AMITY UNIVERSITY

UTTAR PRADESH

Outcome Assessment Plan

Domain: Faculty of Agriculture Sciences

Date: 18-06-2018

Table of Contents

	8.1.2 Assessment Tool 2	
	8.1.N Assessment Tool N	
	8.2 Rubrics	
	8.2.1 Rubrics 1	
	8.2.2 Rubrics 2	
	8.2.N Rubrics N	
	8.3 Format of Surveys	
	8.3.1 Format of Survey 1	
	8.3.2 Format of Survey 2	
	8.3.N Format of Survey N	
	8.4 Comprehensive Examination	
	8.4.1 Guidelines for Comprehensive Examination	
	8.4.2 Format of Comprehensive Examination	
9	Domain Leadership and Assessment Team	

SECTION I:

Introduction to Faculty/Domain

With the globalization of trade and economy, Indian agriculture is facing a number of challenges. According to CIA Facebook sector wise Indian GDP composition in 2014 are as follows: Agriculture (17.9%), Industry (24.2%) and Services (57.9%). Total production of agriculture sector is $366.92 billion. India is 2nd larger producer of agriculture product. India accounts for 7.68 percent of total global agricultural output. The agriculture in many areas is becoming non-remunerative and farmers are losing interest in agriculture. With the opening of world economy, our farmers have to be globally competitive in terms of quality and cost of agriculture produce. The sustainability and profitability of agriculture continues to be our major concern. This puts enormous responsibility on Agriculture graduates passing out from the system can meet the global challenges of 21st century ahead of them.

Agricultural based education system not only improve of Technical skills but also enable students to develop skills that help them to turn out as excellent future managers. Agricultural Education is the teaching of agriculture, natural resources, and land management through hands on experience and guidance to prepare students for entry level jobs or to further education to prepare them for advanced agricultural jobs.

The **Domain of Agricultural Sciences** ensures to provide ample opportunities to its students' to excel in their careers and strives to fulfill its mission

Domain of Agricultural Sciences comprises of academic and research oriented Institutions. The two academic Institutes are:

1. Amity Institute of Organic Agriculture and
2. Amity Institute of Horticulture Studies & Research

In addition, the domain also has seven research based institutes, the main ones being:

1. Amity International Centre for Post Harvest Technology & Cold Chain Management,
2. Amity Centre for Biocontrol & Plant Disease Management and
3. Amity Institute of Herbal Research & Studies.

SECTION II:

Introduction of Outcome Assessment Plan

Outcomes Assessment

Outcomes assessment is a systematic, evaluative process that is implemented to secure learning experiences that are congruent with original goals and objectives; thereby providing a basis for the effectiveness and continuous quality improvement of the academic unit.

1) The annual **outcome assessment** process is more **qualitative** and focuses on improving teaching by **analyzing student learning outcomes**.
2) The programme **review process** is more **quantitative** and focuses on the programme/discipline as a whole, how effective it is, and that our students are learning.

3) To achieve the above, some aspect of each programmes goals and objectives needs to be assessed on an annual basis.
4) All programme and general education goals shall be evaluated annually

The outcome assessment plan includes:

1. Mission - The Mission is defined for the domain which flows down to the Institution level and finally to the programme level. The mission at the institution and programme level is aligned with the domain mission

2. Broad Based Goals: - The broad based are defined under the following categories:

2.1 Educational Goals: The Educational Goals are defined at Domain, Institution and Programme level. The Educational Goals at the institution and programme level are aligned with the domain mission.

2.2 Operational Goals: The Operational Goals are defined at Domain, Institution and Programme level. The Operational Goals at the institution and programme level are aligned with the domain mission.

3. Outcomes: The Outcomes are defined under the following categories:

3.1 Operational Outcomes: The operational outcomes are defined for the domain and assessed at the domain level
3.2 Educational Goals - The Learning outcomes are defined for each programme and each learning outcome is assessed to identify that the established learning objectives are achieved.

4. **Mapping of PEOs and PLOs –** The relationship of PEOs and PLOs are clearly indicated through the mapping of learning outcomes with the established Objective. Each outcome addresses some objective and achievement of outcome indicates the attainment of Objective

5. **Assessment of Learning and Operational Outcomes** – Each learning outcome is assessed by at least one direct and one indirect method. Similarly Operational outcomes are also assessed using the operational assessment tools. It also ensures that outcomes achieved are consistent with the mission. The results of the annual assessments and other data are used to determine the effectiveness of the programme during the programme review process.

6. **Programme Review:** Through the review of our programmes we seek to demonstrate that**:**

   - Students are **learning** the knowledge, skills, and habits necessary to achieve the programme/discipline goals and objectives
   - The **programme/discipline goals** are derived from and support the college mission
   - The **curriculum** is coherent, current and consistent
   - The **instruction** is effective in enabling student
   - The **resources** are adequate for the production of student learning.
   - The academic **support services** are adequate to facilitate student learning.

SECTION III:

DOMAIN MISSION AND BROAD-BASED GOALS /OBJECTIVES

3. DOMAIN MISSION AND BROAD-BASED GOALS /OBJECTIVES

3.1 Mission Statement

Mission of Domain of Agriculture Sciences
"To provide education at all levels in Agriculture Sciences and allied areas and in the futuristic and emerging frontier areas of knowledge, learning and research and to develop the overall personality of students by making them not only excellent professionals but also good individuals, with understanding and regards for human values, pride in their heritage and culture, a sense of right and wrong and yearning for perfection and imbibe attributes of courage of conviction and action."

3.2 Broad-Based Goals / Objectives at Domain / Faculty Level

1.	Students will **acquire** a combination of theoretical, conceptual, analytical, computational, and experimental knowledge and skills of agriculture and allied sciences.
2.	Students will be able to **develop and demonstrate** the understanding of global environment and relate agricultural and food issues to the broader social, economic, legal, cultural and environmental contexts
3.	Students will develop and apply understanding to **analyze and formulate** scientific approach for solving agricultural and allied sector problems
4.	Students will **analyze** the scientific information and infer the results for successful and productive careers or advance studies/research in the field of Agriculture and allied Sciences.
5.	Students will able to c**ompile** the skill set to design and develop crop production & protection practices.
6.	Students will able to **assess and compare** the scientific information to enable them to effectively participate and contribute to the farming community in particular and society in general.
7.	Students will **demonstrate** professional attitudes, effective communication and behavioral skills that support and enhance individual's performance and bridge the gap.
8.	Students will **develop professional** ethics and academic integrity and demonstrate these as an individual/ team member/ leader in diverse teams.
9.	Students will critically evaluate and reflect learning and development throughout their career

3.3 Broad-Based Operational Goals (Resources Required) At Faculty / Domain Level

Operational Goals	
1	Domain of Agriculture Sciences intends to facilitate academically conducive environment and infrastructure to achieve excellence in teaching, learning and research.
2	Domain of Agriculture Sciences will provide ample opportunities to its students to participate in curricular, co-curricular and extracurricular activities for their holistic development.
3	Domain of Agriculture Sciences will facilitate environment for innovation and research excellence for the intellectual growth of faculty.
4	Domain of Agriculture Sciences will inculcate core values and ethical conduct amongst students, faculty and staff.
5	Domain of Agriculture Sciences will encourage cultural diversity and a sense of social and environmental responsibility.
6	Domain of Agriculture Sciences will provide ample opportunities for international exposure to faculty and students.
7	Domain of Agriculture Sciences will be involved in continual improvement of processes and systems and aim to attain national and international accreditations and university rankings.
8	Domain of Agriculture Sciences will build a strong industry interaction by way of alumni networks and empanelment of expertise from industry.
9	Domain of Agriculture Sciences will facilitate employment opportunities and also support students to start their own ventures.
10	Domain of Agriculture Sciences will facilitate good governance in discharge of responsibilities and execution of policies and programs.

SECTION IV:

INSTITUTION MISSION AND BROAD-BASED GOALS /OBJECTIVES

4. INSTITUTION MISSION AND BROAD-BASED GOALS /OBJECTIVES

Name of the Institution: Amity Institute of Organic Agriculture

4.1 Mission Statement

Mission of Institution
Mission Statement: To provide high quality education at various levels that results in knowledge and abilities for meaningful employment, entrepreneurship, value education and lifelong learning in the areas of Agriculture, food, natural resources and life sciences as they relate to the environment, farmer communities and society at large.

4.2 Broad-Based Goals / Objectives at Institution Level

Educational Goals	
1.	Students will **acquire** a combination of theoretical, conceptual, analytical, computational and experimental knowledge and skills of agriculture sciences.
2.	Students will be able to **develop and demonstrate** the understanding of global environment and relate agricultural and food issues to the broader social, economic, legal, cultural and environmental contexts
3.	Students will develop and apply understanding to **analyze and formulate** scientific approach for solving agricultural and rural sector problems.
4.	Students will **analyze** the scientific information and infer the results for successful and productive careers or advance studies/research in the field of Agriculture Sciences.

