes:

At present there are 03 faculties qualified for PG Programmes along with two contractual teachers. Maximum intake rate is 04. At a time 3 to 4 students are working under one faculty.

Department wise thesis submitted in last five years

S. No.	Name of department	Thesis submitted in PG				
		2016	2017	2018	2019	2020
1	Entomology	01	05	09	01	-

6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers etc.):



- Feedback from M.Sc. (Ag) Entomology is normally collected online as well as offline for their overall experience and suggestions for improvement of the programme. It is observed that most of the students are satisfied with the research facilities and support of the staff. At the same time, students needed more practical knowledge and offline classes for clearing the

concept. To resolve the issue, more practical classes have been conducted as well as theoretical classes were also conducted for the preparation of NET, JRF and SRF examinations. Students were advised to go to library and search of the research papers and literature related to advance agricultural research for updating their knowledge and improving their thesis research work. Special lectures and short-term training on advance agricultural technological aspects were also conducted for updating the knowledge and clearing the concepts of the students. Students also pointed out that moreover, Job-oriented classes should be organized.

6.4.8 Student intake and attrition in the programme for last five years: Year wise information on sanctioned strength, actual intake and attrition in the last five years of the Degree Programme, in the tabular form, shall be provided.

Student intake and attrition

Name of the	Actual students admitted in last five years					Attrition (%)				
Degree programme	2016-17	2017-18	2018-19	2019-20	2020-21	2016-17	2017-18	2018-19	2019-20	2020-21
Entomology	08	05	11	10	09	-	-	-	-	-

6.4.9. ICT application in teaching and practical for curricula delivery:

Yes, the faculty members of the College of Agriculture Gwalior are using ICT in teaching and practical. There are lecture rooms and seminar rooms with computer, LCD projector and internet connection. All faculty members have computer, printer and internet connection in their offices. There is Wi-Fi facility for faculty, staff and students. This infrastructure provides opportunities for the use of ICT in quality teaching, research and extension. The faculty members use power point presentations, YouTube, emails and CD ROM in teaching different courses.

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No./Dean/Estt./2021/2911 Date- 17/11/2021

CERTIFICATE

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17/11/2021

DEAN

Signature of the Dean of the College with Date & Seal

College of Agriculture
Gwalior (M.P.)

7 M.Sc. (Ag.) Agricultural Extension

6.4.1 Brief History of PG Degree Programme:

- After the establishment of Jawaharlal Nehru Agricultural University, Jabalpur in the year 1964, Department of Agricultural Extension and Communication has been continuously working to provide advanced agricultural technology to farmers and trained manpower to agricultural universities, research institutes and other development departments.
- The Department of Agriculture Extension and Communication is already functioning since the inception of RVSKVV in the year 2008.
- M.Sc. (Ag.) approximately 45 years .

Objective:

To provide leadership role in teaching and research in agricultural extension to meet the trained man-power requirements of agricultural universities, research institutes and other development departments.

Accomplishment:

Carried out studies on knowledge, adoption, marketing behavior, attitude and awareness of recommended crops training needs assessment, impact assessment of various Government programmes.

Mandates

Teaching:

To produce leadership role, skills or trained students based on the requirements of agricultural universities, research institutes, and other development department.

Research:

To help for programme planning for government, non-government organizations through research, prepare agricultural technology according to the needs of farmers, to contribute for the betterment of development of advanced methods for technology.

Extension:

To identify the gaps in the principle and practices for agricultural technology, needs & interest of the farmers, provide a better solution, and desirable changes of human behaviour through proper extension services.

6.4.2 Faculty Strength

S. No.	Sanctioned Faculty	Faculty in place	Vacant position	Faculty recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
1	Professor	Nil	00	-	-
2	Associate Professor	1	00	1	-
3	Assistant Professor	1	01	1+2	-2

Existing Faculty

S.N.	Name	Designation	Remark
1.	Dr. O.P. Daipuria	HOD	CAS- Prof.
2.	Dr. Shobhana Gupta	Professor	CAS- Prof.
3.	Dr. Prabhakar Sharma	Scientist	CAS-Prof. (No More)
4	Dr. Y D Mishra	Scientist	Deputed from DES
5	Dr. Prashant Sharma	Contractual Teacher	Deputed from DES

6.4.3 Supporting and Technical Staff:

S.N.	Sanctioned Technical and Supporting staff	in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
01	Assistant	00	01	1	-1
02	Lab Assistant	00	01	1	-1

Existing Technical and supporting staff

S.N.	Name	Designation	Remark
1.	Ismail Khan	Helper/Messenger	Peon
2.	Sapna Pandey	Computer Operator	Contractual
3.	Vatan Bhatnagar	Clerk	Contractual

6.4.4 Classrooms and laboratories

S.No.	Name of department	PG Laboratory	Name of equipment
1	Extension education	01	Cyber Lab (01)

Postgraduate (PG) Class Rooms

Department	PG Seminar hall (Equipped with AV aids)
Agricultural Extension & Communication	1

6.4.5: Conduct of practical and hands-on-training

- Communication skills,
- Preparation of bulletin, pamphlet, booklet;
- Preparation of news,
- Radio talk;
- Channels for effective dissemination of agricultural information.

6.4.5.1 credits of course

Table: Course offered department wise in M.Sc.

S. No.	Subject/Department	Courses offered (No.)							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Extension Education	04	03	07	06	07	06	07	06
S. No.	**Subject/Department**	**Total Credits**							
		2016		**2017**		**2018**		**2019 & 2020**	
		I Sem.	**II Sem.**	**I Sem.**	**II Sem.**	**I Sem.**	**II Sem.**	**I Sem.**	**II Sem.**
1.	Extension Education	11	09	18	18	18	18	18	18

6.4.6. Supervision of Students in PG Programmes:

- As per ICAR guidelines, PG Students are supervised timely by the advisory committee headed by the major advisor. Head of Department and Director Instructions also monitor the research work of the students.
- Advisory committee constitutes three members 1 Supporting + 1 Minor and one major advisor.
- Before submitting the synopsis as well as thesis, the synopsis seminar and result seminar respectively are conducted.
- At present there are 03 faculties qualified for PG Programmes along with one contractual teachers. Maximum intake rate is 11. At a time 3 to 4 students are working under one faculty.

Department wise thesis submitted in last five years

S.No.	Name of department	Thesis submitted in PG				
		2016	2017	2018	2019	2020
1	Extension education	02	08	02	05	02

6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers etc.): Different stakeholders like, parents, industrialists Farmers etc. were conducted during visits to get their feedback about involvement of students in various academic activities

FEED BACK

I was a student of M.Sc. (Ag) Extension in the Department of Agriculture Extension and Communication, of the College of Agriculture, Gwalior during the year 2016 to 2020. The teacher was very collaborative and helpful in nature. They were competent in their subjects.

Teachers have also guided me a lot for making my future bright.

I am very thankful to all of them.

FEED BACK

- Feedback from M.Sc. (Ag) Agriculture Extension & Education is normally collected online as well as offline for their overall experience and suggestions for improvement of the programme. It is observed that most of the students are satisfied with the research facilities and support of the staff. At the same time, students needed more practical knowledge and offline classes for clearing the concept. To resolve the issue, more practical classes have been conducted as well as theoretical classes were also conducted for the preparation of NET, JRF and SRF examinations. Students were advised to go to library and search of the research papers and literature related to advance agricultural research for updating their knowledge and improving their thesis research work. Special lectures and short-term training on advance agricultural technological aspects were also

conducted for updating the knowledge and clearing the concepts of the students. Students also pointed out that moreover, Job-oriented classes should be organized.

6.4.8 Student intake and attrition in the programme for last five years: Year wise information on sanctioned strength, actual intake and attrition in the last five years of the Degree Programme, in the tabular form, shall be provided.

Student intake and attrition

Name of the	Actual students admitted in last five years					Attrition (%)				
Degree programme	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
Extension Education	06	07	10	11	09	50	28.5	10	09	22.2

6.4.9. ICT application in teaching and practical for curricula delivery:

- The College of Agriculture, Gwalior has upgraded four class room into smart class room for teaching of post graduate students using smart class room/interactive board. The teaching of undergraduate students is being done using projector based teaching facility in 04 class rooms.
- 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.
- Yes, the faculty members of the College of Agriculture Gwalior are using ICT in teaching and practical. There are lecture rooms and seminar rooms with computer, LCD projector and internet connection. All faculty members have computer, printer and internet connection in their offices. There is Wi-Fi facility for faculty, staff and students. This infrastructure provides opportunities for the use of ICT in quality teaching, research and extension. The faculty members use power point presentations, YouTube, emails and CD ROM in teaching different courses.

6.4.12. Certificate (Applicable when SSR is submitted for Programme):

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Tel- 0751-2341691
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No./Dean/Estt./2021/2411 Date- 17/11/2021

CERTIFICATE

I, the **Dean, College of Agriculture, Gwalior** hereby certify that the information contained in Sections 6.4.1 to 6.4.9 are furnished as per the record available in the college and degree awarding university.

17/11/2021
DEAN
College of Agriculture
Gwalior (M.P.)

Signature of the Dean of the College & Seal

8 M.Sc. (Ag.) Environmental Science

6.4.1 Brief History of PG Degree programme

- Department start functioning in 2016
- PG began in 2016
- Research projects on following areas helped students to pursue their research along with facilities available at University
- Elevated Carbon dioxide studies in pulses in OTC
- Carbon sequestration by three major fodder crops
- Evapo transpiration , water runoff, water use efficiency in wheat crop through lysimeter

6.4.2 Faculty Strength

S. No.	Sanctioned Faculty	Faculty in place	Vacant position	Faculty recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
1	Professor	-	-	-	-
2	Associate Professor	-	-	-	-
3	Assistant Professor	-	-	1	-1

Existing Faculty:

S.No.	Name	Designation	Remark
1	**Dr. S.K. Trivedi**	**Professor & Head**	**Posting as HoD, Soil Science & Agricultural Chemistry**
2	**Dr. Amita Sharma**	**Scientist**	**From Extension stream (In addition to KVK)**
3	**Dr. Anuradha Goyal**	**Contractual Teacher**	**-**

6.4.3 Technical and supporting staff

S. No.	Sanctioned Faculty	Faculty in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
1	Lab Assistant	-	-	1	-1

Existing Supporting Staff:

Supporting Staff		
Contractual Computer Operator	**:**	**Ranveer Patel**
Contractual Peon	**:**	**Jitendra Rajak**

6.4.4 Classrooms and laboratories

S. No.	Name of department	PG Laboratory	Name of equipment
1	Environmental science	01	Photosynthesis System' Pressure Chamber, HPLC, Rotatory Evaporator ,Bench Top Chiller, Open Tope Chamber , Face/Fate/Faoe ,Lysimeter, Digital Sound Label Meter , Soil TDS Digital Conductivity Meter SE 239, LUX Digital Meter, Digital Hand Refractometer, Soil Ph Moisture, Pathalogical Microscope SE 373, Dissolved Oxygen Meter, Laser Leaf Area Meter, Rotary Vacuum Evaporator

Postgraduate (PG} Class Rooms

Department	PG Seminar hall (Equipped with AV aids)
Environmental science	4

6.4.5: Conduct of practical and hands-on-training

- Instrumental methods of Environmental Analysis
- Agro-forestry
- Biodiversity & Conservation
- Environmental Monitoring System and Impact Assessment

6.4.5.1 credits of course

Total credits of course offered department wise in Post Graduate:

S. No.	Subject/Department	course offered							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Environmental Science	07	07	07	07	07	07	07	07

S. No.	Subject/Department	Total Credits							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Environmental Science	21	20	21	20	21	20	21	20

6.4.6. Supervision of Students in PG/Ph.D. Programmes:

- As per ICAR guidelines, PG and Ph.D. Students are supervised timely by the advisory committee headed by the major advisor. Head of Department and Director Instructions also monitor the research work of the students.
- Advisory committee constitutes three members (1 Supporting) + 1 Minor)) and one major advisor.
- Before submitting the synopsis as well as thesis, the synopsis seminar and result seminar respectively are conducted.
- At present there are 02 faculties qualified for PG Programmes along with one contractual teachers. Maximum intake rate is 4. At a time 2 to 3 students are working under one faculty.
- **Department wise thesis submitted in last five years**

S.No.	Name of department	Thesis submitted in PG				
		2016	2017	2018	2019	2020
1	Environmental science	-	-	-	-	03

6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers etc.):

Students:

Feedback regarding Environmental science department.

1 message

ROHIT SHARMA <rs571729@gmail.com> Thu, Nov 11, 2021 at 2:54 PM
To: dean.gwalior@rvskvv.net

Good afternoon ma'am, I am Rohit Sharma (Enrollment number:20114601) studying in M.Sc.(Ag) department of environmental science.
As we know that world is going through a serious concern of climate change which has impacted our ecosystem negatively. Agriculture sector is the backbone of our economy as it feeds billions of population. Environmental science department is one of the most important department of our college as it can help us to discover new methodology and technology so that climate resilience crop variety can be develop.
I was the only student in my department. With the great efforts and knowledge of my departmental professors Dr. Amita Sharma, Dr. Anuradha Goel, Dr. Poulomi Chakraborty it gets easy for me to go through the concepts of my subject. Apart from that, knowledge regarding the minor subjects has been provided by faculty Dr. Sashi Yadav, Dr. Priyadarshini Kambhalkar, Dr. N.S. Gurjar of soil science department. Statistics has been taught by Dr. V.B. Singh that will going to help us in design outlay in research work.
It is a good experience in learning various concepts of environment on crop growth. Though students are unaware due to which they are not attracted to study in the department. I would like to suggest the administration to kindly take some initiative that will help to attract students about the need of the department in upcoming years.
Well it is a great experience for me to learn things from all the faculty who directly and indirectly indulge in this journey.
Thank you
Rohit Sharma
M.Sc. Ag Environmental science

- Feedback from M.Sc. (Ag) Environmental Science is normally collected online as well as offline for their overall experience and suggestions for improvement of the programme. It is observed that most of the students are satisfied with the research facilities and support of the staff. At the same time, students needed more practical knowledge and offline classes for clearing the concept. To resolve the issue, more practical classes have been conducted as well as theoretical classes were also conducted for the preparation of NET, JRF and SRF examinations. Students were advised to go to library and search of the research papers and literature related to advance agricultural research for updating their knowledge and improving their thesis research work. Special lectures and short-term training on advance agricultural technological aspects were also conducted for updating the knowledge and clearing the concepts of the students. Students also pointed out that moreover, Job-oriented classes should be organized.

6.4.8 Student intake and attrition in the programme for last five years: Year wise information on sanctioned strength, actual intake and attrition in the last five years of the Degree Programme, in the tabular form, shall be provided.