5.	Students will able to c**ompile** the skill set to design and develop crop production & protection practices.
6.	Students will able to **assess and compare** the scientific information to enable them to effectively participate and contribute to the farming community in particular and society in general.
7.	Students will **demonstrate** professional attitudes, effective communication and behavioral skills that support and enhance individual's performance and bridge the gap.
8.	Students will **develop professional** ethics and academic integrity and demonstrate these as an individual/ team member/ leader in diverse teams.
9.	Students will critically **evaluate** and reflect learning and development throughout their career.

4.3 Broad-Based Operational Goals (Resources Required) At Institution level

Operational Goals	
1	AIOA intends to provide educational excellence in Teaching/Academic Delivery, extension and Research
2	AIOA will facilitate an academically conducive environment for holistic development of students and scholars.
3	AIOA will encourage the spirit of enquiry & foster an environment for innovation & research intellectual growth in students and scholars as also nurture industry linkages for students.
4	AIOA will promote collaborations between academia & Industry as well as facilitate cultivation of core values of the university and ethical conduct amongst students, scholars, staff and faculty.
5	AIOA will encourage cultural diversity, global issues and a sense of social and environmental responsibility & literacy in teaching, theory & practice.
6	AIOA will provide ample opportunities for international exposure by encouraging student exchange programs, joint research collaborations, international scholarships/ fellowships and grants to students/scholars & faculty.
7	AIOA will try to realign, streamline and improve systems and processes so as to get reputed & relevant

	National / International Accreditations.
8	AIOA will build a strong industry interaction for the bright future of its students and scholars Enhance Employability and Entrepreneurial Capabilities Among Students.
9	AIOA will motivate students for higher studies, venture into agri-preneurship as well as facilitate employment opportunities for them
10	AIOA will facilitate good governance through continuous process improvement.

Section V:

Programme Mission, PEO's, PLO's and Assessment Plan for each Programme

5.1 BACHELOR'S-Level Programme – B.Sc. (Agri & Food Business)

5.1.1 Mission Statement

Programme Mission
The mission of the Bachelor of Science (Agriculture & Food Business) degree program is to impart knowledge on basic agribusiness management techniques; fundamentals of crop and livestock production systems; farm management; and the interaction of agriculture and the management science and to develop the overall personality of students by making them not only excellent professionals but also good individuals, with understanding and regards for human values, pride in their heritage and culture, a sense of right and wrong and yearning for perfection and imbibe attributes of courage of conviction and action

5.1.2 Programme Educational Objectives (PEOs)

Educational Goals	
PEO 1	Students will acquire a combination of theoretical, conceptual, analytical, computational, and experimental knowledge and skills of plant growth, soil fertility & Natural Resource Management
PEO 2	Students will be able to develop and demonstrate the understanding of global environment and relate agricultural and food issues to the broader social, economic, legal, cultural and environmental contexts
PEO 3	Students will develop and apply understanding to analyze and formulate scientific approach for solving agricultural and rural sector problems
PEO 4	Students will analyze the scientific information and infer the results for successful and productive

	careers or advance studies/research in the field of Agriculture Sciences
PEO 5	Students will able to compile the skill set to design and develop crop production & protection practices
PEO 6	Students will able to assess and compare the scientific information to enable them to effectively participate and contribute to the farming community in particular and society in general
PEO 7	Students will demonstrate professional attitudes, effective communication and behavioral skills that support and enhance individual's performance and bridge the gap.
PEO 8	Students will develop professional ethics and academic integrity and demonstrate these as an individual/ team member/ leader in diverse teams.
PEO 9	Students will critically evaluate and reflect learning and development throughout their career.

5.1.3 Programme Operational Objectives

Operational Goals	
1	Program intends to facilitate academically conducive environment and infrastructure to achieve excellence in teaching, learning and research.
2	Program will provide ample opportunities to its students to participate in curricular, co-curricular and extracurricular activities for their holistic development.
3	Program will facilitate environment for innovation and research excellence for the intellectual growth of faculty.
4	Program will inculcate core values and ethical conduct amongst students, faculty and staff.
5	Program will encourage cultural diversity and a sense of social and environmental responsibility.
6	Program will provide ample opportunities for international exposure to faculty and students.
7	Program will be involved in continual improvement of processes and systems and aim to attain national and international accreditations and university rankings.
8	Program will build a strong industry interaction by way of alumni networks and empanelment of expertise from industry.
9	Program will facilitate employment opportunities and also support students to start their own ventures.
10	Program will facilitate good governance in discharge of responsibilities and execution of policies and programs.

5.1.4 Programme Learning Outcomes

Intended Learning Outcomes	
PLO 1	Able to acquire Agricultural concepts, understanding of Agricultural Production Systems and its marketing at National and International level. Competent in applying acquired knowledge and skills to support the farmers and other stakeholders of the community
PLO 2	Able to use basic mathematics, budgeting and financial management skills to analyse critical

	Agricultural issues patiently, to evaluate the source of information using quantitative and qualitative research techniques and develop effective solutions to intricate problems.
PLO 3	Able to find solutions to bridge the communication gap with farming community using Information & Communication Technology. Able to diffuse innovations and information to end users along with transfer of Agricultural Technologies
PLO 4	Demonstrate the ability to apply theoretical knowledge that will lead to development of new ideas, methods, techniques, practices, products and services in a variety of contexts (technology, commerce, social systems).AIOA will promote collaborations between academia & Industry as well as facilitate cultivation of core values of the university and ethical conduct amongst students, scholars, staff and faculty.
PLO 5	Able to Develop and Design effective communication methods and materials targeted predominantly for easy comprehension by farming community. Communicate proficiently, in oral, written, presentation, information searching and listening skills. Be assertive and articulate, be able to negotiate responsibly and persuade others effectively.
PLO 6	Developing a capacity to think independently, exercise personal judgment and take initiatives. Originality and creativity in formulating, evaluating and applying evidence-based solutions and arguments
PLO 7	Able to make a meaningful and positive contribution to society, be ethical and visionary leaders who can show leadership in different contexts. Valuing human diversity in resolving complex situations.
PLO 8	Demonstrate a critical understanding of environmental, economic, social and ethical factors related to plant and animal-derived food and fibre production nationally and Internationally. Learn to appreciate diversity and equality, demonstrate ethical behaviours at all situations.
PLO 9	Able to be entrepreneurial, industrious and be able to recognize opportunities; turn them into ideas for enterprises. One shall have business acumen and display basic business skills. Able to identify, plan,

	develop & execute opportunities within the disciplines of Agricultural Domain.
PLO 10	Understand the value of industry and professional networks and their importance to self-reliance, lifelong learning and career progression.
PLO 11	Able to Demonstrate depth of specialized disciplinary knowledge and skills and be able to apply them in different contexts to solve problems.

5.1.5 **Programme Operational Outcomes**

Operational Outcomes	
POO 1	AIOA intends to provide educational excellence in Teaching/Academic Delivery, extension and Research
POO 2	AIOA will facilitate an academically conducive environment for holistic development of students and scholars.
POO 3	AIOA will encourage the spirit of enquiry & foster an environment for innovation & research intellectual growth in students and scholars as also nurture industry linkages for students.
POO 4	AIOA will promote collaborations between academia & Industry as well as facilitate cultivation of core values of the university and ethical conduct amongst students, scholars, staff and faculty.
POO 5	AIOA will encourage cultural diversity, global issues and a sense of social and environmental responsibility & literacy in teaching, theory & practice.
POO 6	AIOA will provide ample opportunities for international exposure by encouraging student exchange programs, joint research collaborations, international scholarships/ fellowships and grants to students/scholars & faculty.

POO 7	AIOA will try to realign, streamline and improve systems and processes so as to get reputed & relevant National / International Accreditations.
POO 8	AIOA will build a strong industry interaction for the bright future of its students and scholars Enhance Employability and Entrepreneurial Capabilities Among Students.
POO 9	AIOA will motivate students for higher studies, venture into agri-preneurship as well as facilitate employment opportunities for them
POO 10	AIOA will facilitate good governance through continuous process improvement.

5.1.6 PEOs-PLOs Mapping

Matrix Of PEO`s and PLO`s – B.Sc. (A&FB)

PEO/PLO	PEO 1	PEO 2	PEO 3	PEO 4	PEO 5	PEO 6	PEO 7	PEO 8	PEO 9
PLO 1	☑	☑	☐	☐	☑	☐	☐	☐	☐
PLO 2	☑	☐	☐	☐	☐	☐	☐	☐	☐
PLO 3	☑	☐	☑	☑	☐	☐	☐	☐	☐
PLO 4	☐	☐	☑	☐	☑	☑	☐	☐	☐
PLO 5	☐	☐	☑	☐	☐	☑	☐	☐	☐
PLO 6	☑	☐	☑	☑	☑	☑	☐	☐	☐
PLO 7	☑	☐	☐	☑	☐	☐	☐	☐	☐
PLO 8	☐	☐	☐	☑	☐	☐	☑	☑	☐
PLO 9	☑	☐	☑	☐	☐	☐	☐	☐	☑
PLO 10	☐	☐	☐	☑	☐	☐	☐	☑	☑
PLO 11	☑	☑	☐	☐	☑	☑			

5.1.7. Program Educational Outcome Assessment Plan

S.No.	PEO's	PLO's	Direct	Tool No for Direct Assessment	Target Performance	Indirect	Tool_No for Indirect Assessment	Target Performance
1	Students will acquire a combination of theoretical, conceptual, analytical, computational, and experimental knowledge and skills of plant growth, soil fertility & Natural Resource Management	Able to acquire Agricultural concepts, understanding of Agricultural Production Systems and its marketing at National and International level. Competent in applying acquired knowledge and skills to support the farmers and other stakeholders of the community	*Comprehensive Exam/Viva on annual basis	UG/PLO/D/CE Framework	80% students shall pass the exam.	Student Exit Survey	UG/PLO/ID/Exit Survey	80% students response range between 3-5 on the Likert Scale in the Student Exit Survey.
2	Students will be able to develop and demonstrate the understanding of global environment and relate agricultural	Able to use basic mathematics, budgeting and financial management skills to analyze critical Agricultural issues patiently, to evaluate the	Seminar, Internship, In house Practical Training Comprehensive Exam	UG/PLO/D/CE Framework	100% students will undertake and complete the seminar/in house practical training/ internship	Feedback of Internship Guide		The Internship Guide rates the students between 3-4 ranges on the Likert Scale in the feedback.

	and food issues to the broader social, economic, legal, cultural and environmental contexts	source of information using quantitative and qualitative research techniques and develop effective solutions to intricate problems.						
3	Students will develop and apply understanding to analyze and formulate scientific approach for solving agricultural and rural sector problems	Able to find solutions to bridge the communication gap with farming community using Information & Communication Technology. Able to diffuse innovations and information to end users along with transfer of Agricultural Technologies	*Comprehensive Exam	UG/PLO/D/CE Framework	100% students shall able to leverage IT in order to complete their Assignments and Projects	Student Exit Survey	UG/PLO/ID/Exit Survey	80% students response range between 3-5 on the Likert Scale in the Student Exit Survey.
4	Students will analyze the scientific information and infer the results for successful and productive careers or advance studies/researc	Be innovative, think creatively and critically and apply a range of strategies to solve/find solutions for scientific problems in crop production, protection, value addition and	*Comprehensive Exam	UG/PLO/D/CE Framework	80% students shall able to demonstrate Problem Solving Skill	Student Exit Survey	UG/PLO/ID/Exit Survey	80% students response range between 3-5 on the Likert Scale in the Student Exit Survey.

	h in the field of Agriculture Sciences	marketing. Demonstrate the ability to apply theoretical knowledge that will lead to development of new ideas, methods, techniques, practices, products and services in a variety of contexts (technology, commerce, social systems).						
5	Students will able to compile the skill set to design and develop crop production & protection practices	Able to Develop and Design effective communication methods and materials targeted predominantly for easy comprehension by farming community. Communicate proficiently, in oral, written, presentation, information searching and listening skills. Be assertive and articulate, be able	*Business Communication / DAFE Courses Result analysis of all semesters		80% students should secure a grade of 6 and above on a 10-point scale in the presentation component of Business communication course.	Student Exit Survey	UG/PLO/ID/Exit Survey	80% students response range between 3-5 on the Likert Scale in the Student Exit Survey.

		to negotiate responsibly and persuade others effectively.						
6	Students will able to assess and compare the scientific information to enable them to effectively participate and contribute to the farming community in particular and society in general	Developing a capacity to think independently, exercise personal judgment and take initiatives. Originality and creativity in formulating, evaluating and applying evidence-based solutions and arguments	* Behavioural Science Course Result analysis of all semesters, Journal of Success * Rubrics	UG/PLO 6/D/BS	80% students should secure a grade of 6 and above on a 10-point scale in the Journal for Success component of Behavioural Science course.	Student Exit Survey	UG/PLO/ID/Exit Survey	80% students response range between 3-5 on the Likert Scale in the Student Exit Survey.
7	Students will demonstrate professional attitudes, effective communication and behavioral skills that support and enhance individual's performance and bridge the gap**.**	Able to make a meaningful and positive contribution to society, be ethical and visionary leaders who can show leadership in different contexts. Valuing human diversity in resolving complex situations.	*Foreign Business Language Result Analysis of all semesters * Rubrics	UG/PLO 7/D/FBL	100% students' participation in case studies pertaining to global issues.	Student Exit Survey	UG/PLO/ID/Exit Survey	80% students shall able to demonstrate Global Outlook Prespective.
8	Students will develop professional ethics and	Demonstrate a critical understanding of environmental, economic, social	*Plagiarism Checking of Dissertation * Comprehens	UG/PLO /D/CE Framework	100% Students are checked for plagiarism in NTCC report	Feedback of Industry Internship Guide		The Industry Internship Guide rates the students between 3-5

	academic integrity and demonstrate these as an individual/ team member/ leader in diverse teams.	and ethical factors related to plant and animal-derived food and fibre production nationally and Internationally. Learn to appreciate diversity and equality, demonstrate ethical behaviours at all situations.	ive Exam		submissions and are allowed to appear for viva-voce upon obtaining plagiarism % below 15%.			range on the Likert Scale in the feedback. The University will adhere to zero tolerance towards use of unfair means
9	Students will develop professional ethics and academic integrity and demonstrate these as an individual/ team member/ leader in diverse teams	Able to be entrepreneurial, industrious and be able to recognize opportunities; turn them into ideas for enterprises. One shall have business acumen and display basic business skills. Able to identify, plan, develop & execute opportunities within the disciplines of Agricultural Domain.	*Comprehe nsive Exam	UG/PLO/ D/CE Framewo rk	100% students submit a brief report on agricultural enterprises and 80% students shall pass the exam.	Student Exit Survey	UG/PLO/ID/Exit Survey	80% students response range between 4-5 on the Likert Scale in the Student Exit Survey.
10	Students will critically evaluate and reflect	Understand the value of industry and professional networks and	*Comprehe nsive Exam	UG/PLO/ D/CE Framewo rk	Mentors will assess the Learning curve of 100%	Student Exit Survey	UG/PLO/ID/Exit Survey	80% students response range between 4-5 on the Likert Scale

	learning and development throughout their career.	their importance to self reliance, lifelong learning and career progression.			students.			in the Alumni Survey.
11		Able to Demonstrate depth of specialised disciplinary knowledge and skills and be able to apply them in different contexts to solve problems.	*Comprehensive Exam	UG/PLO/D/CE Framework	100% students shall able to leverage IT inorder to complete their Assignements and Projects	Student Exit Survey	UG/PLO/ID/Exit Survey	80% students response range between 4-5 on the Likert Scale in the Alumni Survey.

5.2. MASTER'S-Level Programme – MBA (Agri & Food Business)

5.2.1 Mission Statement

Programme Mission
The mission of the MBA (Agriculture & Food Business) degree program is to impart necessary knowledge and skills for application in the entire value chain from production on farms, via processing, trading, distribution & consumption of food and also to develop the overall personality of management students by making them not only excellent management professionals but also good individuals, with understanding and regards for human values, pride in their heritage and culture, a sense of right and wrong and yearning for perfection and imbibe attributes of courage of conviction and action.

5.2.2 Programme Educational Objectives (PEOs)

Educational Goals	
PEO 1	Students will acquire a combination of theoretical, conceptual, analytical, computational, and experimental knowledge and skills of Agribusiness & food business and its subsectors.
PEO 2	Students will be able to develop and demonstrate the understanding of global environment and relate agricultural and food issues to the broader social, economic, legal, cultural and environmental contexts
PEO 3	Students will develop and apply understanding to analyze and formulate scientific approach for solving agricultural and rural sector problems
PEO 4	Students will analyze the scientific information and infer the results for successful and productive careers or advance studies/research in the field of Agriculture Sciences.

PEO 5	Students will able to compile the skill set to design and develop crop production & protection practices
PEO 6	Students will able to assess and compare the scientific information to enable them to effectively participate and contribute to the farming community in particular and society in general.
PEO 7	Students will demonstrate professional attitudes, effective communication and behavioral skills that support and enhance individual's performance and bridge the gap.
PEO 8	Students will develop professional ethics and academic integrity and demonstrate these as an individual/ team member/ leader in diverse teams
PEO 9	Students will critically evaluate and reflect learning and development throughout their career

5.2.3 Programme Operational Objectives

Operational Objectives	
1	Program intends to facilitate academically conducive environment and infrastructure to achieve excellence in teaching, learning and research.
2	Program will provide ample opportunities to its students to participate in curricular, co-curricular and extracurricular activities for their holistic development.
3	Program will facilitate environment for innovation and research excellence for the intellectual growth of faculty.
4	Program will inculcate core values and ethical conduct amongst students, faculty and staff.
5	Program will encourage cultural diversity and a sense of social and environmental responsibility.
6	Program will provide ample opportunities for international exposure to faculty and students.
7	Program will be involved in continual improvement of processes and systems and aim to attain national and international accreditations and university rankings.
8	Program will build a strong industry interaction by way of alumni networks and empanelment of expertise from industry.