Student intake and attrition

Name of the	Actual students admitted in last five years					Attrition (%)				
Degree programme	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
Environmental science	04	04	03	04	01	-	25	--	-	-

6.4.9. ICT application in teaching and practical for curricula 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.

S. No.	Tools	Purpose
1.	Smart class room	Regular delivery of online lectures
2.	PPT	Effective and impressive Teaching
3.	Internet Network	Class, library online access of journals
4.	Google meet / webex / Zoom	Viva-voce examination, online teaching, webinar, Guest lectures etc.
5.	Test moz	Online midterm examination of M.Sc. & Ph.D. (PG student)
6.	Whatsapp group	Notice, Circular, class and exam schedule, lectures links etc.
7.	Remote Sensing and GIS	Soil Sampling and fertility mapping
8.	Communication & publication	Online publication of research papers, pamphlets, magazines etc.

6.4.12. Certificate (Applicable when SSR is submitted for Programme):

OFFICE OF THE DEAN

COLLEGE OF AGRICULTURE, GWALIOR (M.P.)

Tel- 0751-2341691
Email- dean.gwalior@rvskvv.net

No./Dean/Estt./2021/2911 Date- 17/11/2021

CERTIFICATE

I, the **Dean, College of Agriculture, Gwalior** hereby certify that the information contained in Sections 6.4.1 to 6.4.9 are furnished as per the record available in the college and degree awarding university.

17/11/2021

DEAN

College of Agriculture
Gwalior (M.P.)

Signature of the Dean of the College with Date & Seal

9 M.Sc. Horticulture.

6.4.1 Brief History of PG Degree programme

Department of Horticulture was started during the 1974 to impart education and entrepreneurship skills in area of Horticulture like- fruits, vegetables, flowers and post harvest management and value addition for sustainable development.

Department	Year of Starting
Horticulture Department Started	1974
M.Sc. Horticulture Started	1975
Further Bifurcated and started M.Sc. Fruit Science and Vegetable Science	
M.Sc. Fruit Science Started	2011
M.Sc. Vegetable Science Started	2013
Ph.D. Horticulture Started	2009
Further Bifurcated and started Ph.D. Fruit Science and Vegetable Science	
Ph.D. Fruit Science Started	2011
Ph.D. Vegetable Science Started	2011

Objectives:

- To impart education and entrepreneurship skills in fruits, vegetables, flowers, post harvest and value addition technology for sustainable development.
- To undertake studies on advances in fruits, vegetables, flowers, post harvest and value addition technology. Which may prove to be beneficial for students and farmers.
- To work on the value addition and post harvest technology to minimize the post harvest losses of fruits and vegetables.
- To study the impact of climate change on fruit and vegetable production and their future prospects.

Accomplishments:-

- Identification and understanding the demand of horticultural crop to be produced and enhanced in the area.
- Encouragement of organic vegetable production in near by districts.
- Evaluations of various local grown fruits and their germplasm.
- Selection and evaluations of local produced fruits varieties.
- Dry land fruit orchard at Sirsod.(Researches on Ber, Guava, Drumstick, karonda etc.)
- Vegetable seed production unit at horticulture experiment area.

6.4.2 Faculty Strength

S.No.	Sanctioned Faculty	Faculty in place	Vacant position	Faculty recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
1	Professor	Nil	0	1	-1
2	Associate Professor	Nil	0	1	-1
3	Assistant Professor	1	1	2+1	-2

Existing Faculty:

S.No.	Name of faculty	**Designation**	Remark
1	Dr Rajesh Lekhi	Professor & HoD	CAS-Prof.
2	Dr. Rashmi Bajpai	Sr. Scientist	Deputed from KVK
3	Dr. Prashant Gupta	Sr. Scientist	Deputed from KVK
4	Dr. K.V. Singh	Sr. Scientist	Deputed from DES
5	Dr. K.K.Yadav	Scientist	Deputed from KVK
6	Dr. P.K.S. Gurjar	Scientist	Deputed from KVK
7	Dr. Arjun Kashyap	Contractual Teacher	-
8	Dr. Rajesh Jatav	Contractual Teacher	-
9	Dr. Richa Pyasi	Contractual Teacher	-
10	Dr. Pragya Singh	Contractual Teacher	-

6.4.3 Technical and Supporting Staff

S.N.	Sanctioned Technical and Supporting staff	in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
01	Assistant	00	01	01	-1
02	Field Assistant/FEO	00	02	02	-2
03	Lab attended	00	01	02	-2
04	Peon/Messenger	00	02	-	-

6.4.4 Classrooms and laboratories

S.No.	Name of department	UG & PG/Ph.D. Laboratory	Name of equipment
1	Fruit science	01	Hand Refractometer Digital Refractometer Refrigerator Electronic weighing balance Pan Balance
2	Vegetable science	01	Hand Refractometer Digital Refractometer Refrigerator Electronic weighing balance Pan Balance

Postgraduate (PG) Class Rooms

Department	PG Seminar hall (Equipped with AV aids)
1. Horticulture	1

6.4.5: Conduct of practical and hands-on-training

Propagation methods e.g. cutting, layering, budding and grafting and crop maximization practices like bending, notching, ringing and girdling, training and pruning. Production Technology of Vegetables and Flower Crops: Maximization of vegetable yield by *viz*., staking, turning, blanching, earthing up. Maximization of flower yield and quality by pinching, disbudding, pruning, bending. Vegetable Production: Production and marketing of various vegetables *viz*., tomato, brinjal, onion, cabbage, cauliflower, broccoli, lettuce, garlic and exotics. Preparation of value added products.

6.4.5.1 credits of course

Table: Course offered department wise in M. Sc

S. No.	Subject/Department	Courses offered (No.)							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Fruit Science	04	03	07	06	07	06	07	06
2	Vegetable Science	04	03	07	06	07	06	07	06

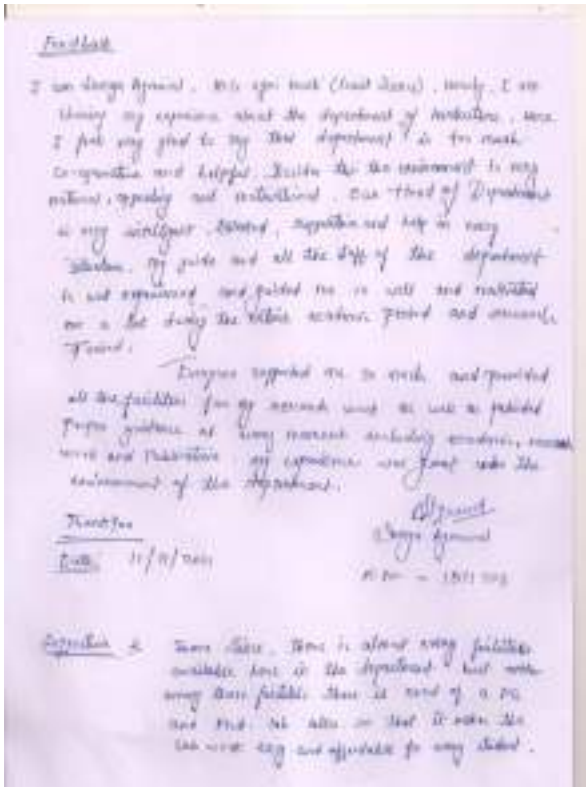
S. No.	Subject/Department	Total Credits							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Fruit Science	12	08	22	16	22	16	22	16
2	Vegetable Science	12	08	22	16	22	16	22	16

6.4.6. Supervision of Students in PG Programmes:

- As per ICAR guidelines, PG Students are supervised timely by the advisory committee headed by the major advisor. Head of Department and Director Instructions also monitor the research work of the students.
- Advisory committee constitutes three members (1 Supporting) + 1 Minor)) and one major advisor.
- Before submitting the synopsis as well as thesis, the synopsis seminar and result seminar respectively are conducted.
- At present there are 1 permanent faculties along with three contractual teacher qualified for PG/PhD Programmes. At a time 4 to 5 students are working under one faculty.
- **Department wise thesis submitted in last five years**

S. No.	Name of department	Thesis submitted in PG				
		2016	2017	2018	2019	2020
1	Fruit science	08	08	07	06	11
2	Vegetable science	05	07	02	07	07

6.4.7 Feedback of the stack holders (Students, Parents, industries, employer, farmers, etc.)-



- Feedback from M.Sc. (Ag) Horticulture is normally collected online as well as offline for their overall experience and suggestions for improvement of the programme. It is observed that most of the students are satisfied with the research facilities and support of the staff. At the same time, students needed more practical knowledge and offline classes for clearing the concept. To resolve the issue, more practical classes have been conducted as well as theoretical classes were also conducted for the preparation of NET, JRF and SRF examinations. Students were advised to go to library and search of the research papers and literature related to advance agricultural research for updating their knowledge and improving their thesis research work. Special lectures and short-term training on advance agricultural technological aspects were also conducted for updating the knowledge and clearing the concepts of the students. Students also pointed out that moreover, Job-oriented classes should be organized.

6.4.8 Student intake and attrition in the programme for last five years

Name of the	Actual students admitted in last five years					Attrition (%)				
Degree programme	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
Fruit Science	08	09	12	12	11	-	-	-	-	-
Vegetable Sc.	06	10	12	12	12	-	-	-	-	-

6.4.9. ICT application in teaching and practical for curricula 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.

Yes, the faculty members of the College of Agriculture Gwalior are using ICT in teaching and practical. There are lecture rooms and seminar rooms with computer, LCD projector and internet connection. All faculty members have computer, printer and internet connection in their offices. There is Wi-Fi facility for faculty, staff and students. This infrastructure provides opportunities for the use of ICT in quality teaching, research and extension. The faculty members use power point presentations, YouTube, emails and CD ROM in teaching different courses.

The College of Agriculture, Gwalior has upgraded four class room into smart class room for teaching of post graduate students using smart class room/interactive board. The teaching of undergraduate students is being done using projector based teaching facility in 04 class rooms.

6.4.12. Certificate (Applicable when SSR is submitted for Programme):

OFFICE OF THE DEAN

COLLEGE OF AGRICULTURE, GWALIOR (M.P.)

Tel- 0751-2341691

Email- dean.gwalior@rvskvv.net

No./Dean/Estt./2021/2411 Date- 17/11/2021

CERTIFICATE

I, the **Dean, College of Agriculture, Gwalior** hereby certify that the information contained in Sections 6.4.1 to 6.4.9 are furnished as per the record available in the college and degree awarding university.

17/11/2021

DEAN

College of Agriculture

Gwalior (M.P.)

Signature of the Dean of the College with Date & Seal

10 M.Sc. (Ag.) Agricultural Economics

6.4.1 Brief History of the PG Degree Programme

- The Department of Agricultural Economics is functioning since the inception of RVSKVV in the year 2008.
- Post Graduate Programme was started from 2009-10.
- Ph.D. Programme was started from 2010-11.

Objective:-

To strengthen human resources for development of entrepreneurial skills as per requirements agricultural universities, research institutes and other development departments

Accomplishment:

Impact of Soil Health Card Scheme on production and productivity of paddy, wheat, gram etc.

Growth Pattern And Trend Analysis Of Major Crops Of India.

Mandates

- To conduct research in frontier areas and serve as a center for academic excellence in PG and Ph.D. programme.

6.4.2 Faculty strength

S. No.	Sanctioned Faculty	Faculty in place	Vacant position	Faculty recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
1	Professor	-	-	-	-
2	Associate Professor	-	-	1	-1
3	Assistant Professor	1	1	2	-1

Existing Faculty:-

S. No.	Name of faculty	**Designation**	Remark
1	Dr. A.M. Jaulkar	Professor & HoD	CAS-Prof. (Retd. On July, 31,2021)
2	Dr. Sudhir Singh	Contractual Teacher	Deputed from KVK

6.4.3 Technical and supporting staff—

S.N.	Sanctioned Technical and Supporting staff	in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
01	Computer Operator /Steno	1	0	1	0
02	Lab Attended	0	1	1	-1

Existing Supporting Staff:-

S. No	Name of Staff	Post
1	Reena Goyal	Computer Operator/Steno
2	Anshul Gupta	Contractual Computer Operator
3	Krishna Pal	Contractual Peon

6.4.4 Classrooms and laboratories

S. No.	Name of department	Laboratory	Name of equipment
1	Agril. Economics	01	Cyber Lab

Postgraduate (Ph.D.) Class Rooms

Department	PG Seminar hall (Equipped with AV aids)
Agril. Economics	1

6.4.5: Conduct of practical and hands-on-training

Estimation of cost of cultivation of Crops, depreciation of farm assets, net worth and income statements, financial test ratios, break even analysis of project, study of marketing institutions such as NAFED, SWC, CWC. etc. Economic analysis of different enterprises, partial and complete budgeting and preparation alternative farm plans, assessment of credit requirement for various crops and enterprises. Testing of economic viability of project, loan proposal formulation and assessment of repayment capacity, risk barring ability and returns on investment. Institutional finance, Marketing of Agricultural products and livestock. Input and output markets, financial criteria for appraisal of the project. Seasonal indices of arrival and prices of Agril. Commodities.

6.4.5.1 credits of course

Table: Course offered department wise in M.Sc.

S. No.	Subject/Department	Courses offered (No.)							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Agricultural Economics & F.M.	04	05	07	08	07	08	07	08

Total credits of course offered department wise in Post Graduate:

S. No.	Subject/Department	Total Credits							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Agricultural Economics & F.M.	07	13	17	22	17	22	17	22

6.4.6. Supervision of Students in PG Programmes:

- As per ICAR guidelines, PG Students are supervised timely by the advisory committee headed by the major advisor. Head of Department and Director Instructions also monitor the research work of the students.
- Advisory committee constitutes three members (1 Supporting) + 1 Minor)) and one major advisor.
- Before submitting the synopsis as well as thesis, the synopsis seminar and result seminar respectively are conducted. As per ICAR guidelines, PG Students are supervised timely by the advisory committee headed by the major advisor. Head of Department and Director Instructions also monitor the research work of the students.
- Advisory committee constitutes three members 1 Supporting + 1 Minor and one major advisor.
- Before submitting the synopsis as well as thesis, the synopsis seminar and result seminar respectively are conducted.
- At present there are no permanent faculties. Only one contractual teacher qualified for PG Programmes. Maximum intake rate is 07.

Department wise thesis submitted in last five years

S. No.	Name of department	Thesis submitted in PG				
		2016	2017	2018	2019	2020
1	Agril. Economics	05	02	05	00	03

6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers etc.):


Department of Agricultural Economics

ID No. 18110902

I am Hemant Kumar Lamba M.Sc. (Ag.) Department of Agricultural Economics College of Agriculture, RVSKVV Gwalior. My 2 years in this university have been excellent and memorable. Because this university provided me all type of necessary facilities like digital library, computer lab, analytical software for research purpose and also provided sports facility for the students. It gave me the opportunity to meet different kinds of people and learn a lot. I have got a lot of support from the faculty member whenever required. Lastly, I am grateful to RVSKVV for providing me a platform to enhance my skills and provide an opportunity to showcase them. It fills my heart with joy to be associated with such a university.