9	Program will facilitate employment opportunities and also support students to start their own ventures.
10	Program will facilitate good governance in discharge of responsibilities and execution of policies and programs.

5.2.4 Programme Learning Outcomes

PLO 1	Able to acquire basic knowledge of agricultural concepts, agri business sector and food industry at local as well as national and international levels. Comprehension of forward and backward integration of these acquired skills for the betterment of the farmers, industry and community at large
PLO 2	Able to evaluate critical and intricate agricultural as well as food industry related issues by using quantitative and qualitative research techniques and evolve effective solutions which value add to the areas studied
PLO 3	Able to design solutions to bridge the communication gap with farming community and food industry using Information & Communication Technology. Able to diffuse knowledge of these advancements to end users in agricultural and food domain for development of the sectors
PLO 4	Able to define solutions to field and scientific problems in crop production, protection, marketing, food processing, logistics and other micro and macro level areas related to agri and food sectors
PLO 5	Develop and Design effective communication methods and materials targeted predominantly for easy comprehension by farming community. Understand, communicate, negotiate and function effectively and efficiently within and between relevant food and agribusiness sectors and the industry by using a range of communication modes for a range of purposes.
PLO 6	Demonstrate ability for self directed learning, time management and accountability through working effectively in teams, individually as well as during industry interactions. Display initiative, honesty, integrity and trust by empowering and empathising with team members
PLO 7	Demonstrate understanding of impact of globalization and liberalisation on the industry. Ability to understand technological advancements and implications and applying them for developing adaptability, valuing human diversity and managerial

	competencies in global complex situations
PLO 8	Seek to understand the role and impact of agriculture and food resources in society and the international community Learn to appreciate diversity and equality, demonstrate ethical and professional behaviours in all situations
PLO 9	Able to identify, plan and develop opportunities within the disciplines of Agriculture and food Domain. Learn the skills necessary to independently plan and execute a business idea
PLO 10	Understand the value of industry and professional networks and their importance in self reliance and career progression. Linking learning to real world problems to stimulate professionalism
PLO 11	Be capable of rigorous and independent thinking. Be open to, be able to develop Business plans, strategise and evaluate Agri & Food business horizons.

5.2.5 **Program Operational Outcomes**

POO 1	AIOA intends to provide educational excellence in Teaching/Academic Delivery, extension and Research
POO 2	AIOA will facilitate an academically conducive environment for holistic development of students and scholars.
POO 3	AIOA will encourage the spirit of enquiry & foster an environment for innovation & research intellectual growth in students and scholars as also nurture industry linkages for students
POO 4	AIOA will promote collaborations between academia & Industry as well as facilitate cultivation of core values of the university and ethical conduct amongst students, scholars, staff and faculty
POO 5	AIOA will encourage cultural diversity, global issues and a sense of social and environmental responsibility & literacy in teaching, theory & practice

POO 6	AIOA will provide ample opportunities for international exposure by encouraging student exchange programs, joint research collaborations, international scholarships/ fellowships and grants to students/scholars & faculty
POO 7	AIOA will try to realign, streamline and improve systems and processes so as to get reputed & relevant National / International Accreditations
POO 8	AIOA will build a strong industry interaction for the bright future of its students and scholars Enhance Employability and Entrepreneurial Capabilities Among Students
POO 9	AIOA will motivate students for higher studies, venture into agri-preneurship as well as facilitate employment opportunities for them
POO 10	AIOA will facilitate good governance through continuous process improvement

5.2.6 **PEOs -PLOs Mapping**

PEO/PLO	PEO 1	PEO 2	PEO 3	PEO 4	PEO 5	PEO 6	PEO 7	PEO 8	PEO 9
PLO 1	☑	☑	☑	☑	☑	☑	☑	☑	☑
PLO 2	☑	☐	☐	☑	☐	☑	☐	☑	☐
PLO 3	☐	☑	☐	☐	☑	☐	☑	☐	☑
PLO 4	☐	☐	☑	☐	☐	☐	☐	☐	☐
PLO 5	☑	☐	☐	☑	☐	☑	☐	☑	☐
PLO 6	☐	☑	☐	☐	☑	☐	☑	☐	☑
PLO 7	☐	☐	☑	☐	☐	☐	☐	☐	☐
PLO 8	☑	☐	☐	☑	☐	☑	☐	☑	☐
PLO 9	☐	☑	☐	☐	☑	☐	☑	☐	☑
PLO 10	☐	☐	☐	☑	☐	☐	☐	☑	☐
PLO 11	☑	☐	☑	☐	☐	☑	☑	☐	☑

5.2.7 Program Educational Outcome Assessment Plan

#	PEO's	PLO's	Direct	Tool No for Direct Assessment	Target Performance	Indirect	Tool No for Indirect Assessment	Target Performance
1	Students will acquire a combination of theoretical, conceptual, analytical, computational, and experimental knowledge and applied aspects of Agronomical practices	Able to acquire basic knowledge of concepts of agriculture and more specifically agronomy at local, national and international levels. Utilization of these acquired skills for the betterment of the farmers and community as at large.	*Comprehensive Exam/Viva on annual basis	PG/PLO/D/CE Framework	80% students shall pass the exam.	Student Exit Survey	PG/PLO/ID/Exit Survey	80% students response range between 3-5 on the Likert Scale in the Student Exit Survey.
2	Students will be able to design and conduct independent experiments with analyze and interpretation of results	Able to evaluate critical and intricate agricultural related issues by using quantitative and qualitative research techniques and evolve effective solutions	Dessertation		100% students will undertake and complete the Thesis	Feedback of Guide		The Guide rates the students between 3-4 range on the Likert Scale in the feedback.
			Comprehensive Exam	PG/PLO/D/CE Framework				

3	Students will be able to develop and demonstrate the understanding of global environment and relate agricultural and food issues to the broader social, economic, legal, cultural and environmental contexts	Able to design effective ICT solutions for farming community and also able to diffuse knowledge of advancements to farmers and researchers.	*Comprehensive Exam	PG/PLO/D/CE Framework	100% students shall able to leverage IT inorder to complete their Assignements and Projects	Student Exit Survey	PG/PLO/ID/Exit Survey	80% students response range between 3-5 on the Likert Scale in the Student Exit Survey.
4	Students will develop and apply understanding to analyze and formulate scientific approach for solving agricultural and rural sector problems	Able to formulate solutions to field and scientific problems in crop production and cropping systems.	*Comprehensive Exam	PG/PLO/D/CE Framework	80% students shall able to demonstrate Problem Solving Skill	Student Exit Survey	PG/PLO/ID/Exit Survey	80% students response range between 3-5 on the Likert Scale in the Student Exit Survey.
5	Students will analyze the scientific information from field experimentation and infer the results for successful and productive careers or	Develop and Design effective extension methods and materials targeted predominantly for easy comprehension and applicability by the farming community.	*Business Communication Course Result analysis of all semesters *Rubrics	PG/PLO 5/D/ BC	80% students should secure a grade of 6 and above on a 10-point scale in the presentation component	Student Exit Survey	PG/PLO/ID/Exit Survey	80% students response range between 3-5 on the Likert Scale in the Student Exit Survey.

	advance studies/research in the field of Agriculture Sciences				of Business communication course.			
6	Students will able to compile the skill set to design and develop crop production practices	Demonstrate ability for self directed learning, time management and dedication to serve the community by working effectively individually as well as in teams. Display initiative, honesty, integrity and deligence by empathising with farmers.	* Behavioural Science Course Result analysis of all semesters, Journal of Success * Rubrics	PG/PLO 6/D/BS	80% students should secure a grade of 6 and above on a 10-point scale in the Journal for Success component of Behavioural Science course.	Student Exit Survey	PG/PLO/ID/Exit Survey	80% students response range between 3-5 on the Likert Scale in the Student Exit Survey.
7	Students will acquire a combination of theoretical, conceptual, analytical, computational, and experimental knowledge and applied aspects of Agronomical practices	Evaluate impact of globalization and liberalisation on the agriculture sector and farmers in particular. Ability to understand technological advancements and implications and applying them for developing adaptability and managing diversity in global complex situations.	*Foreign Business Language Result Analysis of all semesters * Rubrics	PG/PLO7/D/FBL	100% students' participation in case studies pertaining to global issues.	Student Exit Survey	PG/PLO/ID/Exit Survey	80% students shall able to demonstrate Global Outlook Prespective.