- Feedback from M.Sc. (Ag) Agricultural Economics & Education is normally collected online as well as offline for their overall experience and suggestions for improvement of the programme. It is observed that most of the students are satisfied with the research facilities and support of the staff. At the same time, students needed more practical knowledge and offline classes for clearing the concept. To resolve the issue, more practical classes have been conducted as well as theoretical classes were also conducted for the preparation of NET, JRF and SRF examinations. Students were advised to go to library and search of the research papers and literature related to advance agricultural research for updating their knowledge and improving their thesis research work. Special lectures and short-term training on advance agricultural technological aspects were also conducted for updating the knowledge and clearing the concepts of the students. Students also pointed out that moreover, Job-oriented classes should be organized.

6.4.8 Student intake and attrition in the programme for last five years: Year wise information on sanctioned strength, actual intake and attrition in the last five years of the Degree Programme, in the tabular form, shall be provided.

Student intake and attrition

Name of the	Actual students admitted in last five years					Attrition (%)				
Degree programme	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
Agril. Economics	04	04	07	06	05	50	25	-	16.6	20

6.4.9. ICT application in teaching and practical for curricula 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.

Yes, the faculty members of the College of Agriculture Gwalior are using ICT in teaching and practical. There are lecture rooms and seminar rooms with computer, LCD projector and internet connection. All faculty members have computer, printer and internet connection in their offices. There is Wi-Fi facility for faculty, staff and students. This infrastructure provides opportunities for the use of ICT in quality teaching, research and extension. The faculty members use power point presentations, YouTube, emails and CD ROM in teaching different courses.

The College of Agriculture, Gwalior has upgraded four class room into smart class room for teaching of post graduate students using smart class room/interactive board. The teaching of undergraduate students is being done using projector based teaching facility in 04 class rooms.

6.4.12. Certificate (Applicable when SSR is submitted for Programme):

OFFICE OF THE DEAN

COLLEGE OF AGRICULTURE, GWALIOR (M.P.)

Tel- 0751-2341691

Email- dean.gwalior@rvskvv.net

No./Dean/Estt./2021/ 2411 Date- 17/11/2021

CERTIFICATE

I, the **Dean, College of Agriculture, Gwalior** hereby certify that the information contained in Sections 6.4.1 to 6.4.9 are furnished as per the record available in the college and degree awarding university.

17/11/2021

DEAN

Signature of the Dean of the College with Date & Seal

Gwalior (M.P.)

Programme-03

Ph.D. (Agri./Hort.)
2year Programme

6.5 About the College History

The college of Agriculture Gwalior was established in the year 1950. This is the oldest college of Madhya Bharat State. In the beginning this college was affiliated to Agra University and later on to Vikram University Ujjain. This college has celebrated its golden jubilee in the year 2000. After the establishment of Jawaharlal Nehru Krishi Vishwa Vidyalaya Jabalpur in the year1964, this college has been affiliated to it. On 19th August 2008 a new Agriculture University namely Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya came into existence after bifurcation of JNKVV, Jabalpur with its head quarter in Gwalior and this college has become the main campus of Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya.

The Central Research Farm of the college (Regional Agriculture Research Station) was established in 1916.

DETAILS OF DEPARTMENT STARTED Ph.D.

S. No.	Department	Degree programme	Year Start
1	Agronomy	Ph.D.	2009
2	Pl. Pathology	Ph.D.	2011
3	Soil Science	Ph.D.	2009
4	Genetics & Plant Breeding	Ph.D.	2010
5	Entomology	Ph.D.	2010
6	Agricultural Extension	Ph.D.	2011
7	Horticulture (Fruit Science) Horticulture (Vegetable Science)	Ph.D.	2011 2009
8	Agriculture Economics	Ph.D.	2010

1. Ph.D. Agronomy

6.4.1 Brief History of Ph.D. Degree Programme

- Agronomy Section/Department was established in the year 1951.
- Dr. R. Mishra was the founder Head of Agronomy Section/Department.
- The college started post graduate instructions in Agronomy in 1957.
- Ph. D programme was started in the year 2009..

6.4.2 : Faculty Strength

S.No.	Sanctioned Faculty	Faculty in place	Vacant position	Faculty recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
1	Professor	-	-	01	-1
2	Associate Professor	0	01	01	-1
3	Assistant Professor	0	04	04	-4

Agronomy Faculty In Research / Extension

S. No	Faculty Name	Designation	Remark
1	Dr. S.P.S. Tomar	CAS: Pr. Scientist (Agronomy)	ICAR-Wheat IMP Scheme
2	Dr. S.S. Tomar	ADR (Seed)	DRS, RVSKVV, Gwalior
3	Dr. D.S. Sasode,	Sr. Scientist	ICAR Weed Control Project Working as HoS
4	Dr. Shailendra Singh Kushwah	Sr. Scientist	DES, RVSKVV, Gwalior
5	Dr. RPS Tomar	Scientist	DES, RVSKVV, Gwalior
6	Dr. B.S. Kasana	Scientist	DES, RVSKVV, Gwalior
7	Dr. Sudheer Singh Bhadauria	Tech. Officer/ Asstt. Prof.	DES, RVSKVV, Gwalior
8	Dr. Janmejay Sharma	Scientist	ICAR Guar Project
9	Dr. Ekta Joshi	Scientist	ICAR New Centre oilseed Groundnut
10	Dr. Varsha Gupta	Scientist	ICAR Weed Control Project

6.4.3 Technical and Supporting staff

S.N.	Sanctioned Technical and Supporting staff	in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
01	Lab technician	00	01	2	-1
02	Stenographer / Assistant	02	00	1	+1
03	Field Extension Officer	02	00	3	-1

Existing Supporting Staff:

S.No.	Staff Name	Designation	Remark
01	Sh. Shivnarayan Kushwah	FEO	ICAR Guar Project
02	Sh. Y.K. Singh	FEO	ICAR Weed Control Project
03	Sh. Gajendra Singh Yadav	Assistant Gr. II	ICAR New Centre oilseed Groundnut
04	Sh. Shubham Chouhan	Steno	Non Plan

S.N	Name of post	Sanctioned post	Filled	Vacant
1	Associate Professor	01	0	01
2	Assistant Professor	03	0	03
3	Lab Technician	01	0	01
4	Lab Attended	01	0	01

6.4.3 Classrooms and laboratories

Classrooms:-

S. No.	Class Rooms/ Laboratories / Field	Numbers	Student Capacity
1.	Ph.D. Class Room	01	20
2.	Seminar Room	01	50
3.	Ph.D. G Lab	01	15
4.	Aris cell	01	05
5.	Department library	01	06

6.	Experimental Field	01	Yes

Laboratories:-

S.No.	Name of department	PG Laboratory	Name of equipment
1	Agronomy	01	Air circular hot air oven Core Sampler Kit V-notch Double Beem UV Visible spectrophotometer Rotatory flask shaker Electronic kel plus superior microprocessor LCD projector Honda weed cutter / Bruss cutter Kisankraft sell Propelled weeder self propelled walk behind PUSA STFR meter kit (Digital Soil Testing Mini Lab) Unbranded kjeldahl Digestion cum Flame Photometer Tensiometer Analytical Digital Balance Micro kjeldhal Digestion & distillation assembly Seed germinator Seed counter

Postgraduate (PG) Class Rooms

Department	PG Seminar hall (Equipped with AV aids)
Agronomy	1

6.4.5.1 Conduct of practical and hands-on-training

Charts/specimens of tools and implements, actual seed, weed and crop identification, different methods of sowing, irrigation layouts, live models of pressurized irrigation systems, agro-meteorological instruments, methods of fertilizer application and methods of weed management.

6.4.5.1 credits of course

Total credits of course offered department wise in Post Graduate:

S. No.	Subject/Department	Course Offered							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Agronomy	07	07	06	06	06	06	06	06

S. No.	Subject/Department	Total Credits							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Agronomy	13	10	17	15	17	15	17	15

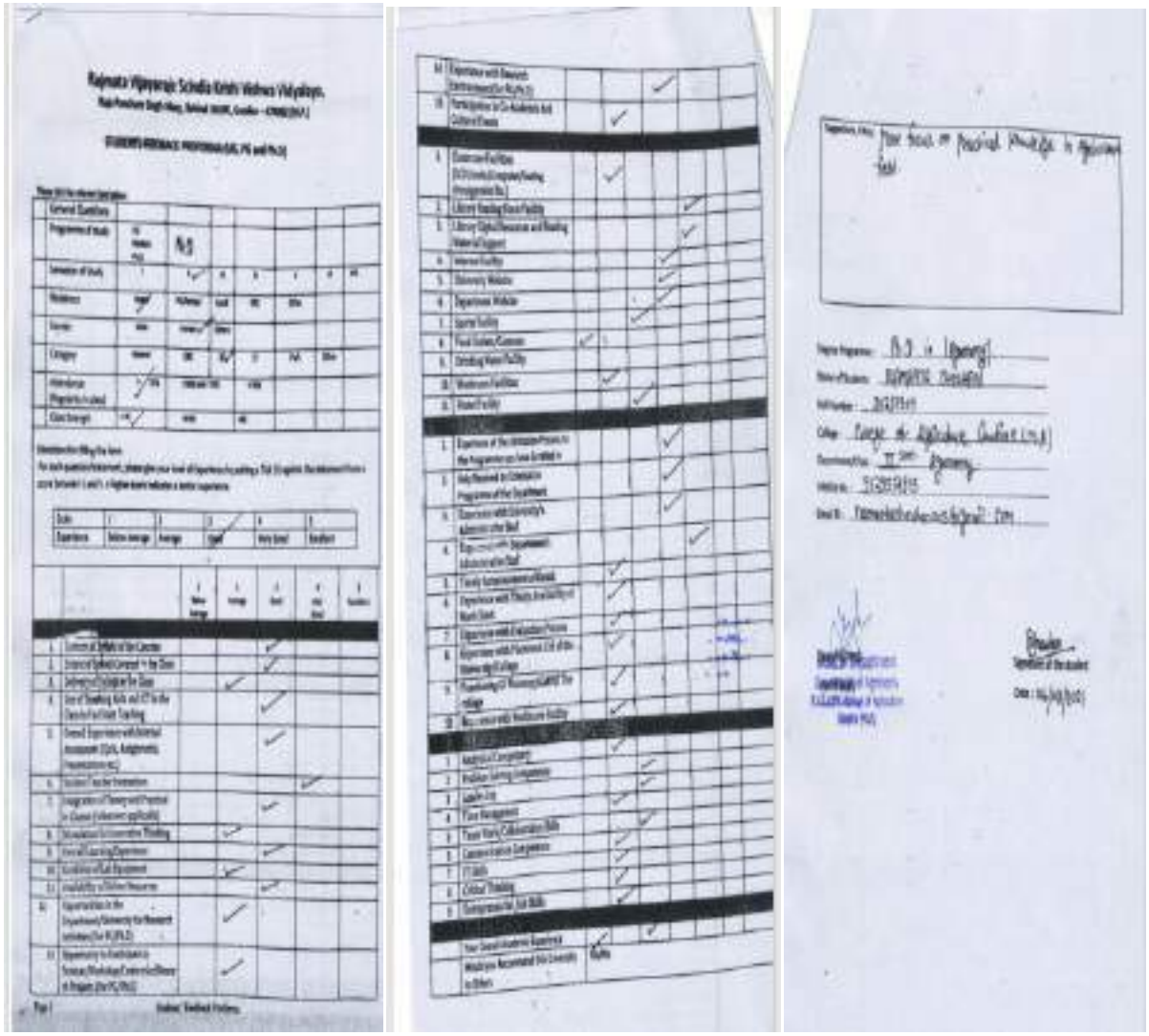
6.4.6. Supervision of Students in PG Programmes:

- As per ICAR guidelines, PG Students are supervised timely by the advisory committee headed by the major advisor. Head of Department and Director Instructions also monitor the research work of the students.
- Advisory committee constitutes three members 1 Supporting + 1 Minor and one major advisor.
- Before submitting the synopsis as well as thesis, the synopsis seminar and result seminar respectively are conducted.
- At present there are 5 permanent faculties along with attached teacher qualified for PG/PhD Programmes.. At a time 1 to 2 students are working under one faculty.

Details of Ph.D. programme offered by the Department

S.No.	Name of department	Thesis submitted in PG				
		2016	2017	2018	2019	2020
1	Agronomy	02	01	05	03	03

6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers etc.):



- Feedback from Ph.D. (Ag) Agronomy is normally collected online as well as offline for their overall experience and suggestions for improvement of the programme. It is observed that most of the students are satisfied with the research facilities and support of the staff. At the same time, students needed more practical knowledge and offline classes for clearing the concept. To resolve the issue, more practical classes have been conducted as well as theoretical classes were also conducted for the preparation of NET, JRF and SRF examinations. Students were advised to go to library and search of the research papers and literature related to advance agricultural research for updating their knowledge and improving their thesis research work. Special lectures and short-term

training on advance agricultural technological aspects were also conducted for updating the knowledge and clearing the concepts of the students. Students also pointed out that moreover, Job-oriented classes should be organized.

6.4.8 Student intake and attrition in the programme for last five years

Name of the	Actual students admitted in last five years					Attrition (%)				
Degree programme	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
Agronomy	02	06	06	06	06	-	-	-	-	-

6.4.9. ICT application in teaching and practical for curricula 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.

Yes, the faculty members of the College of Agriculture Gwalior are using ICT in teaching and practical. There are lecture rooms and seminar rooms with computer, LCD projector and internet connection. All faculty members have computer, printer and internet connection in their offices. There is Wi-Fi facility for faculty, staff and students. This infrastructure provides opportunities for the use of ICT in quality teaching, research and extension. The faculty members use power point presentations, YouTube, emails and CD ROM in teaching different courses.

The College of Agriculture, Gwalior has upgraded four class room into smart class room for teaching of post graduate students using smart class room/interactive board. The teaching of undergraduate students is being done using projector based teaching facility in 04 class rooms.

6.4.12. Certificate (Applicable when SSR is submitted for Programme):

OFFICE OF THE DEAN
COLLEGE OF AGRICULTURE, GWALIOR (M.P.)

Tel- 0751-2341691
Email- dean.gwalior@rvskvv.net

No./Dean/Estt./2021/2911 Date- 17/11/2021

CERTIFICATE

I, the **Dean, College of Agriculture, Gwalior** hereby certify that the information contained in Sections 6.4.1 to 6.4.9 are furnished as per the record available in the college and degree awarding university.

17/11/2021

DEAN

Signature of the Dean of the College with Date & Seal
Gwalior (M.P.)

2. Ph.D. Plant Pathology

6.4.1: Brief history of Ph.D. Degree Programme

- The Department was established in 1957 as post graduate department but in 1968 post-graduation was transferred to College of Agriculture, Jabalpur.
- Ph.D. prgramme was started in 2011-12.

Objectives

- To produce good students at UG/PG and Ph.D. level having good knowledge of Plant Pathology so that they can serve better in different organizations at national and international level.
- To develop skills among the students for their self employment generation,
- To manage the pathological problems of various crops cultivated in the state.
- To develop low cast environment friendly management strategies of various crop diseases which are hurdles in obtaining optimum yield of crops.

6.4.2: Faculty strength

S.No.	Sanctioned Faculty	Faculty in place	Vacant position	Faculty recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation from recommended position
1	Professor	-	-		-
2	Associate Professor	0	01		-1
3	Assistant Professor	0	02		-2

Existing Faculty of Research:

S.No.	Name	Designation	Remark
1	Dr. Reeti Singh	Principal Scientist	IERP
2	Dr. R.K. Pandya	Principal Scientist	AICRP on Pearlmillet
3	Dr.Rajni Sasode	Scientist	AINP on Arid Legume
4	Dr. Jagdish Kumar Patidar	Contractual Teacher	
5	Dr. Pramod Kumar Fatehpuria	Contractual Teacher	

6.4.3: Technical and supporting Staff Supporting Staff

S.N.	Sanctioned Technical and Supporting staff	in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
01	Lab technician	01	01	2	-1
02	Assistant	0	-	1	-1
03	Field Asstt.	0	-	1	-1
04	Peon	01	0	-	+1

Existing Contractual Supporting Staff:-

S.No.	Name
1	Mr. Shrawan Krishna, Computer operator, contractual
2	Dr. Vivek Bhanwar, Unskilled

6.4.4 Classrooms and laboratories

S. No.	Class Rooms/ Laboratories / Field	Numbers	Student Capacity
1.	Ph. D. Class Room	01	20
2.	Seminar Room	01	40
3.	Ph.D. Lab	02	10
4.	Experimental Field	01	Yes

S.No.	Name of department	PG Laboratory	Name of equipment
1	Plant Pathology	01	Students Microscopes Microscopes with 100 x Objectives BOD incubator Laminar air flow Deep freezer Centrifuge haemocytometer Hot air Oven Autoclave

			Trinocular microscope Binocular Stereo Microscope Binocular stereo Zoom microscope Spectrophotometer Ultra centrifuge PCR Gel doc Environment controlled indoor chamber Centrifuge UV-Vis Spectrophotometer

Postgraduate (PG& Ph.D.) Class Rooms

Department	PG Seminar hall (Equipped with AV aids)
Plant Pathology	1

6.4.5: Conduct of practical and hands-on-training

Isolation and identification of plant diseases, disease diagnosis of field as well as horticultural crops. Isolation and identification of different beneficial microbes including bio fertilizer, bio agents, mushroom etc.

6.4.5.1 credits of course

Credits of course offered department wise in Post Graduate:

S. No.	Subject/Department	Course Offered							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Plant Pathology	07	07	06	06	06	06	06	06

Credits of course offered department wise in Post Graduate:

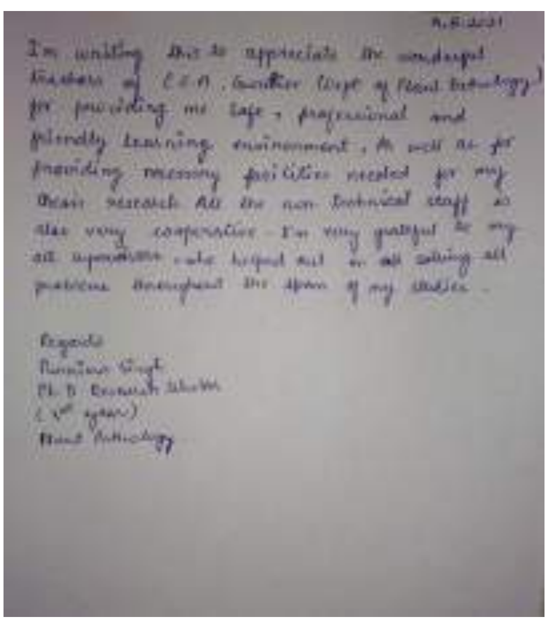
S. No.	Subject/Department	Total Credits							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Plant Pathology	12	09	17	13	17	13	17	13

- **6.4.6. Supervision of Students in PG Programmes:**
- As per ICAR guidelines, PG Students are supervised timely by the advisory committee headed by the major advisor. Head of Department and Director Instructions also monitor the research work of the students.
- Advisory committee constitutes three members 1 Supporting + 1 Minor and one major advisor.
- Before submitting the synopsis as well as thesis, the synopsis seminar and result seminar respectively are conducted.
- At present there are 3 permanent faculties along with one contractual teacher qualified for PhD Programmes. Maximum intake rate is 06. At a time 2 to 3 students are working under one faculty.

Department wise thesis submitted in last five years

S.No.	Name of department	Thesis submitted in PG				
		2016	2017	2018	2019	2020
1	Plant Pathology	0	1	3	6	5

6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers etc.): Mention the feedback mechanism (duly supported by the documents) from different stakeholders of the degree programme. What action the University has taken in last five years to address the issues raised in the feedback?

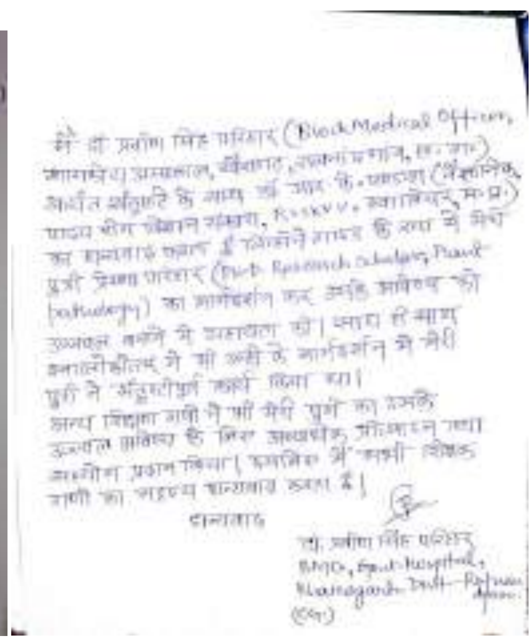


I'm writing this to appreciate the wonderful teachers of [illegible] (Dept of Plant Pathology) for providing me safe, professional and friendly learning environment, as well as for providing necessary facilities needed for my thesis research. All the non technical staff is also very cooperative. I'm very grateful to my all [illegible] who helped me in all solving all problems throughout the span of my studies.

Regards

Ph.D Research Scholar

Plant Pathology



- Feedback from Ph.D. (Ag) Plant Pathology is normally collected online as well as offline for their overall experience and suggestions for improvement of the programme. It is observed that most of the students are satisfied with the research facilities and support of the staff. At the same time, students needed more practical knowledge and offline classes for clearing the concept. To resolve the issue, more practical classes have been conducted as well as theoretical classes were also conducted for the preparation of NET, JRF and SRF examinations. Students were advised to go to library and search of the research papers and literature related to advance agricultural research for updating their knowledge and improving their thesis research work. Special lectures and short-term training on advance agricultural technological aspects were also conducted for updating the knowledge and clearing the concepts of the students. Students also pointed out that moreover, Job-oriented classes should be organized.

6.4.8 Student intake and attrition in the programme for last five years: Year wise information on sanctioned strength, actual intake and attrition in the last five years of the Degree Programme, in the tabular form, shall be provided.

Student intake and attrition

Name of the	Actual students admitted in last five years					Attrition (%)				
Degree programme	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
Plant Pathology	03	00	04	06	02	33	-	-	-	-

6.4.9. ICT application in teaching and practical for curricula 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.

Yes, the faculty members of the College of Agriculture Gwalior are using ICT in teaching and practical. There are lecture rooms and seminar rooms with computer, LCD projector and internet connection. All faculty members have computer, printer and internet connection in their offices. There is Wi-Fi facility for faculty, staff and students. This infrastructure provides opportunities for the use of ICT in quality teaching, research and extension. The faculty members use power point presentations, YouTube, emails and CD ROM in teaching different courses.

The College of Agriculture, Gwalior has upgraded four class room into smart class room for teaching of post graduate students using smart class room/interactive board. The teaching of undergraduate students is being done using projector based teaching facility in 04 class rooms.

6.4.12. Certificate (Applicable when SSR is submitted for Programme):

OFFICE OF THE DEAN

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Tel- 0751-2341691

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No./Dean/Estt./2021/2911 Date- 17/11/2021

CERTIFICATE

I, the **Dean, College of Agriculture, Gwalior** hereby certify that the information contained in Sections 6.4.1 to 6.4.9 are furnished as per the record available in the college and degree awarding university.

17/11/2021

DEAN

Signature of the Dean of the College with Date & Seal

College of Agriculture
Gwalior (M.P.)

3 Ph.D. Soil Science

6.4.1 Brief History of Ph.D Degree Programme

Soil Science and Agricultural Chemistry Section/Department was established in the year 1957. Dr. D.P. Motiramani was the founder Head Soil Science and Agriculture Chemistry. Ph.D prgramme was started in 2009.

Objectives

- To offer courses in different disciplines of Soil Science & Agricultural chemistry for the undergraduate degree programme in Agriculture, Horticulture, Agricultural Engineering and Forestry, and Master's and Doctoral Degree Programme in Soil Science and Agricultural Chemistry.
- To exchange information with other scientists and extension staff engaged in similar pursuits through field trials, training, group discussion, symposia, seminar, conference and publications.
- To carry out the fundamental and applied researches on soils, especially in pedology, soil classification, soil physics, soil fertility, soil microbiology, plant nutrition, agricultural chemicals and farm and industrial wastes utilization.
- Under graduate and post graduate teaching and training of scientist, teacher of ICAR, SAU's and state agriculture Department under Centre of Advanced Faculty Training (CAFT) and other programmes.
- Technology transfer and other activities.

6.4.2 Faculty Strength -

S.No.	Sanctioned Faculty	Faculty in place	Vacant position	Faculty recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
1	Professor	-	-	-	-
2	Associate Professor	0	01	01	-1
3	Assistant Professor	1	02	02	-1

Existing Faculty:-

S.No.	Name of Employee	Designation	Remark
1	Dr. S.K. Trivedi	Professor & Head	CAS Prof. posted in Non Plan
2	Sh. P S Tomar	Sr. Scientist	CAS-S.S. in Soil Test Scheme
3	Dr. Shashi S. Yadav	SMS (Soil Science)	Deputed from DES,RVSKVV
4	Dr.Amita Sharma	Scientist (Agro forestry)	Deputed from KVK
5	Dr. PA Khambalkar	Guest Faculty	-
6	Dr. Narendra Singh Gurjar	Guest Faculty	-
7	Prof. V.S.Tomar	Adjunct Faculty	Retd. Vice Chancellor, RVSKVV, Gwalior & JNKVV, Jabalpur
8	Prof. DLN Rao	Adjunct Faculty	Retd. Director, IISS, Bhopal

.4.1 Technical and Supporting Staff.-

S.N.	Sanctioned Technical and Supporting staff	in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
1	**Lab Assistant**	00	03	2	-2
2	**Assistant**	0	0	1	-1
5	**FEO /Field Asstt.**	01	00	1	-
6	**Messenger / Driver***	0	01	1	-1

***Post is sanctioned under research scheme**

Existing Supporting Staff:

S.No.	Name	Remark
1	Sh. D.S. Bhadouria	Regular FEO
2	Rajesh	Contractual Computer Operator
3	Lala	Contractual Helper

6.4.4 Classrooms and laboratories

S. No.	Class Rooms/ Laboratories / Field	Numbers	Student Capacity
1.	Ph. D. Class Room	01	30
2.	Seminar Room	01	50
3.	Ph. D. Lab	02	40
4.	Soil testing Lab	01	20
5.	AAS Lab	01	06
6.	Microbiology Lab	01	06
7.	Experimental Field	01	2.2 ha

S.No.	Name of department	PG Laboratory	Name of equipment
1	Soil Science	02	Flame Photometer, Yadder Apparatus, UV Spectrophotometer, EC meter, pH meter, Tensiometer, Nitrogen analyzer, Shakers, Hot air oven, Bouycous hydrometer, centrifuge machine, hot plate, COD, Distil water unit, etc

Postgraduate (PG.) Class Rooms

Department	PG Seminar hall (Equipped with AV aids)
Soil Science and Agricultural Chemistry	1

6.4.5: Conduct of practical and hands-on-training

Physical, chemical and biological properties of soils ; recommendation for improving the soil quality, health and crop sustainability; specimens of soil forming rocks and minerals along with their properties, soil profile, tools for collection of soil and irrigation water samples. The qualitative and quantitative analysis of carbohydrates, proteins, lipids and oils are carried out for nutritive values along with their quality in food are tested.

6.4.5.1 credits of course

Total credits of Course offered department wise in Post Graduate:

S. No.	Subject/Department	Course Offered							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Soil Science &Agril.	07	08	06	07	06	07	06	07

S. No.	Subject/Department	Total Credits							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Soil Science &Agril.	09	12	15	17	15	17	15	17

6.4.6. Supervision of Students in Ph.D. Programmes:

- As per ICAR guidelines Ph.D. Students are supervised timely by the advisory committee headed by the major advisor. Head of Department and Director Instructions also monitor the research work of the students.
- Advisory committee constitutes three members (1 Agricultural Statistics (Supporting) + 1 Agronomy (Minor)) and one major advisor.
- Before submitting the synopsis as well as thesis, the synopsis seminar and result seminar respectively are conducted.
- At present there are 2 permanent faculties along with one contractual teacher qualified for PG/PhD Programmes. Maximum intake rate is 06. At a time 2 to 3 students are working under one faculty.

➢ **Department wise thesis submitted in last five years**

S. No.	Name of department	Thesis submitted in PG				
		2016	2017	2018	2019	2020
1	Soil Science	01	01	01	01	01

6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers etc.):

Students:

- The campus is green and eco-friendly. The office staffs in the college is cooperative and helpful. Online educational resources, Internet facility are available and accessible in the library
- The prescribed books / reading materials are available in the library, the buildings / classrooms are clean and well maintained are accessible to disabled persons. Equipment in the lab(s) is in good working condition, Results are displayed by the college. The functioning of the placement cell in the college is satisfactory. Continuous efforts are taken by the college to improve the quality of teaching and learning
- The college takes interest in strengthening its ties with industries, professional bodies etc. The college promotes student exchange, internship etc. programmes for providing new opportunities to students. The mentoring process of the college helped me to identify my strengths and face challenges The overall teaching and mentoring process of the college is excellent.

Parent's feedback:

- Admission procedure easy and smooth.
- Infrastructure and lab facility, Work Culture observed are excellent.
- Library, Sports and cultural activities Other facilities are provided by the college
- Student's counseling activities and guidance.
- Better Use of Information and communication technology in the college.
- Academic Discipline (*i.e* timely conduct of lectures, practical's and related activities) very well maintain.
- Impressive improvement in soft skills, knowledge, ethics, morality, observed by us while our children's studying in college.
- Examination system adopted by the college Evaluation and Feedback mechanism Placements were excellent.
- Feedback from Ph.D. (Ag) Soil Science & Agricultural Chemistry is normally collected online as well as offline for their overall experience and suggestions for improvement of the programme. It is observed that most of the students are satisfied with the research facilities and support of the staff. At the same time, students needed more practical knowledge and offline classes for clearing the concept. To resolve the issue, more

practical classes have been conducted as well as theoretical classes were also conducted for the preparation of NET, JRF and SRF examinations. Students were advised to go to library and search of the research papers and literature related to advance agricultural research for updating their knowledge and improving their thesis research work. Special lectures and short-term training on advance agricultural technological aspects were also conducted for updating the knowledge and clearing the concepts of the students. Students also pointed out that moreover, Job-oriented classes should be organized.