8	Students will demonstrate professional attitudes, effective communication and behavioral skills that support and enhance individual's performance and bridge the gap	Analyze the role and impact of agriculture in society and the international community Learn to appreciate diversity and equality, demonstrate ethical and professional behaviours in all situations.	*Plagiarism Checking of Thesis		100% Students are checked for plagiarism in Theisi report submissions and are allowed to appear for viva-voce upon obtaining plagiarism % below 15%.	Feedback of Thesis Guide		The IGuide rates the students between 3-5 range on the Likert Scale in the feedback.
				*Comprehensive Exam	PG/PLO/D/CE Framework		Indiscipline Cases	
9	Students will analyze the scientific information from field experimentation and infer the results for successful and productive careers or advance studies/research in the field of Agriculture Sciences	Relate the value of linkages and networks with their importance in self reliance and research. Linking learning to real world problems to stimulate professionalism in research.	*Quiz (Rubrics)	*Comprehensive Exam	Mentors will asses the Learning curve of 100% students.	Student Exit Survey	PG/PLO/ID/Exit Survey	80% students response range between 4-5 on the Likert Scale in the Alumni Survey.
					PG/PLO/D/CE Framework			

5.3 Master's-Level Programme – M.Sc.(Agri) Agronomy

5.3.1 Mission Statement

Programme Mission
The mission of the Master of Science in Agriculture degree program is to enhance the career trajectory of agricultural professionals, practitioners, and educators by improving their ability to apply new and emerging scientific findings and technologies to the advancement and expansion of their disciplines.

5.3.2 Programme Educational Objectives (PEOs)

Educational Goals	
PEO 1	Students will acquire a combination of theoretical, conceptual, analytical, computational, and experimental knowledge and applied aspects of Agronomical practices
PEO 2	Students will be able to design and conduct independent experiments with analyze and interpretation of results
PEO 3	Students will be able to develop and demonstrate the understanding of global environment and relate agricultural and food issues to the broader social, economic, legal, cultural and environmental contexts
PEO 4	Students will develop and apply understanding to analyze and formulate scientific approach for solving agricultural and rural sector problems
PEO 5	Students will analyze the scientific information from field experimentation and infer the results for successful and productive careers or advance studies/research in the field of Agriculture Sciences

PEO 6	Students will able to compile the skill set to design and develop crop production practices
PEO 7	Students will able to assess and compare the scientific information to enable them to effectively participate and contribute to the farming community in particular and society in general
PEO 8	Students will demonstrate professional attitudes, effective communication and behavioral skills that support and enhance individual's performance and bridge the gap.
PEO 9	Students will develop professional ethics and academic integrity and demonstrate these as an individual/ team member/ leader in diverse teams

5.3.3 Programme Operational Objectives

Operational Goals	
1	Program intends to facilitate academically conducive environment and infrastructure to achieve excellence in teaching, learning and research.
2	Program will provide ample opportunities to its students to participate in curricular, co-curricular and extracurricular activities for their holistic development.
3	Program will facilitate environment for innovation and research excellence for the intellectual growth of faculty.
4	Program will inculcate core values and ethical conduct amongst students, faculty and staff.
5	Program will encourage cultural diversity and a sense of social and environmental responsibility.
6	Program will provide ample opportunities for international exposure to faculty and students.
7	Program will be involved in continual improvement of processes and systems and aim to attain national and international accreditations and university rankings.
8	Program will build a strong industry interaction by way of alumni networks and empanelment of expertise from industry.
9	Program will facilitate employment opportunities and also support students to start their own ventures.
10	Program will facilitate good governance in discharge of responsibilities and execution of policies and programs.

5.3.4 Programme Learning Outcomes

2.1.1. Intended Learning Outcomes	
PLO 1	Able to acquire basic knowledge of concepts of agriculture and more specifically agronomy at local, national and international levels. Utilization of these acquired skills for the betterment of the farmers and comm Dr. Nutan Kaushik unity as at large.
PLO 2	Able to evaluate critical and intricate agricultural related issues by using quantitative and qualitative research techniques and evolve effective solutions
PLO 3	Able to design effective ICT solutions for farming community and also able to diffuse knowledge of advancements to farmers and researchers.
PLO 4	Able to formulate solutions to field and scientific problems in crop production and cropping systems.
PLO 5	Develop and Design effective extension methods and materials targeted predominantly for easy comprehension and applicability by the farming community.
PLO 6	Demonstrate ability for self directed learning, time management and dedication to serve the community by working Effectively individually as well as in teams. Display initiative, honesty, integrity and diligence by empathizing with farmers.
PLO 7	Evaluate impact of globalization and liberalization on the agriculture sector and farmers in particular. Ability to understand technological advancements and implications and applying them for developing adaptability and managing Diversity in global complex situations.
PLO 8	Analyze the role and impact of agriculture in society and the international community Learn to appreciate diversity and equality, demonstrate ethical and professional behaviors in all situations.

	PLO 9	Able to be entrepreneurial, industrious and be able to recognize opportunities; turn them into ideas for enterprises. One shall have business acumen and display basic business skills. Able to identify, plan, develop & execute opportunities within the disciplines of Agricultural Domain.
	PLO 10	Relate the value of linkages and networks with their importance in self reliance and research. Linking learning to real world problems to stimulate professionalism in research.
	PLO 1	Able to acquire basic knowledge of concepts of agriculture and more specifically agronomy at local, national and international levels. Utilisation of these acquired skills for the betterment of the farmers and community as at large.

5.3.5 **Programme Operational Outcomes**

Operational Outcomes	
POO 1	The Programme intends to facilitate academically conducive environment and infrastructure to achieve excellence in teaching, learning and research.
POO 2	The Programme will provide ample opportunities to its students to participate in curricular, co-curricular and extracurricular activities for their holistic development.
POO 3	The Programme will facilitate environment for innovation and research excellence for the intellectual growth of faculty.
POO 4	The Programme will inculcate core values and ethical conduct amongst students, faculty and staff.
POO 5	The Programme will encourage cultural diversity and a sense of social and environmental responsibility.
POO 6	The Programme will provide ample opportunities for international exposure to faculty and students

POO 7	The Programme will be involved in continual improvement of processes and systems and aim to attain national and international accreditations and university rankings.
POO 8	The Programme will build a strong industry interaction by way of alumni networks and empanelment of expertise from industry.
POO 9	The Programme will facilitate employment opportunities and also support students to start their own ventures.
POO 10	The Programme will facilitate good governance in discharge of responsibilities and execution of policies and programs.

5.3.6 **PEO`s- PLO`s Mapping**

PEO/PLO	PEO 1	PEO 2	PEO 3	PEO 4	PEO 5	PEO 6	PEO 7	PEO 8	PEO 9
PLO 1	☑	☑	☑	☑	☑	☑	☑	☑	☑
PLO 2	☑	☐	☐	☑	☐	☑	☐	☑	☐
PLO 3	☐	☑	☐	☐	☑	☐	☑	☐	☑
PLO 4	☐	☐	☑	☐	☐	☐	☐	☐	☐
PLO 5	☑	☐	☐	☑	☐	☑	☐	☑	☐
PLO 6	☐	☑	☐	☐	☑	☐	☑	☐	☑
PLO 7	☐	☐	☑	☐	☐	☐	☐	☐	☐
PLO 8	☑	☐	☐	☑	☐	☑	☐	☑	☐
PLO 9	☐	☑	☐	☐	☑	☐	☑	☐	☑
PLO 10	☐	☐	☐	☑	☐	☐	☐	☑	☐
PLO 11	☑	☐	☑	☐	☐	☑	☑	☐	☑

5.3.7 **Program Educational Outcome Assessment Plan**

#	PEO's	PLO's	Direct	Tool No for Direct Assessment	Target Performance	Indirect	Tool No for Indirect Assessment	Target Performance
1	Students will acquire a combination of theoretical, conceptual, analytical, computational, and experimental knowledge and applied aspects of Agronomical practices	Able to acquire basic knowledge of concepts of agriculture and more specifically agronomy at local, national and international levels. Utilization of these acquired skills for the betterment of the farmers and community as at large.	*Comprehensive Exam/Viva on annual basis	PG/PLO/D/CE Framework	80% students shall pass the exam.	Student Exit Survey	PG/PLO/ID/Exit Survey	80% students response range between 3-5 on the Likert Scale in the Student Exit Survey.
2	Students will be able to design and conduct independent experiments with analyze and interpretation of results	Able to evaluate critical and intricate agricultural related issues by using quantitative and qualitative research techniques and evolve effective solutions	Thesis		100% students will undertake and complete the Thesis	Feedback of Thesis Guide		The Guide rates the students between 3-4 range on the Likert Scale in the feedback.
			Comprehensive Exam	PG/PLO/D/CE Framework				
3	Students will be able to develop and demonstrate	Able to design effective ICT solutions for	*Comprehensive Exam	PG/PLO/D/CE Framew	100% students shall able to	Student Exit Survey	PG/PLO/ID/Exit Survey	80% students response range between 3-5 on the

	the understanding of global environment and relate agricultural and food issues to the broader social, economic, legal, cultural and environmental contexts	farming community and also able to diffuse knowledge of advancements to farmers and researchers.		ork	leverage IT inorder to complete their Assignements and Projects			Likert Scale in the Student Exit Survey.
4	Students will develop and apply understanding to analyze and formulate scientific approach for solving agricultural and rural sector problems	Able to formulate solutions to field and scientific problems in crop production and cropping systems.	*Comprehensive Exam	PG/PLO/D/CE Framework	80% students shall able to demonstrate Problem Solving Skill	Student Exit Survey	PG/PLO/ID/Exit Survey	80% students response range between 3-5 on the Likert Scale in the Student Exit Survey.
5	Students will analyze the scientific information from field experimentation and infer the results for successful and productive careers or advance studies/research in the field of	Develop and Design effective extension methods and materials targeted predominantly for easy comprehension and applicability by the farming community.	*Business Communication Course Result analysis of all semesters		80% students should secure a grade of 6 and above on a 10-point scale in the presentation component of Business communication course.	Student Exit Survey	PG/PLO/ID/Exit Survey	80% students response range between 3-5 on the Likert Scale in the Student Exit Survey.