6.4.8 Student intake and attrition in the programme for last five years: Year wise information on sanctioned strength, actual intake and attrition in the last five years of the Degree Programme, in the tabular form, shall be provided.

Student intake and attrition

Name of the	Actual students admitted in last five years					Attrition (%)				
Degree programme	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
Ph.D (Ag.) Soil Science & Ag. Chemistry	02	06	05	06	06	50	16.6	20	-	-

6.4.9. ICT application in teaching and practical for curricula 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.

Yes, the faculty members of the College of Agriculture Gwalior are using ICT in teaching and practical. There are lecture rooms and seminar rooms with computer, LCD projector and internet connection. All faculty members have computer, printer and internet connection in their offices. There is Wi-Fi facility for faculty, staff and students. This infrastructure provides opportunities for the use of ICT in quality teaching, research and extension. The faculty members use power point presentations, YouTube, emails and CD ROM in teaching different courses.

6.4.12. Certificate (Applicable when SSR is submitted for Programme):

OFFICE OF THE DEAN
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CERTIFICATE

I, the **Dean, College of Agriculture, Gwalior** hereby certify that the information contained in Sections 6.4.1 to 6.4.9 are furnished as per the record available in the college and degree awarding university.

17/11/2021
DEAN
College of Agriculture
Gwalior (M.P.)

Signature of the Dean of the College & Seal

4 Ph.D. Genetics & Plant Breeding

6.4.1. Brief History of Ph.D Degree Programme

- The department of Plant Breeding & Genetics established in the year 1980.
- The departments have well equipped P.G. laboratories. Efforts have been made for Ph.D. Programme since inception of RVSKVV, Gwalior.
- The first batch of Ph.D. student enrolled in 2010-11.
- Department of Plant Breeding & Genetics changed rename as department of Genetics & Plant Breeding in the year 2016.
- 5 courses at Ph.D. level are being taught.
- No. of seats in Ph.D. G&PB are 6.
- Total no of Ph.D. G&PB degree was awarded up to 2019-20 are 13.

Objectives & Accomplishment:

Objectives:

- To undertake basic and applied research on Genetics & Plant Breeding.
- To impart education and entrepreneurship skills in crop improvement applied to agriculture for sustainable development.
- To provide information about development of high yielding varieties for human welfare.
- To provide applied training to farmers, youth and rural women.
- Training of graduate students to understand seed technologies processes**.**

Mandate:

Teaching:

To produce students having applied and basic knowledge to take care of crop improvement and varietal development programme.

Research:

- To contribute towards betterment of agriculture in respect to crop improvement programme to improve yield, nutritional quality and resistant/tolerant against different biotic and abiotic stresses.

Extension:

- To disseminate new developed varieties among farmers.
- To provide breeder/certified/nucleus seeds of higher quality to farmers for higher production and enhancement of national GDP.

6.4.2. Faculty Strength: The faculty strength of the Degree Programme needs 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 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.

S. No.	Sanctioned Faculty	Faculty in place	Vacant position	Faculty recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
1	Professor	Nil	00	1	-1
2	Associate Professor	Nil	00	1	-1
3	Assistant Professor	Nil	01	2+1	-3

Present Staff position in 2021

S. No	Faculty Name	Designation	Remark
01	**Dr. V.S. Khandalkar**	Scientist	Working as CAS -Professor & Head and Principal Breeder, AICRP Wheat(Retired in 2020)
02	Dr. M.K. Tripathi	Senior Scientist	Working as CAS -Professor & Head and Principal Breeder, AICRP pearl millet
03	Dr. R.S. Sikarwar	Scientist	Working as Breeder, AICRP Groundnut
04	Dr. N.S. Bhadauria	Scientist	Deputed from KVK to Research Scheme
05	Dr. Sushma Tiwari	Scientist	Working as Breeder, Minor Millet improvement project

6.4.3. Technical and Supporting staff: The position of the technical and supporting staff of the Degree Programme including farm and field workers need to be mentioned for both sanctioned and in- place.

S.N.	Sanctioned Technical and Supporting staff	in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
01	Lab technician	00	02	02	-2
	Assistant / Stenographer	01	0	01	-
02	Lab attended	01	01 (Provided by VV)	-	+1
03	Field Assistant	00	2	2	-2
04	Peon	00	01	-	-

Present Staff position in 2021

S. No	Faculty Name	Designation	Remark
01	Mr. Y.M. Indapurkar	Technical Officer	Working as PRO at RVSKVV
02	Mr. Rajendra Dhamdhere	LDC-II	
03	Mr. Saurabh Thengahe	Stenographer Grade-3	
04	Dr. Munesh K. Kushwah	Guest faculty	Joined in January 2021
05	Dr. Ravindra Solanki	Guest faculty	Joined in January 2021
06	Mr. Abhay Saxena	TSL	
07	Mr. Rajesh Pal	Cont. Computer Operator	

.4.2 Classroom and laboratories

6.4.4.1 Classrooms

S. No.	Classrooms	Seating Capacity
01	Ph. D	12

6.4.4.2 Details of Laboratories:

S. No.	Laboratories	Detail
01	Seed testing lab	PG/Ph.D.
02	Molecular Biology lab	PG/Ph.D.
03	Plant Tissue culture lab	PG/Ph.D.
04	Cytogenetics lab	PG/ Ph.D.

List of equipment's available in different division laboratories

S.No.	Name of department	PG Laboratory	Name of equipment
	Genetics & Plant Breeding	01	Mini Magnetic Staner Water Bath Hote Plate Single Auto Clave Vacuum Pump Cent refuse Over Head Projector Hand Grinder Microscope Gas Cylinder (1-8Kg.) P^H.Meter Electronic Weight Machine Seed Germinator Cooling Centrifuge (Rime) Seed Blower Dacota Seed Precision Divider Moisture Meter Micro pipette kit model 7012/Borosil Hot Air Oven (Model 126/science Enterprise) Auto clave (Model Se-101) Microwave Oven-Samsung Micro processor based PH meter Deep Freezer Gel Rocker "jyoti" make Magnetic stirrer capacity Tinifuge Voltage 6000/15000 Digital Orbital Shaker Vortexer Analytical Electronic Balance Dry Bath Vertical Reading Microscope Gas cylinder for Co-Z Reflacting Microscope Microscope (Zeipswinkel) Microscope spancer Microscope zeips winkle Dessexcting Microscope Binocular Demonstration Eye Pice Distillation Plant copper Microscope Dissecting (Round base) Microscope (Glory Sciontificallrs) Lux Meter Oxygen Cylinder of unit twithdolly Res Binocular Microscope Microscope Light Attachment

6.4.5 Conduct of Practical and Hands-on-Training: 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-trainings per the curriculum and meeting above mentioned requirements.

- Field visit, Research Trial setup and hybridization.
- Variety development and maintenance.
- Practical and hands on training in Plant Genomic DNA isolation, Quantification, PCR using SSR and RAPD markers, Electrophoresis, and phylogenetic analysis for diversity assessment.
- Plant tissue culture and micro propagation.

6.4.5.1 credits of course

Total credits of Course offered department wise in Ph.D.:

S. No.	Subject/Department	Course Offered							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Genetics & Plant Breeding	07	07	06	06	06	06	06	06

S. No.	Subject/Department	Total Credits							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Genetics & Plant Breeding	09	12	13	16	13	16	13	16

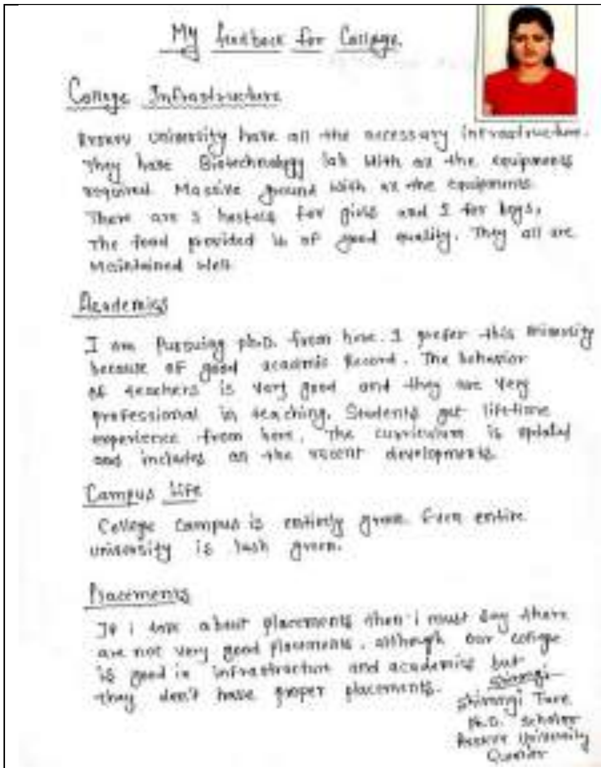
6.4.6. Supervision of students in PhD Programmes.

- As per ICAR guidelines, PG Students are supervised timely by the advisory committee headed by the major advisor. Head of Department and Director Instructions also monitor the research work of the students.
- Advisory committee constitutes three members 1 Supporting + 1 Minor and one major advisor.
- Before submitting the synopsis as well as thesis, the synopsis seminar and result seminar respectively are conducted.
- At present there are 03 faculties qualified for PG/PhD Programmes along with two contractual teachers. Maximum intake rate is 06. At a time 3 to 4 students are working under one faculty.

➢ **Department wise thesis submitted in last five years**

S.No.	Name of department	Thesis submitted in PG				
		2016	2017	2018	2019	2020
1	Genetics & Plant Breeding	01	00	01	03	04

6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers etc.): Mentionthe feedback mechanism (duly supported by the documents) from different stakeholders of thedegree programme. What action the University has taken in last five years to address the issuesraised in the feedback?


My feedback for College.

College Infrastructure

Every university have all the necessary infrastructure. They have Biotechnology lab with all the equipments required. Massive ground with all the equipments. There are 3 hostels for girls and 3 for boys. The food provided is of good quality. They all are maintained well.

Academics

I am pursuing Ph.D. from here. I prefer this university because of good academic record. The behavior of teachers is very good and they are very professional in teaching. Students get life-time experience from here. The curriculum is updated and includes all the recent developments.

Campus life

College campus is entirely green. Even entire university is lush green.

Placements

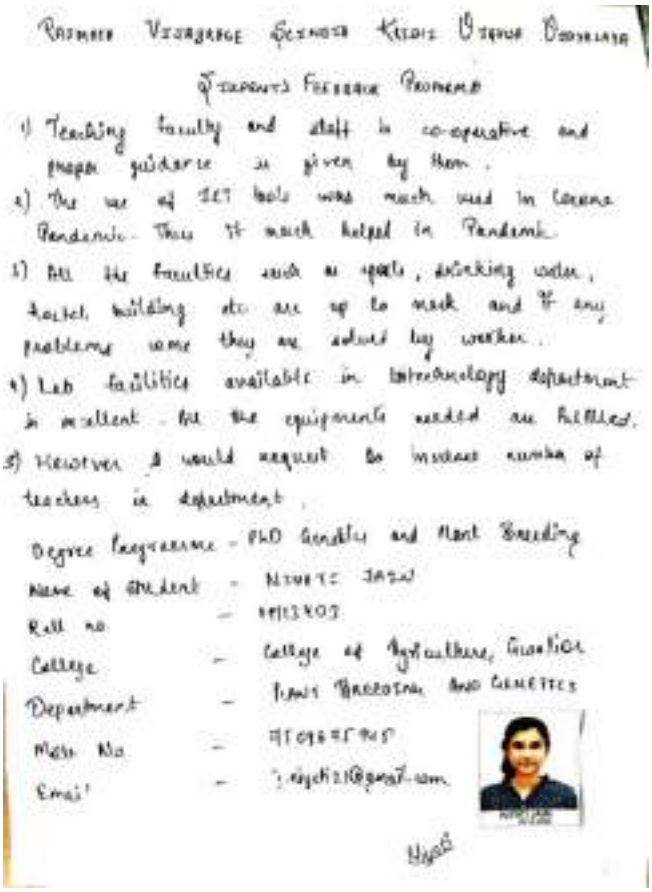
If I talk about placements then I must say there are not very good placements. although our college is good in infrastructure and academics but they don't have proper placements.

Shivangi Tare
Ph.D. Scholar
[illegible] University
Gwalior


Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya
Student Feedback Proforma

1) Researchers & teaching staff are cooperative & interactive
2) Online guidance of proper seminars & webinars conducted by the departments during pandemic Corona period.
3) Library daily full of necessary journals, magazines, computer facility throughout year.
4) New teaching staff required in the Breeding department
5) Sport facility insufficient for the students.
6) Campus interview or placement cell should be more active for providing jobs.

Degree programme - Ph.D. Genetics & Plant Breeding
Name of students - Kamlesh Singh Rajput
Roll no. - [illegible]
College - College of Agriculture, Gwalior (M.P.)
Department - Genetics & Plant Breeding.
Mob. No. - [illegible]
Email - [illegible]@gmail.com
Date - 06/08/2021



Feedback from Ph.D. (Ag) Genetics & Plant breeding

1) Teaching faculty and staff is co-operative and proper guidance is given by them.
2) The use of ICT tools was much used in Corona Pandemic. Thus it much helped in Pandemic.
3) All the facilities such as sports, drinking water, hostel building etc are up to mark and if any problems come they are solved by worker.
4) Lab facilities available in biotechnology department is excellent for the equipments needed are fulfilled.
5) However I would request to increase number of teachers in department.

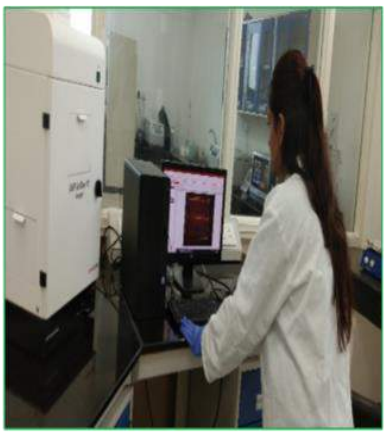
Degree Programme - PhD Genetics and Plant Breeding
Name of Student - [illegible]
Roll no - [illegible]
College - College of Agriculture, Gwalior
Department - Plant Breeding and Genetics
Mob No - [illegible]
Email - [illegible]@gmail.com

- Feedback from Ph.D. (Ag) Genetics & Plant breeding is normally collected online as well as offline for their overall experience and suggestions for improvement of the programme. It is observed that most of the students are satisfied with the research facilities and support of the staff. At the same time, students needed more practical knowledge and offline classes for clearing the concept. To resolve the issue, more practical classes have been conducted as well as theoretical classes were also conducted for the preparation of NET, JRF and SRF examinations. Students were advised to go to library and search of the research papers and literature related to advance agricultural research for updating their knowledge and improving their thesis research work. Special lectures and short-term training on advance agricultural technological aspects were also conducted for updating the knowledge and clearing the concepts of the students. Students also pointed out that moreover, Job-oriented classes should be organized.