	Agriculture Sciences							
			*Rubrics	PG/PLO 5/D/ BC				
6	Students will able to compile the skill set to design and develop crop production practices	Demonstrate ability for self directed learning, time management and dedication to serve the community by working effectively individually as well as in teams. Display initiative, honesty, integrity and deligence by empathising with farmers.	* Behavioural Science Course Result analysis of all semesters, Journal of Success		80% students should secure a grade of 6 and above on a 10-point scale in the Journal for Success component of Behavioural Science course.	Student Exit Survey	PG/PLO/ID/Exit Survey	80% students response range between 3-5 on the Likert Scale in the Student Exit Survey.
			* Rubrics	PG/PLO 6/D/BS				
7	Students will acquire a combination of theoretical, conceptual, analytical, computational, and experimental knowledge and applied aspects of Agronomical practices	Evaluate impact of globalization and liberalisation on the agriculture sector and farmers in particular. Ability to understand technological advancements and implications and applying them for developing adaptability and managing diversity in global complex	*Foreign Business Language Result Analysis of all semesters		100% students' participation in case studies pertaining to global issues.	Student Exit Survey	PG/PLO/ID/Exit Survey	80% students shall able to demonstrate Global Outlook Prespective.

		situations.						
			* Rubrics	PG/PLO 7/D/FB L				
8	Students will demonstrate professional attitudes, effective communication and behavioral skills that support and enhance individual's performance and bridge the gap	Analyze the role and impact of agriculture in society and the international community Learn to appreciate diversity and equality, demonstrate ethical and professional behaviours in all situations.	*Plagiarism Checking of Thesis		100% Students are checked for plagiarism in Theisi report submissions and are allowed to appear for viva-voce upon obtaining plagiarism % below 15%.	Feedback of Thesis Guide		The IGuide rates the students between 3-5 range on the Likert Scale in the feedback.
				* Comprehensive Exam	PG/PLO/D/CE Framework		Indiscipline Cases	
9	Students will analyze the scientific information from field experimentation and infer the results for successful and productive careers or advance	Relate the value of linkages and networks with their importance in self reliance and research. Linking learning to real world problems to stimulate professionalism in research.	*Quiz (Rubrics)		Mentors will asses the Learning curve of 100% students.	Student Exit Survey	PG/PLO/ID/Exit Survey	80% students response range between 4-5 on the Likert Scale in the Alumni Survey.

	studies/research in the field of Agriculture Sciences							
				*Comprehensive Exam	PG/PLO/D/CE Framework			

5.4 Programme : M.Sc. Horticulture(Post Harvest management)

5.4.1 Programme Mission The mission of the Master of Science in Horticulture degree program is to enhance the career trajectory of horticultural professionals, practitioners, and educators by improving their ability to apply new and emerging scientific findings and technologies to the advancement and expansion of their disciplines and also provide excellent human resource to the industry and to train the students in diverse branches of post- harvest technology.

5.4.2 Programme Educational Objectives/Goals

PEO 1	Students will acquire a combination of theoretical, conceptual, analytical, computational, and experimental knowledge and applied aspects of Agronomical practices
PEO 2	Students will be able to design and conduct independent experiments with analyze and interpretation of results
PEO 3	Students will be able to develop and demonstrate the understanding of global environment and relate agricultural and food issues to the broader social, economic, legal, cultural and environmental contexts
PEO 4	Students will develop and apply understanding to analyze and formulate scientific approach for solving agricultural and rural sector problems
PEO 5	Students will analyze the scientific information from field experimentation and infer the results for successful and productive careers or advance studies/research in the field of Agriculture Sciences
PEO 6	Students will able to compile the skill set to design and develop crop production practices
PEO 7	Students will able to assess and compare the scientific information to enable them to effectively participate and contribute to the farming community in particular and society in general
PEO 8	Students will demonstrate professional attitudes, effective communication and behavioral skills that support and enhance individual's performance and bridge the gap.

PEO 9	Students will develop professional ethics and academic integrity and demonstrate these as an individual/ team member/ leader in diverse teams
PEO 10	Students will critically evaluate and reflect learning and development throughout their career.

5.4.3 Programme Operational Objectives

Operational Goals	
1	Program intends to facilitate academically conducive environment and infrastructure to achieve excellence in teaching, learning and research.
2	Program will provide ample opportunities to its students to participate in curricular, co-curricular and extracurricular activities for their holistic development.
3	Program will facilitate environment for innovation and research excellence for the intellectual growth of faculty.
4	Program will inculcate core values and ethical conduct amongst students, faculty and staff.
5	Program will encourage cultural diversity and a sense of social and environmental responsibility.
6	Program will provide ample opportunities for international exposure to faculty and students.
7	Program will be involved in continual improvement of processes and systems and aim to attain national and international accreditations and university rankings.
8	Program will build a strong industry interaction by way of alumni networks and empanelment of expertise from industry.
9	Program will facilitate employment opportunities and also support students to start their own ventures.
10	Program will facilitate good governance in discharge of responsibilities and execution of policies and programs.

5.4.4 Programme Learning Outcomes(PLOs)

PLO 1	Able to acquire basic knowledge of concepts of horticulture and more specifically agronomy at local, national and international levels. Utilisation of these acquired skills for the betterment of the farmers and community as at large.
PLO 2	Able to evaluate critical and intricate agricultural related issues by using quantitative and qualitative research techniques and evolve effective solutions
PLO 3	Able to design effective ICT solutions for farming community and also able to diffuse knowledge of advancements to farmers and researchers.
PLO 4	Able to formulate solutions to field and scientific problems in crop production and cropping systems.
PLO 5	Develop and Design effective extension methods and materials targeted predominantly for easy comprehension and applicability by the farming community.
PLO 6	Demonstrate ability for self directed learning, time management and dedication to serve the community by working effectively individually as well as in teams. Display initiative, honesty, integrity and diligence by empathizing with farmers.
PLO 7	Evaluate impact of globalization and 45iberalization on the agriculture sector and farmers in particular. Ability to understand technological advancements and implications and applying them for developing adaptability and managing diversity in global complex situations.
PLO 8	Analyze the role and impact of agriculture in society and the international community Learn to appreciate diversity and equality, demonstrate ethical and professional behaviours in all situations.
PLO 9	Able to be entrepreneurial, industrious and be able to recognize opportunities; turn them into ideas for enterprises.

	One shall have business acumen and display basic business skills. Able to identify, plan, develop & execute opportunities within the disciplines of Agricultural Domain.
PLO 10	Relate the value of linkages and networks with their importance in self reliance and research. Linking learning to real world problems to stimulate professionalism in research.

5.4.5 Programme Operational Outcomes(POOs)

POO 1	The Programme intends to facilitate academically conducive environment and infrastructure to achieve excellence in teaching, learning and research.
POO 2	The Programme will provide ample opportunities to its students to participate in curricular, co-curricular and extracurricular activities for their holistic development.
POO 3	The Programme will facilitate environment for innovation and research excellence for the intellectual growth of faculty.
POO 4	The Programme will inculcate core values and ethical conduct amongst students, faculty and staff.
POO 5	The Programme will encourage cultural diversity and a sense of social and environmental responsibility.
POO 6	The Programme will provide ample opportunities for international exposure to faculty and students
POO 7	The Programme will be involved in continual improvement of processes and systems and aim to attain national and international accreditations and university rankings.

POO 8	The Programme will build a strong industry interaction by way of alumni networks and empanelment of expertise from industry.
POO 9	The Programme will facilitate employment opportunities and also support students to start their own ventures.
POO 10	The Programme will facilitate good governance in discharge of responsibilities and execution of policies and programs.