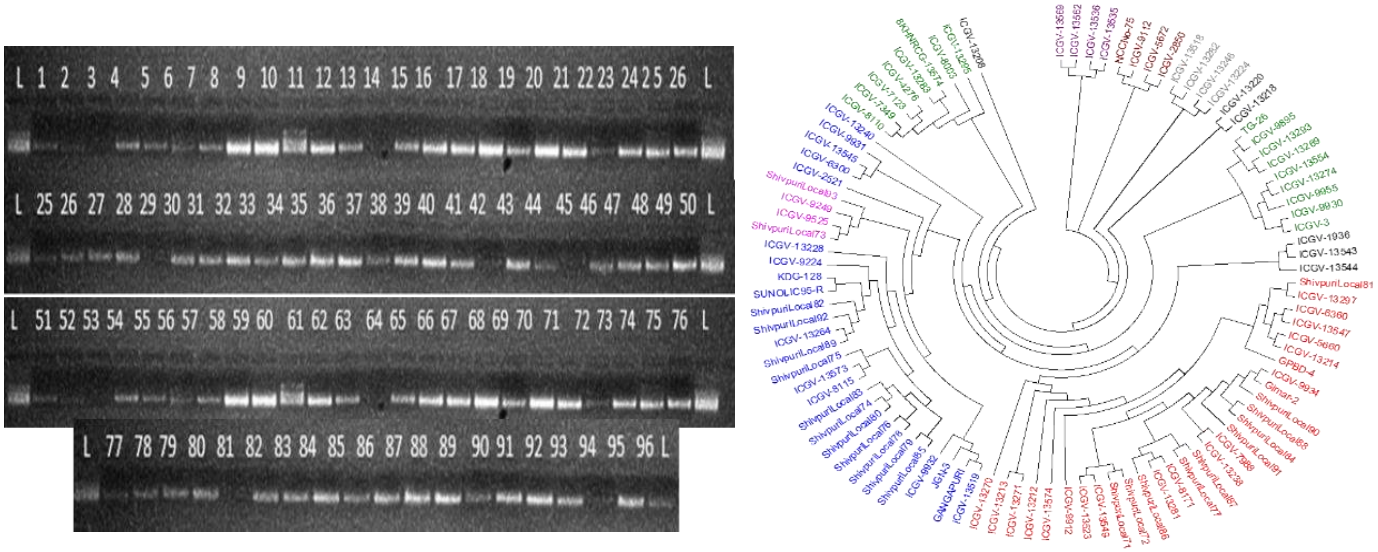
6.4.8. Student intake and attrition in the programme for last five years: Year wise information on sanctioned strength, actual intake and attrition in the last five years of the Degree Programme, in the tabular form, shall be provided.

Student intake and attrition

Name of the	Actual students admitted in last five years					Attrition (%)				
Degree programme	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
Ph.D.(Genetics and Plant Breeding)	00	02	02	06	04	-	-	-	-	-





6.4.9. ICT application in teaching and practical for curricula delivery:

Yes, the faculty members of the College of Agriculture Gwalior are using ICT in teaching and practical. There are lecture rooms and seminar rooms with computer, LCD projector and internet connection. All faculty members have computer, printer and internet connection in their offices. There is Wi-Fi facility for faculty, staff and students.

This infrastructure provides opportunities for the use of ICT in quality teaching, research and extension. The faculty members use power point presentations, YouTube, emails and CD ROM in teaching different courses.

6.4.12. Certificate (Applicable when SSR is submitted for Programme):

OFFICE OF THE DEAN
COLLEGE OF AGRICULTURE, GWALIOR (M.P.)
Tel- 0751-2341691
Email- dean.gwalior@rvskvv.net

No./Dean/Estt./2021/2911 Date- 17/11/2021

CERTIFICATE

I, the **Dean, College of Agriculture, Gwalior** hereby certify that the information contained in Sections 6.4.1 to 6.4.9 are furnished as per the record available in the college and degree awarding university.

17/11/2021
DEAN
College of Agriculture
Gwalior (M.P.)

Signature of the Dean of the College with Date & Seal

5 Ph.D. Entomology

6.4.1 Brief History of Ph.D Degree Programme

Department started functioning in 1954.

PG began in 1964.
Ph.D. started in 2010.

Objectives & Accomplishment:

Objectives:

- To teach Ph.D. students regarding in depth knowledge of Entomology.
- To find out successful modules of IPM for minimizing the losses caused due to insect pest in mustard, pigeon pea, soybean, sesame & vegetable.
- To raise the socioeconomic condition of farmers through IPM based insect pest management.

Mandate:

Teaching: For impartation of knowledge to the students for minimizing the losses due to insect pest in the area.

Research: Conduction of various field & lab experiments to develop of technology of IPM for major crops of the area.

Extension: Conduction of various training programmes to the farmers & extension workers of state Agriculture Department for transfer of technology of IPM.

6.4.2. Faculty Strength:

The faculty strength of the Degree Programme needs 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 Programmes also taking the help of Research staff, extension staff, contractual faculty, guest faculty, adjunct faculty or any other arrangement is made to complete the curriculum, it should be clearly mentioned in the report.

S. No.	Sanctioned Faculty	Faculty in place	Vacant position	Faculty recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
1	Professor	Nil	Nil	-	-
2	Associate Professor	01	Nil	01	-
3	Assistant Professor	02	Nil	02	-

Present Staff position in 2021

S. No	Faculty Name	Designation	Remark
01	Dr. U.C.Singh	CAS Professor & Head	-
02	Dr. N.S.Bhadauria	CAS Professor	Working as Deputy Registrar
03	Dr. M.L.Sharma	CAS Professor	-

6.4.3. Technical and Supporting staff:

The position of the technical and supporting staff of the Degree Programme including farm and field workers need to be mentioned for both sanctioned and in- place.

S.N.	Sanctioned Technical and Supporting staff	in place	Vacant position	Faculty recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
01	Assistant	-	-	01	-1
02	Lab technician	00	00	-	-
03	Stenographer	00	00	-	-
04	Lab attended	00	00	01	-1
05	Peon	00	00	-	
06	Field Asstt.	-	-	01	-1

Present Staff position in 2021

S. No	Faculty Name	Designation	Remark
01	Mr. Munesh Parihar	Cont. Computer Operator	-
02	Mr. Deepak Kushwah	Cont. Peon	-

6.4.4 Classrooms and Laboratories:

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. Lists major equipments, 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.

Classrooms

S. No.	Classrooms	Seating Capacity
01	Ph. D	20

Laboratories

S. No.	Laboratories	Detail
01	Ph.D. lab	01

6.4.5 Conduct of Practical and Hands-on-Training:

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-trainings per the curriculum and meeting above mentioned requirements.

- Field visit, Research Trial setup and hybridization.
- Variety development and maintenance.
- Practical and hands on training in Plant Genomic DNA isolation, Quantification, PCR using SSR and RAPD markers, Electrophoresis, and phylogenetic analysis for diversity assessment.
- Plant tissue culture and micro propagation.

- **Prepared posters on IPM of deferent crops.**

6.4.5.1 credits of course

Total credits of Course offered department wise in Ph.D.:

S. No.	Subject/Department	Course Offered							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Entomology	08	07	07	06	07	06	07	06

S. No.	Subject/Department	Total Credits							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Entomology	11	09	18	15	18	15	18	15

6.4.6. Supervision of students in PhD Programmes:

- As per ICAR guidelines, PG Students are supervised timely by the advisory committee headed by the major advisor. Head of Department and Director Instructions also monitor the research work of the students.
- Advisory committee constitutes three members 1 Supporting + 1 Minor and one major advisor.
- Before submitting the synopsis as well as thesis, the synopsis seminar and result seminar respectively are conducted.

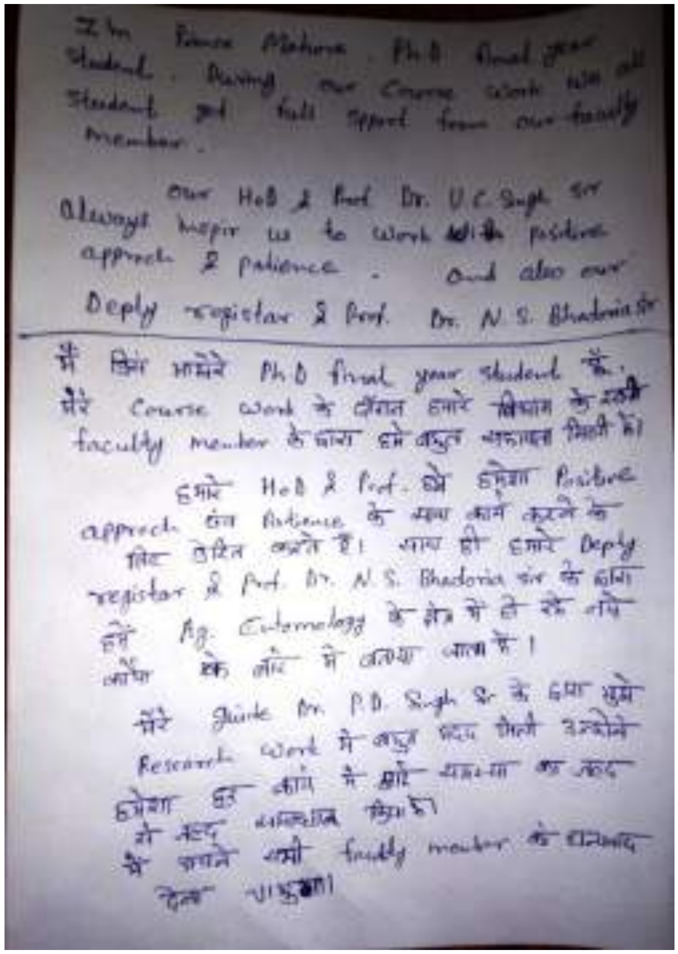
- At present there are 03 faculties qualified for PG/PhD Programmes along with two contractual teachers. Maximum intake rate is 06. At a time 3 to 4 students are working under one faculty.

S.No.	Year	Ph. D
01	2017-18	02
02	2018-19	04
03	2019-20	06
04	2020-21	04

Department wise thesis submitted in last five years

S.No.	Name of department	Thesis submitted in Ph.D.				
		2016	2017	2018	2019	2020
1	Entomology	-	01	-	-	-

6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers etc.): Mention the feedback mechanism (duly supported by the documents) from different stakeholders of the degree programme. What action the University has taken in last five years to address the issues raised in the feedback?


I am [illegible] Mahora . Ph.D final year student . During our Course work we all student got full support from our faculty member .

Our HoD & Prof. Dr. U.C. Singh sir always inspir us to work with positive approch & patience . And also our Deply registar & Prof. Dr. N. S. Bhadoria sir

- Feedback from Ph.D. (Ag) Entomology is normally collected online as well as offline for their overall experience and suggestions for improvement of the programme. It is observed that most of the students are satisfied with the research facilities and support of the staff. At the same time, students needed more practical knowledge and offline classes for clearing the concept. To resolve the issue, more practical classes have been conducted as well as theoretical classes were also conducted for the preparation of NET, JRF and SRF examinations. Students were advised to go to library and search of the research papers and literature related to advance agricultural research for updating their knowledge and improving their thesis research work. Special lectures and short-term training on advance agricultural technological aspects were also conducted for updating

the knowledge and clearing the concepts of the students. Students also pointed out that moreover, Job-oriented classes should be organized.

6.4.8 Student intake and attrition in the programme for last five years: Year wise information on sanctioned strength, actual intake and attrition in the last five years of the Degree Programme, in the tabular form, shall be provided.

Student intake and attrition

Name of the	Actual students admitted in last five years					Attrition (%)				
Degree programme	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
Entomology	01	02	04	06	04	-	-	-	-	-

6.4.9. ICT application in teaching and practical for curricula delivery:

Yes, the faculty members of the College of Agriculture Gwalior are using ICT in teaching and practical. There are lecture rooms and seminar rooms with computer, LCD projector and internet connection. All faculty members have computer, printer and internet connection in their offices. There is Wi-Fi facility for faculty, staff and students. This infrastructure provides opportunities for the use of ICT in quality teaching, research and extension. The faculty members use power point presentations, YouTube, emails and CD ROM in teaching different courses.

6.4.12. Certificate (Applicable when SSR is submitted for Programme):

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17/11/2021
DEAN
College of Agriculture
Gwalior (M.P.)

Signature of the Dean of the College with Date & Seal

6 Ph.D. Agricultural Extension

6.4.1 Brief History of Ph.D. Degree programme

- After the establishment of Jawaharlal Nehru Agricultural University, Jabalpur in the year 1964, Department of Agricultural Extension and Communication has been continuously working to provide advanced agricultural technology to farmers and trained manpower to agricultural universities, research institutes and other development departments.
- The Department of Agriculture Extension and Communication is already functioning since the inception of RVSKVV in the year 2008
- The Ph. D degree programme was started in the year 2011.

Objective:

To provide leadership role in teaching and research in agricultural extension to meet the trained man-power requirements of agricultural universities, research institutes and other development departments.

Accomplishment:

Carried out studies on knowledge, adoption, marketing behavior, attitude and awareness of recommended crops training needs assessment, impact assessment of various Government programmes.

Mandates

- **Teaching:**

  To produce leadership role, skills or trained students based on the requirements of agricultural universities, research institutes, and other development department.

- **Research:**

  To help for programme planning for government, non-government organizations through research, prepare agricultural technology according to the needs of farmers, to contribute for the betterment of development of advanced methods for technology.

- **Extension:**

  To identify the gaps in the principle and practices for agricultural technology, needs & interest of the farmers, provide a better solution, and desirable changes of human behavior through proper extension services.

6.4.2 Faculty Strength

S. No.	Sanctioned Faculty	Faculty in place	Vacant position	Faculty recommended by theICAR/UGC/VCI/ other regulatory bodies	Deviation
1	Professor	Nil	00	-	-
2	Associate Professor	1	00	1	-
3	Assistant Professor	1	01	1+2	-2

Existing Faculty

S.N.	Name	Designation	Remark
1.	Dr. O.P. Daipuria	HOD	CAS- Prof.
2.	Dr. Shobhana Gupta	Professor	CAS- Prof.
3.	Dr. Prabhakar Sharma	Prof.	CAS-Prof.
4	Dr. Y D Mishra	Scientist	Deputed from DES
5	Dr. Prashant Sharma	Contractual Teacher	Deputed from DES

6.4.3 Supporting and Technical Staff:

S.N.	Sanctioned Technical and Supporting staff	in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
01	Assistant	00	01	1	-1
02	Lab Assistant	00	01	1	-1

Existing Technical and supporting staff

S.N.	Name	Designation	Remark
1.	Ismail Khan	Helper/Messenger	Peon
2.	Spana Pandey	Computer Operator	Contractual
3.	Vatan Bhatnagar	Clerk	Contractual

6.4.4: Classrooms and laboratries

S. No.	Name of department	PG Laboratory	Name of equipment
1	Extension education	01	Cyber Lab (01)

Postgraduate (PG) Class Rooms

Department	PG Seminar hall (Equipped with AV aids)
Agricultural Extension & Communication	1

6.4.5: Conduct of practical and hands-on-training

- Communication skills,
- Preparation of bulletin, pamphlet, booklet;
- Preparation of news,
- Radio talk;
- Channels for effective dissemination of agricultural information.

6.4.5.1 credits of course

Table: Course offered department wise in Ph.D.

S. No.	Subject/Department	Course Offered							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Extension	07	07	06	06	06	06	06	06

S. No.	Subject/Department	Total Credits							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Extension	12	12	16	18	16	18	16	18

6.4.6. Supervision of Students in PG Programmes:

7 As per ICAR guidelines, PG Students are supervised timely by the advisory committee headed by the major advisor. Head of Department and Director Instructions also monitor the research work of the students.

8 Advisory committee constitutes three members 1 Supporting + 1 Minor and one major advisor.

9 Before submitting the synopsis as well as thesis, the synopsis seminar and result seminar respectively are conducted.

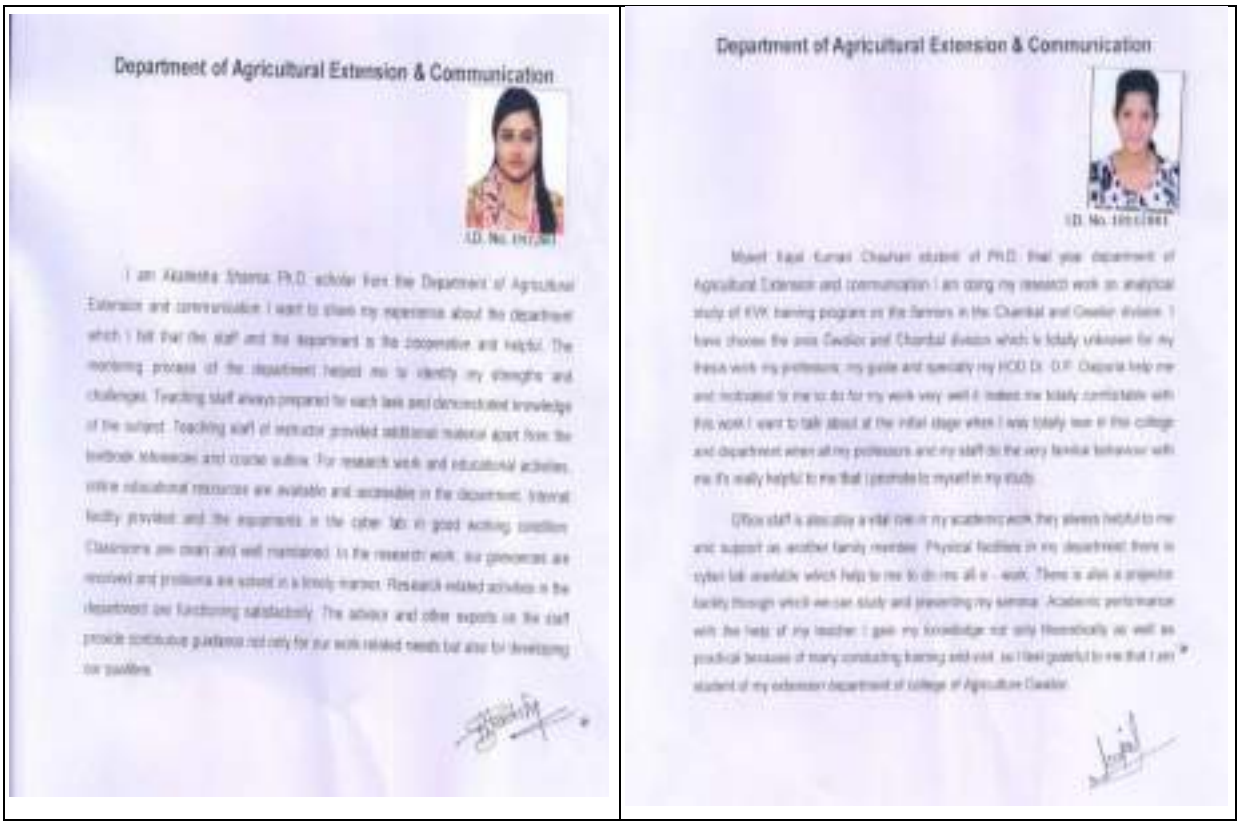
10 At present there are 1 permanent faculties along with one contractual teacher qualified for PG/PhD Programmes. Maximum intake rate is 06. At a time 4 to 5 students are working under one faculty.

Department wise thesis submitted in last five years

S.No.	Name of department	Thesis submitted in Ph.D.				
		2016	2017	2018	2019	2020
1	Extension education	01	01	--	--	02

6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers etc.):

Different stakeholders like, parents, industrialists Farmers etc. were conducted during visits to get their feedback about involvement of students in various academic activities



Department of Agricultural Extension & Communication

Department of Agricultural Extension & Communication

- Feedback from Ph.D. (Ag) Agriculture Extension & Education is normally collected online as well as offline for their overall experience and suggestions for improvement of the programme. It is observed that most of the students are satisfied with the research facilities and support of the staff. At the same time, students needed more practical knowledge and offline classes for clearing the concept. To resolve the issue, more practical classes have been conducted as well as theoretical classes were also conducted for the preparation of NET, JRF and SRF examinations. Students were advised to go to library and search of the research papers and literature related to advance agricultural research for updating their knowledge and improving their thesis research work. Special lectures and short-term training on advance agricultural technological aspects were also conducted for updating the knowledge and clearing the concepts of the students. Students also pointed out that moreover, Job-oriented classes should be organized.

6.4.8 Student intake and attrition in the programme for last five years:-

Student intake and attrition

Name of the	Actual students admitted in last five years					Attrition (%)				
Degree programme	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
Extension Education	00	04	03	06	05	-	-	-	16.6	-

6.4.9. ICT application in teaching and practical for curricula delivery:

- The College of Agriculture, Gwalior has upgraded four class room into smart class room for teaching of post graduate students using smart class room/interactive board. The teaching of undergraduate students is being done using projector based teaching facility in 04 class rooms.
- 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.
- Yes, the faculty members of the College of Agriculture Gwalior are using ICT in teaching and practical. There are lecture rooms and seminar rooms with computer, LCD projector and internet connection. All faculty members have computer, printer and internet connection in their offices. There is Wi-Fi facility for faculty, staff and students. This infrastructure provides opportunities for the use of ICT in quality teaching, research and extension. The faculty members use power point presentations, YouTube, emails and CD ROM in teaching different courses.

6.4.12. Certificate (Applicable when SSR is submitted for Programme):

OFFICE OF THE DEAN

COLLEGE OF AGRICULTURE, GWALIOR (M.P.)

Tel- 0751-2341691
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No./Dean/Estt./2021/2911 Date- 17/11/2021

CERTIFICATE

I, the **Dean, College of Agriculture, Gwalior** hereby certify that the information contained in Sections 6.4.1 to 6.4.9 are furnished as per the record available in the college and degree awarding university.

17/11/2021

DEAN

Signature of the Dean of the College with Date & Seal

College of Agriculture
Gwalior (M.P.)

8. Ph.D. Horticulture.

6.4.1 Brief History of Ph.D. Degree programme

Department of Horticulture was started during the 1974 to impart education and entrepreneurship skills in area of Horticulture like- fruits, vegetables, flowers and post harvest management and value addition for sustainable development.

Department	Year of Starting
Horticulture Department Started	1974
M.Sc. Horticulture Started	1975
Further Bifurcated and started M.Sc. Fruit Science and Vegetable Science	
M.Sc. Fruit Science Started	2011
M.Sc. Vegetable Science Started	2013
Ph.D. Horticulture Started	2009
Further Bifurcated and started Ph.D. Fruit Science and Vegetable Science	
Ph.D. Fruit Science Started	2011
Ph.D. Vegetable Science Started	2009

Objectives:

- To impart education and entrepreneurship skills in fruits, vegetables, flowers, post harvest and value addition technology for sustainable development.
- To undertake studies on advances in fruits, vegetables, flowers, post harvest and value addition technology. Which may prove to be beneficial for students and farmers?
- To work on the value addition and post harvest technology to minimize the post harvest losses of fruits and vegetables.
- To study the impact of climate change on fruit and vegetable production and their future prospects.

Accomplishments:-

- Identification and understanding the demand of horticultural crop to be produced and enhanced in the area.
- Encouragement of organic vegetable production in nearby districts.
- Evaluations of various local grown fruits and their germplasm.
- Selection and evaluations of local produced fruits varieties.
- Dryland fruit orchard at Sirsod.(Researches on Ber, Guava, Drumstick, karonda etc.)
- Vegetable seed production unit at horticulture experiment area.

6.4.2 Faculty Strength

S.No.	Sanctioned Faculty	Faculty in place	Vacant position	Faculty recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
1	Professor	Nil	0	1	-1
2	Associate Professor	Nil	0	1	-1
3	Assistant Professor	1	1	2+1	-2

Existing Faculty:

S.No.	Name of faculty	**Designation**	Remark
1	Dr Rajesh Lekhi	Professor & HoD	CAS-Prof.
2	Dr. Rashmi Bajpai	Sr. Scientist	Deputed from KVK
3	Dr. Prashant Gupta	Sr. Scientist	Deputed from KVK
4	Dr. K.V. Singh	Sr. Scientist	Deputed from DES
5	Dr. K.K.Yadav	Scientist	Deputed from KVK
6	Dr. P.K.S. Gurjar	Scientist	Deputed from KVK
7	Dr. Arjun Kashyap	Contractual Teacher	-
8	Dr. Rajesh Jatav	Contractual Teacher	-
9	Dr. Richa Pyasi	Contractual Teacher	-
10	Dr. Pragya Singh	Contractual Teacher	-

6.4.3 Technical and Supporting Staff

S.N.	Sanctioned Technical and Supporting staff	in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
01	Assistant	00	01	01	-1
02	Field Assistant/FEO	00	02	02	-2
03	Lab attended	00	01	02	-2
04	Peon/Messenger	00	02	-	-

6.4.4 **List of equipment's available in different division laboratories**

S.No.	Name of department	UG & PG/Ph.D. Laboratory	Name of equipment
1	Fruit science	01	Hand Refractometer Digital Refractometer Refrigerator Electronic weighing balance Pan Balance
2	Vegetable science	01	Hand Refractometer Digital Refractometer Refrigerator Electronic weighing balance Pan Balance

Postgraduate (PG& Ph.D.) Class Rooms

Department	Ph.D. Seminar hall (Equipped with AV aids)
2. Horticulture	1

6.4.5: Conduct of practical and hands-on-training

Propagation methods e.g. cutting, layering, budding and grafting and crop maximization practices like bending, notching, ringing and girdling, training and pruning. Production Technology of Vegetables and Flower Crops: Maximization of vegetable yield by *viz*., staking, turning, blanching, earthing up. Maximization of flower yield and quality by pinching, disbudding, pruning, bending. Vegetable Production: Production and marketing of various vegetables *viz*., tomato, brinjal, onion, cabbage, cauliflower, broccoli, lettuce, garlic and exotics. Preparation of value added products.

6.4.5.1 credits of course

Table: Course offered department wise in Ph.D

S. No.	Subject/Department	Courses offered (No.)							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Fruit Science	07	06	06	05	06	05	06	05
2	Vegetable Science	08	06	07	05	07	05	07	05
S. No.	**Subject/Department**	**Total Credits**							
		2016		**2017**		**2018**		**2019 & 2020**	

		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Fruit Science	12	09	17	15	17	15	17	15
2	Vegetable Science	14	09	19	13	19	13	19	13

6.4.6. Supervision of Students in Ph.D. Programmes:

11 As per ICAR guidelines Ph.D. Students are supervised timely by the advisory committee headed by the major advisor. Head of Department and Director Instructions also monitor the research work of the students.

12 Advisory committee constitutes three members (1 Supporting) + 1 Minor)) and one major advisor.

13 Before submitting the synopsis as well as thesis, the synopsis seminar and result seminar respectively are conducted.

14 At present there are 1 permanent faculties along with one contractual teacher qualified for PG/PhD Programmes. Maximum intake rate is 06. At a time 4 to 5 students are working under one faculty.

Department wise thesis submitted in last five years

S.No.	Name of department	Thesis submitted in PG				
		2016	2017	2018	2019	2020
1	Fruit science	02	02	04	05	03
2	Vegetable science	--	--	02	03	01

6.4.7 Feedback of the stack holders (Students, Parents, industries, employer, farmers, etc.)-

- Naresh Sharma farmer from Bhopal started Nursery and establish Gwalior-27 guava variety orchard.
- Amardeep farmer from Gohad, Bhind started Nursery and establish Gwalior-27 guava variety orchard.
- Dr. Raj Kumar Deshlhra near Gohad, Bhind started fruit and vegetable production.
- 02 stack holders interested in to start small RTS unit on home scale.
- 02 pass out students to start nursery raising of fruits and vegetables near Gohad.

I am Khushboo Namdev Ph.D Scholar, dept of Horticulture, RVSKVV Gwalior. I was given research topic on processing of fruit (guava) and I made squash and cheese in dept only. This was an innovative research. All members of dept always facilitate everything for research work. I would like to thank you to the dept and college.

My experience was very good. I was really satisfied by studying in college.

Khushboo Namdev
Ph.D Scholar

I am Shashikumari Ph.D Scholar, Department of Horticulture (Fruit Science) college of Agriculture Gwalior (M.P). My experience with the department was very nice. I have done B.Sc, M.Sc, PhD from this college and during B.Sc I had decided to pursue my M.Sc and Ph.D from this college only. During my research work, I found the behaviour of department staff to be very cooperative and student friendly. They always supported me during entire degree and I suggest to many UG students to take admissions in this college only.

Shashikumari
Ph.D Scholar
(Fruit Science)
Enr. 18112306

Feedback

I am Devendra Vishvakarma, PhD passed from Department of Horticulture, CoA Gwalior (MP) in the year of 2020. I want to share my experience about the department. My department is very co-operative, helpfull and provided all necessary facility to the work for students. My guide and member committee staff motivated a lot to me during entire research work.

I got all the facilities for my research work in department & I got guidance for not only doing research work but also technical writing & publication work under the guidance of staff.