5.4.6 PEO`s - PLO`s Mapping

PEO/PLO	PEO 1	PEO 2	PEO 3	PEO 4	PEO 5	PEO 6	PEO 7	PEO 8	PEO 9	PEO 10
PLO 1	☑	☑	☑	☑	☑	☐	☐	☐	☐	☑
PLO 2	☐	☐	☐	☐	☑	☑	☑	☐	☐	☑
PLO 3	☐	☑	☑	☐	☐	☐	☐	☐	☐	☐
PLO 4	☐	☐	☐	☑	☑	☐	☑	☑	☑	☐
PLO 5	☐	☑	☐	☐	☑	☑	☑	☐	☑	☐
PLO 6	☐	☐	☑	☐	☑	☑	☑	☐	☑	☑
PLO 7	☑	☐	☐	☐	☐	☑	☑	☐	☐	☐
PLO 8	☐	☐	☐	☑	☐	☐	☑	☑	☐	☐
PLO 9	☐	☐	☐	☐	☐	☐	☐	☐	☑	☑
PLO 10	☑	☑	☑	☐	☐	☐	☐	☐	☑	

5.4.7 **Program Educational Outcome Assessment Plan**

#	PEO's	PLO's	Direct	Tool No for Direct Assessment	Target Performance	Indirect	Tool No for Indirect Assessment	Target Performance
1	Students will acquire a combination of theoretical, conceptual, analytical, computational, and experimental knowledge and applied aspects of Agronomical practices	Able to acquire basic knowledge of concepts of agriculture and more specifically agronomy at local, national and international levels. Utilization of these acquired skills for the betterment of the farmers and community as at large.	*Comprehensive Exam/Viva on annual basis	PG/PLO/D/CE Framework	80% students shall pass the exam.	Student Exit Survey	PG/PLO/ID/Exit Survey	80% students response range between 3-5 on the Likert Scale in the Student Exit Survey.
2	Students will be able to design and conduct independent experiments with analyze and interpretation of results	Able to evaluate critical and intricate agricultural related issues by using quantitative and qualitative research techniques and evolve effective solutions	Thesis		100% students will undertake and complete the Thesis	Feedback of Thesis Guide		The Guide rates the students between 3-4 range on the Likert Scale in the feedback.
			Comprehensive Exam	PG/PLO/D/CE Framework				
3	Students will be able to develop and demonstrate the	Able to design effective ICT solutions for farming community	*Comprehensive Exam	PG/PLO/D/CE Framework	100% students shall able to leverage IT	Student Exit Survey	PG/PLO/ID/Exit Survey	80% students response range between 3-5 on the Likert Scale in the

	understanding of global environment and relate agricultural and food issues to the broader social, economic, legal, cultural and environmental contexts	and also able to diffuse knowledge of advancements to farmers and researchers.			inorder to complete their Assignemen ts and Projects			Student Exit Survey.
4	Students will develop and apply understanding to analyze and formulate scientific approach for solving agricultural and rural sector problems	Able to formulate solutions to field and scientific problems in crop production and cropping systems.	*Comprehe nsive Exam	PG/PLO /D/CE Framew ork	80% students shall able to demonstrate Problem Solving Skill	Student Exit Survey	PG/PLO/ID/Ex it Survey	80% students response range between 3-5 on the Likert Scale in the Student Exit Survey.
5	Students will analyze the scientific information from field experimentation and infer the results for successful and productive careers or advance studies/research in the field of Agriculture	Develop and Design effective extension methods and materials targeted predominantly for easy comprehension and applicability by the farming community.	*Business Communic ation Course Result analysis of all semesters		80% students should secure a grade of 6 and above on a 10-point scale in the presentation component of Business communicat ion course.	Student Exit Survey	PG/PLO/ID/Ex it Survey	80% students response range between 3-5 on the Likert Scale in the Student Exit Survey.

	Sciences							
			*Rubrics	PG/PLO 5/D/ BC				
6	Students will able to compile the skill set to design and develop crop production practices	Demonstrate ability for self directed learning, time management and dedication to serve the community by working effectively individually as well as in teams. Display initiative, honesty, integrity and deligence by empathising with farmers.	* Behavioural Science Course Result analysis of all semesters, Journal of Success		80% students should secure a grade of 6 and above on a 10-point scale in the Journal for Success component of Behavioural Science course.	Student Exit Survey	PG/PLO/ID/Exit Survey	80% students response range between 3-5 on the Likert Scale in the Student Exit Survey.
			* Rubrics	PG/PLO 6/D/BS				
7	Students will acquire a combination of theoretical, conceptual, analytical, computational, and experimental knowledge and applied aspects of Agronomical practices	Evaluate impact of globalization and liberalisation on the agriculture sector and farmers in particular. Ability to understand technological advancements and implications and applying them for developing adaptability and managing diversity in global complex	*Foreign Business Language Result Analysis of all semesters		100% students' participation in case studies pertaining to global issues.	Student Exit Survey	PG/PLO/ID/Exit Survey	80% students shall able to demonstrate Global Outlook Prespective.

		situations.						
			* Rubrics	PG/PLO 7/D/FB L				
8	Students will demonstrate professional attitudes, effective communication and behavioral skills that support and enhance individual's performance and bridge the gap	Analyze the role and impact of agriculture in society and the international community Learn to appreciate diversity and equality, demonstrate ethical and professional behaviours in all situations.	*Plagiarism Checking of Thesis		100% Students are checked for plagiarism in Theisi report submissions and are allowed to appear for viva-voce upon obtaining plagiarism % below 15%.	Feedback of Thesis Guide		The IGuide rates the students between 3-5 range on the Likert Scale in the feedback.
				* Comprehensive Exam	PG/PLO/D/ CE Framework		Indiscipline Cases	
9	Students will analyze the scientific information from field experimentation and infer the results for successful and productive careers or advance	Relate the value of linkages and networks with their importance in self reliance and research. Linking learning to real world problems to stimulate professionalism in research.	*Quiz (Rubrics)	*Comprehensive Exam	Mentors will asses the Learning curve of 100% students. PG/PLO/D/ CE Framework	Student Exit Survey	PG/PLO/ID/Exit Survey	80% students response range between 4-5 on the Likert Scale in the Alumni Survey.

	studies/research in the field of Agriculture Sciences							

Section V:
Domain Operational Outcomes & Operational Outcome Assessment Plan

S.No.	**Broad-Based Operational Goals**	**Intended Operational Outcomes for the Domain of Agriculture Science (DAS)**	**Assessment Measures/Methods for Intended Operational Outcomes**	**Performance Objectives (Targets/Criteria)**
1	DAS intends to provide educational excellence in Teaching/Academic Delivery and research.	1.1The Domain of Agriculture Science will use appropriate methodology and pedagogical tools for teaching, learning and development.	• Student feedback of course faculty. • Faculty Qualifications and Experience Files.	• 80% faculty shall have Excellent feedback • 70% Faculty shall be either Ph.D. or shall have Industry Experience.
		1.2The curriculum will be contemporary and relevant to meet industry requirements and benchmarked on global standards by incorporating feedback from all the stakeholders.	• Stakeholders feedback, peer-group feedback and analysis of the same for incorporation in curriculum. • Minutes of Meetings of Area Advisory Board, Board of Studies and Academic Council	• Curriculum shall be reviewed periodically (At least once in 5 years)

		1.3The student of DAS will graduate in timely manner.	• Graduation rate in convocation report.
			  • on completion of Registration period (N)
			  • during extended period (N+1+1 for PG and N+2+1 for UG)
				• At least 80% students shall graduate on completion of Registration period (N)
				• 80% or remaing students shall pass
				  • during extended period (N+1+1 for PG and N+2+1 for UG)

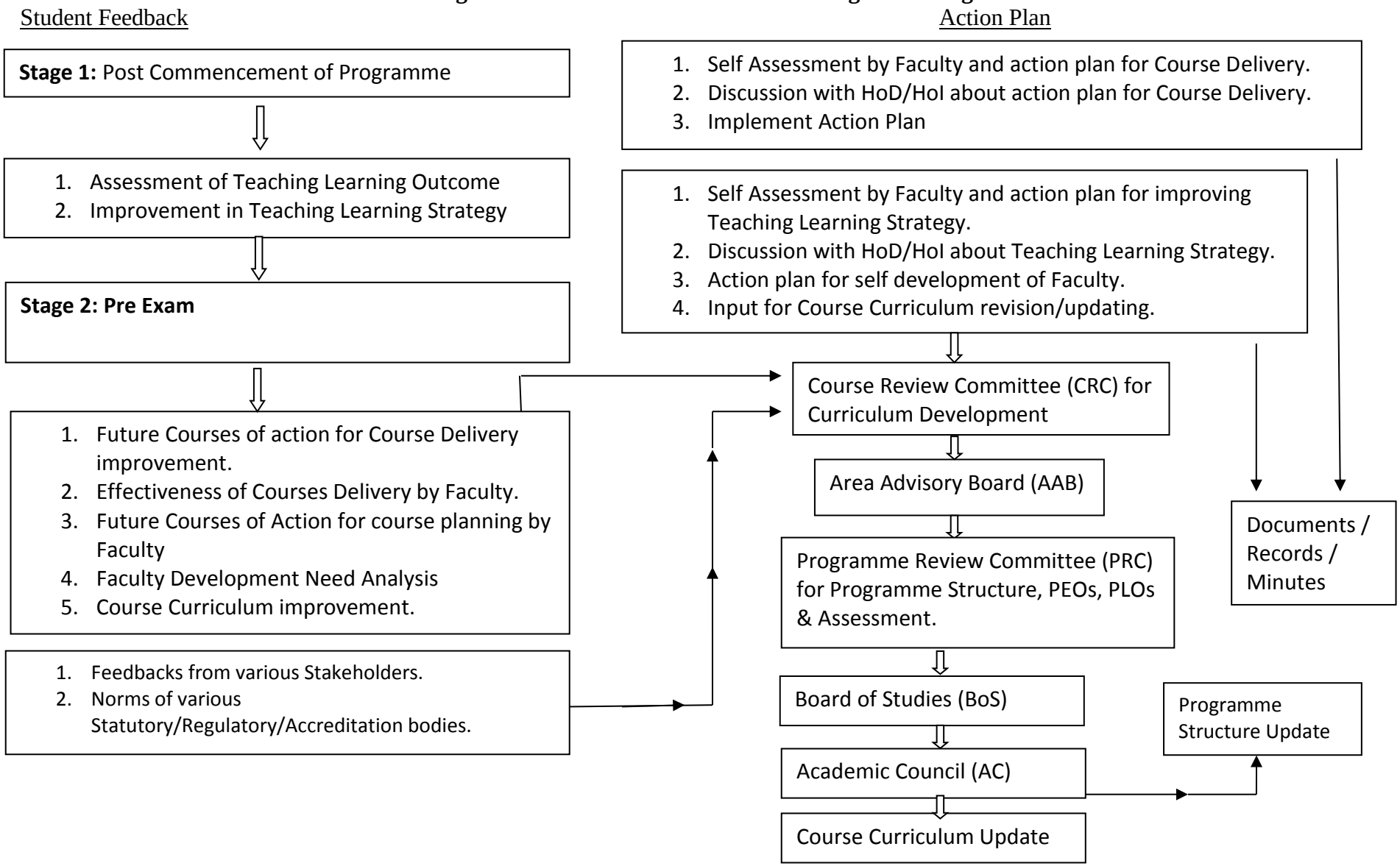
		1.4University shall provide Academic facilities, Technological Resources for teaching and learning.	• Teaching, learning aids, resources, such as labs, library, journals, database, softwares, Inventory of all technology equipment in classrooms, computer labs, academic offices, and faculty offices.	
2	DAS will facilitate an academically conducive environment for holistic development of students.	2.1The student of DAS will earn achievements in inter-university Extra Curricular activities.	• Functional and area specific club, Committees, Sports Events, co-curricular and extra curricular activities and students participation in inter institutional competition. • List of Award winners	•
3	DAS will facilitate environment for innovation and research excellence for the intellectual growth of faculty.	3.1Faculty will be engaged in scholarly and professional activities in order to enhance their competencies and to contribute to the existing Body of Knowledge.	Faculty data about Research work and other Scholar activities such as: • Scholarship of teaching; published and unpublished articles, manuscripts, books, curriculum review and evaluation of teaching material. • Scholarship of Discovery: published articles, manuscripts,	

			papers presented, dissertations/ thesis, • Scholarship of Integration: published articles, manuscripts, papers presented, dissertations/ thesis, conference and workshops attended. • Scholarship of application: published articles, manuscripts, papers presented, consultations, policy analysis, programme evaluation. • Professional activities: Routine consulting, conference, workshop, professional meeting attendance, professional membership.	
4	DAS will facilitate cultivation of core values of the university and ethical conduct amongst students, faculty and staff.	4.1 The DAS will integrate ethics and values in teaching, theory and practice, develop and retain excellent students, faculty and staff.	• Attrition Rate • Courses embedded in curriculum such as Behavioral Science Courses, Human Values and Community Outreach, etc. • Plagiarism check. • Feedback system.	• Attrition rate shall be below 10% annually • Faculty Feedback shall be taken for each course. • 80% faculty shall have 4 or 5 on 5 point Likert Scale.
5	DAS will encourage cultural diversity and a sense of social and environmental responsibility.	5.1 DAs will facilitate cultivation of cross cultural humanitarian values.	• List of community/ social sector projects/ activities/ engagements. • Organizing Cultural program • Day of Belongingness. • Celebration of festivals for culturally diverse group of students.	• Atlease 80% faculty and students should be engaged in organizing/ participating the various events and activities
6	DAS will provide ample opportunities	6.1DAS will facilitate joint	• Exchange Programs for students.	• 100% students and faculty of DAS shall be offered an opportunity for

	for international exposure to faculty and students.	research collaborations, invite international delegates and speakers for seminars and conferences and various other opportunities for global exposure.	• Conferences/ Seminars organised by national and international speakers and delegates. • Collaborative Research.	international exposure through various programmes designed for the purpose.
7	DAS will be involved in continual improvement of processes and systems and aim to attain national and international accreditations and university rankings.	7.1 DAS will be continuously engaged in developing/ reviewing processes, policies and systems to achieve prestigious accreditations from various national, international bodies and ranking bodies.	• Ranking in national and international ranking agencies. • Accreditation at institutions and programme levels.	□ Industry visits shall be scheduled for 100% students of DAS □ Industry experts shall be invited at least once a semester
8	DAS will build a strong industry interaction by way of alumni networks and empanelment of expertise from industry.	8.1 DAS shall develop and maintain strong relationship with corporate.	Report on Annual Industry Interaction activities such as, • Industry Academia Meets	• Details of 60% of DAS alumni shall be maintained in the alumni database and readily available for various purposes
		8.2 Shall maintain lifelong alumni network and keep the curriculum responsive to industry needs.	• Industry visits • Evaluation Board • Career Counseling Sessions, etc.	.
9	DAS will facilitate employment opportunities and also support	9.1DAS will support all the students for quality placements or join	Employability: • Quality of placements (company profile, job profile,	• 90% students shall either be placed or shall join family business or shall start their own

	students to start their own ventures.	family business or start their own venture.	salary package offered) • quality of internship • List of students placed. • List of industries visiting campus, Entrepreneurship: • Students joining family business, • Students starting their own ventures.	ventures or shall go for further studies
10	DAS will facilitate good governance in discharge of responsibilities and execution of policies and programs.	10.1 DAS will establish an internal quality cell for operational quality and process improvement.	Reports of various: • Statutory bodies, • Accreditation bodies, • External evaluators report. • BSI Report. • Quality Audit Report by QAE.	• DAS shall conduct periodic meetings as per regulations.

Section VII:
Linkage of Outcomes Assessment with Strategic Planning



Section VIII: Appendices

A. Provide blank copies of all the assessment instruments that will be used as measures of intended student learning outcomes and intended operational outcomes.

B. Provide blank copies of all the evaluation rubrics associated with the assessment instruments identified in above. These should be separated by tabs and identified in a table of contents.

8.1 Format of Assessment Tools
8.1.1 Rubrics for Business Communication for Post Graduate students
8.1.2 Rubrics for Business Communication for Under Graduate students
8.1.3 Rubrics for Behavioural Science for Post Graduate students
8.1.4 Rubrics for Behavioural Science for Under Graduate students
8.1.5 Rubrics for Foreign Business Language for Post Graduate students
8.1.6 Rubrics for Foreign Business Language for Under Graduate students
8.1.7 Rubrics for Dissertation for Post Graduate students
8.3 Format of Surveys
8.3.1 Format of Exit Survey Post Graduate Program -MBA (A&FB)
8.3.2 Format of of Exit Survey for Undergraduate Program
8.4 Comprehensive Examination
8.4.1 Guidelines for Comprehensive Examination
8.4.2 Format of Comprehensive Examination

Agriculture Sciences

Leadership Team

Dean/Domain Head: Dr. Sunil Saran						
S.No	**Institution Name**	**Head of the Institution**	**Programme Title**	**Programme Leaders**	**Programme Review Committee (PRC of 3-5 Members)**	**Role**
1	AIOA	Dr. Naleeni Ramawat	MBA(A&FB)	Ms. Beila Sehdev Krishnan	Dr. Naleeni Ramawat	Chair
					Ms. Beila Sehdev Krishnan	Member
					Ms. Sneha Ghai	Member
			B.Sc.(A&FB)	Mr Aditya Kumar	Mr Aditya Kumar Verma	Chair
					Dr Sangeeta Pandey	
					Mr Deepshikha Thakur	Member
					Dr Shalini Singh	Member
			M.Sc. (Agri) Agronomy	Dr Renu Yadav	Dr. Naleeni Ramawat	Chair
					Dr Deepak Sapkal	Member
					Mr. Aditya Verma	Member
2	AIHSR	Dr. Nutan Kaushik	MSc Horticulture (Post Harvest Management)	Dr Neeru Dubey	Dr. Nutan Kaushik	Chair
					Dr Anshu Sharma	Member
					Dr Naleeni Ramawat	Member