Thank you

Date
15/07/21

Name- Devendra Vishvakarma

Feedback of Students

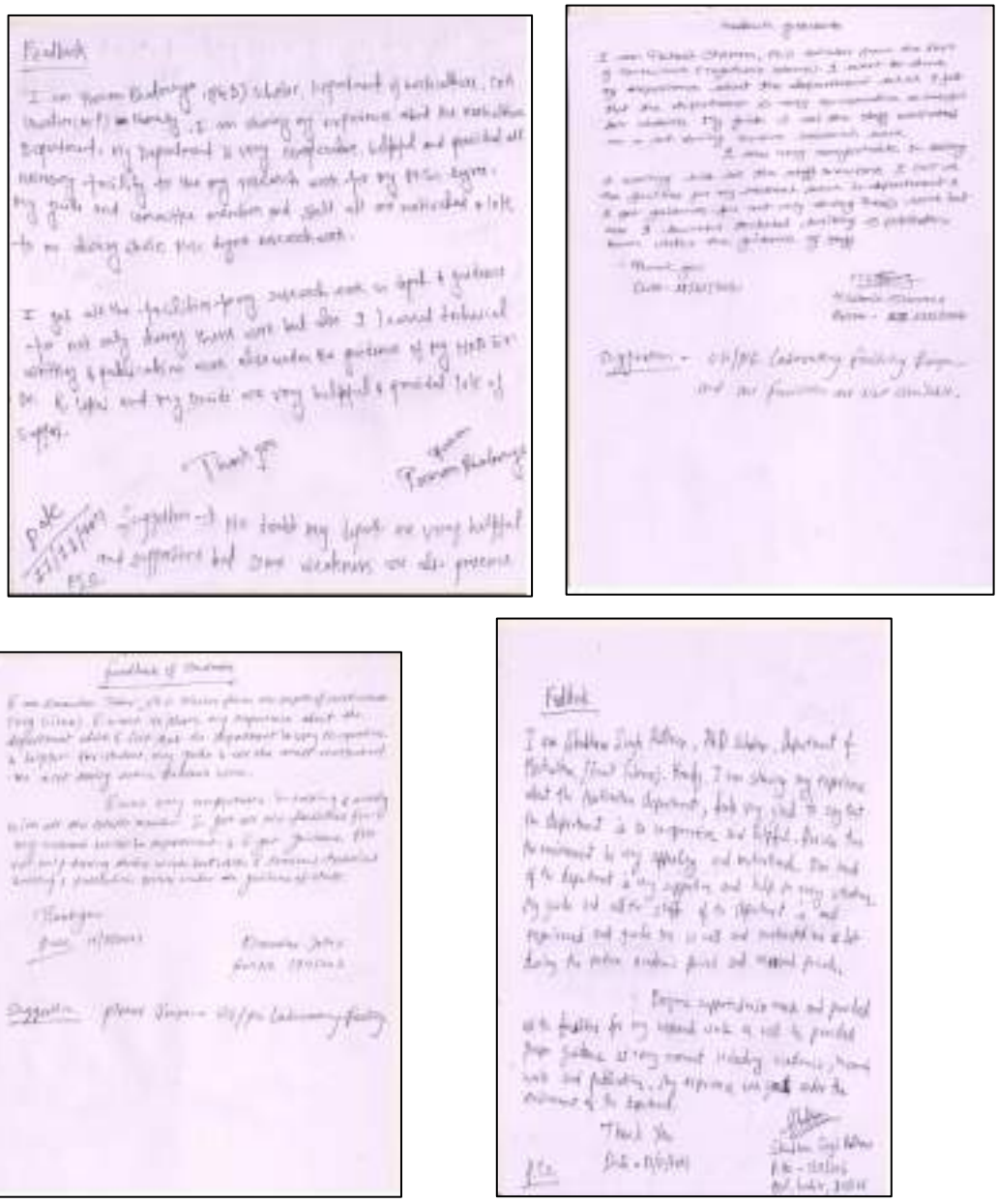
I am Niharika Pathan Ph.D Scholar from the Department of Horticulture (fruit sci.). I want to share my experience about the department which I felt that the department is very cooperative & helpful for students. My guide & all the staff motivated me a lot during entire research work. I was very comfortable in talking & working with all the staff member.

I got all the facilities for my research work in department & I got guidance for not only doing thesis work but also I learned technical writing & publication work under the guidance of staff.

Thank you

Date
5/07/21

Niharika Pathan



- Feedback from Ph.D. (Ag) Horticulture is normally collected online as well as offline for their overall experience and suggestions for improvement of the programme. It is observed that most of the students are satisfied with the research facilities and support of the staff. At the same time, students needed more practical knowledge and offline classes for clearing the concept. To resolve the issue, more practical classes have been conducted as well as theoretical classes were also conducted for the preparation of NET, JRF and SRF examinations. Students were advised to go to library and search of the research papers and literature related to advance agricultural research for updating their

knowledge and improving their thesis research work. Special lectures and short-term training on advance agricultural technological aspects were also conducted for updating the knowledge and clearing the concepts of the students. Students also pointed out that moreover, Job-oriented classes should be organized.

6.4.9 Student intake and attrition in the programme for last five years

Name of the	Actual students admitted in last five years					Attrition (%)				
Degree programme	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
Fruit Science	01	02	06	06	04	-	-	-	-	-
Vegetable Sc.	01	04	05	06	04	-	-	-	-	-

6.4.9. ICT application in teaching and practical for curricula delivery:

Yes, the faculty members of the College of Agriculture Gwalior are using ICT in teaching and practical. There are lecture rooms and seminar rooms with computer, LCD projector and internet connection. All faculty members have computer, printer and internet connection in their offices. There is Wi-Fi facility for faculty, staff and students. This infrastructure provides opportunities for the use of ICT in quality teaching, research and extension. The faculty members use power point presentations, YouTube, emails and CD ROM in teaching different courses.

The College of Agriculture, Gwalior has upgraded four class room into smart class room for teaching of post graduate students using smart class room/interactive board. The teaching of undergraduate students is being done using projector based teaching facility in 04 class rooms.

6.4.12. Certificate (Applicable when SSR is submitted for Programme):

OFFICE OF THE DEAN
COLLEGE OF AGRICULTURE, GWALIOR (M.P.)

Tel- 0751-2341691
Email- dean.gwalior@rvskvv.net

No./Dean/Estt./2021/2911 Date- 17/11/2021

CERTIFICATE

I, the **Dean, College of Agriculture, Gwalior** hereby certify that the information contained in Sections 6.4.1 to 6.4.9 are furnished as per the record available in the college and degree awarding university.

17/11/2021
DEAN

Signature of the Dean of the College with Date & Seal
Gwalior (M.P.)

9 Ph.D. Agricultural Economics

6.4.1 Brief History of the Ph.D. Degree Programme

- The Department of Agricultural Economics is functioning since the inception of RVSKVV in the year 2008.
- Post Graduate Programme was started from 2009-10.
- Ph.D. Programme was started from 2010-11

Objectives

- To carry out post-graduate education programmes leading to the degree of M.Sc. (Ag) and Ph.D. in Agricultural Economics to meet the trained man-power requirements of agricultural universities, research institutes and other development departments.
- To carry out advanced National and International training programmes to impart knowledge, skills and desired orientation to the persons engaged in teaching, research and transfer of technology so as to improve their efficiency and effectiveness.
- To provide leadership role in teaching and research in Agricultural Economics
- To carry out basic and strategic research in the areas of Agricultural Economics.

Mandates

Teaching:

To produce leadership role, skills or trained students based on the requirements of agricultural universities, research institutes, and other development department.

Research:

To help for programme planning for government, non-government organizations through research, prepare agricultural technology according to the needs of farmers, to contribute for the betterment of development of advanced methods for technology.

Extension:

To identify the gaps in the principle and practices for agricultural technology, needs & interest of the farmers, provide a better solution, and desirable changes of human behavior through proper extension services.

6.4.2 Faculty strength

S.No.	Sanctioned Faculty	Faculty in place	Vacant position	Faculty recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
1	Professor	-	-	-	-
2	Associate Professor	-	-	1	-1
3	Assistant Professor	1	1	2	-1

Existing Faculty:-

S.No.	Name of faculty	**Designation**	Remark
1	Dr. A.M. Jaulkar	Professor & HoD	CAS-Prof. (Retd. On July, 31,2021)
2	Dr. Sudhir Singh	Contractual Teacher	Deputed from KVK

6.4.3Technical and supporting staff—

S.N.	Sanctioned Technical and Supporting staff	in place	Vacant position	Staff recommended by the ICAR/UGC/VCI/ other regulatory bodies	Deviation
01	Computer Operator /Steno	1	0	1	0
02	Lab Attended	0	1	1	-1

Existing Supporting Staff:-

S. No	Name of Staff	Post
1	Reena Goyal	Computer Operator/Steno
2	Anshul Gupta	Contractual Computer Operator
3	Krishna Pal	Contractual Peon

6.4.4 Classrooms and laboratories

S.No.	Name of department	Laboratory	Name of equipment
1	Agril. Economics	01	Cyber Lab

Postgraduate (Ph.D.) Class Rooms

Department	PG Seminar hall (Equipped with AV aids)
Agril. Economics	1

6.4.5: Conduct of practical and hands-on-training

Estimation of cost of cultivation of Crops, depreciation of farm assets, net worth and income statements, financial test ratios, break even analysis of project, study of marketing institutions such as NAFED, SWC, CWC. etc. Economic analysis of different enterprises, partial and complete budgeting and preparation alternative farm plans, assessment of credit requirement for various crops and enterprises. Testing of economic viability of project, loan proposal formulation and assessment of repayment capacity, risk barring ability and returns on investment. Institutional finance, Marketing of Agricultural products and livestock.Input and output markets, financial criteria for appraisal of the project.Seasonal indices of arrival and prices of Agril. Commodities.

6.4.5.1 credits of course

Table: Course offered department wise in Ph.D.

S. No.	Subject/Department	Courses offered (No.)							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Agricultural Economics &	07	07	06	06	06	06	06	06

Total credits of course offered department wise in Post Graduate:

S. No.	Subject/Department	Total Credits							
		2016		2017		2018		2019 & 2020	
		I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.	I Sem.	II Sem.
1.	Agricultural Economics &	10	11	16	17	16	17	16	17

6.4.6. Supervision of Students in Ph.D. Programmes:

15 As per ICAR guidelines Ph.D. Students are supervised timely by the advisory committee headed by the major advisor. Head of Department and Director Instructions also monitor the research work of the students.

16 Advisory committee constitutes three members (1 Supporting) + 1 Minor)) and one major advisor.

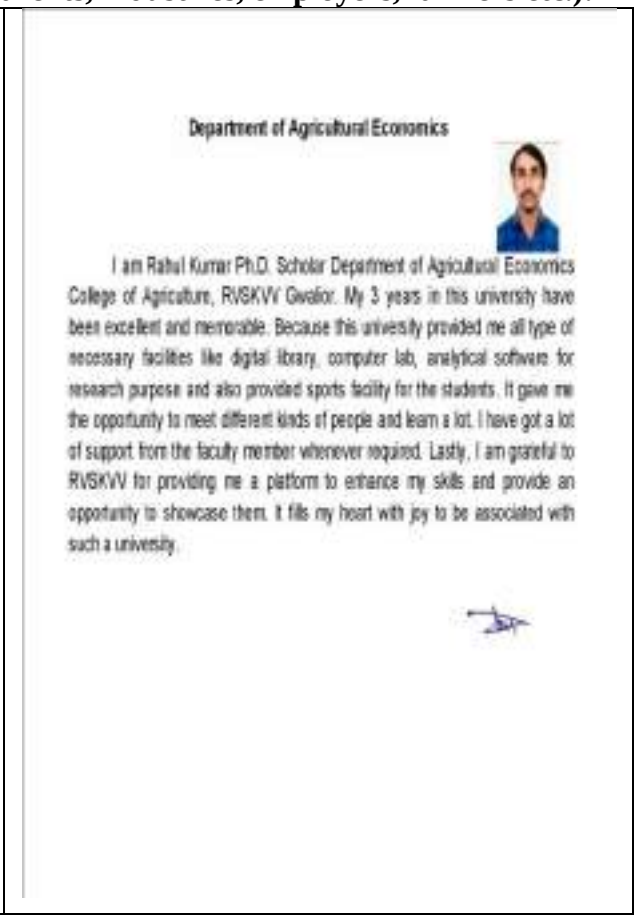
17 Before submitting the synopsis as well as thesis, the synopsis seminar and result seminar respectively are conducted.

Department wise thesis submitted in last five years

S.No.	Name of department	Thesis submitted in PG				
		2016	2017	2018	2019	2020
1	Agril. Economics	0	0	0	0	0

6.4.7. Feedback of stakeholders (Students, parents, industries, employers, farmers etc.):

Department of Agricultural Economics



Department of Agricultural Economics

I am Rahul Kumar Ph.D. Scholar Department of Agricultural Economics College of Agriculture, RVSKVV Gwalior. My 3 years in this university have been excellent and memorable. Because this university provided me all type of necessary facilities like digital library, computer lab, analytical software for research purpose and also provided sports facility for the students. It gave me the opportunity to meet different kinds of people and learn a lot. I have got a lot of support from the faculty member whenever required. Lastly, I am grateful to RVSKVV for providing me a platform to enhance my skills and provide an opportunity to showcase them. It fills my heart with joy to be associated with such a university.

- Feedback from Ph.D. (Ag) Agricultural Economics & Education is normally collected online as well as offline for their overall experience and suggestions for improvement of the programme. It is observed that most of the students are satisfied with the research facilities and support of the staff. At the same time, students needed more practical knowledge and offline classes for clearing the concept. To resolve the issue, more practical classes have been conducted as well as theoretical classes were also conducted

for the preparation of NET, JRF and SRF examinations. Students were advised to go to library and search of the research papers and literature related to advance agricultural research for updating their knowledge and improving their thesis research work. Special lectures and short-term training on advance agricultural technological aspects were also conducted for updating the knowledge and clearing the concepts of the students. Students also pointed out that moreover, Job-oriented classes should be organized.

6.4.8 Student intake and attrition in the programme for last five years: Year wise information on sanctioned strength, actual intake and attrition in the last five years of the Degree Programme, in the tabular form, shall be provided.

Student intake and attrition

Name of the	Actual students admitted in last five years					Attrition (%)				
Degree programme	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
Agril. Economics	00	01	01	01	03	-	-	-	-	-

6.4.9. ICT application in teaching and practical for curricula delivery:

Yes, the faculty members of the College of Agriculture Gwalior are using ICT in teaching and practical. There are lecture rooms and seminar rooms with computer, LCD projector and internet connection. All faculty members have computer, printer and internet connection in their offices. There is Wi-Fi facility for faculty, staff and students. This infrastructure provides opportunities for the use of ICT in quality teaching, research and extension. The faculty members use power point presentations, YouTube, emails and CD ROM in teaching different courses.

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CERTIFICATE

I, the **Dean, College of Agriculture, Gwalior** hereby certify that the information contained in Sections 6.4.1 to 6.4.9 are furnished as per the record available in the college and degree awarding university.

17/11/2021
DEAN

Signature of the Dean of the College with Date & Seal
Gwalior (M.P.)