HINDU COLLEGE

CO PO MAPPING

Course Outcomes – Program Outcomes (COPO) Mapping and Attainment

Program Outcomes (POs)-B.Sc. (H) Botany

PO1 Disciplinary knowledge

Capable of demonstrating comprehensive knowledge and understanding of one or more disciplines that form a part of an undergraduate programme of study.

PO2 Scientific reasoning

Ability to analyse, interpret and draw conclusions from quantitative/qualitative data; and critically evaluate ideas, evidence and experiences from an open-minded and reasoned perspective.

PO3 Critical thinking

Capability to apply analytic thought to a body of knowledge; analyse and evaluate evidence, arguments, claims, beliefs on the basis of empirical evidence; identify relevant assumptions or implications; formulate coherent arguments; critically evaluate practices, policies and theories by following scientific approach to knowledge development

PO4 Problem solving

Capacity to extrapolate from what one has learned and apply their competencies to solve different kinds of non-familiar problems, rather than replicate curriculum content knowledge; and apply one's learning to the real life situations.

PO5 Analytical reasoning

Ability to evaluate the reliability and relevance of evidence; identify logical flaws and holes in the arguments of others; analyse and synthesise data from a variety of sources; draw valid conclusions and support them with evidence and examples, and addressing opposing viewpoints.

PO6 Reflective thinking

Critical sensibility to lived experiences, with self-awareness and reflexivity of both self and society.

PO7 Multicultural competence

Possess knowledge of the values and beliefs of multiple cultures and a global perspective; and capability to effectively engage in a multicultural society and interact respectfully with diverse groups.

PO8 Lifelong learning

Ability to acquire knowledge and skills, including 'learning how to learn', that are necessary for participating in learning activities throughout life, through self-paced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives, and adapting to changing trades and demands of work place through knowledge/skill development/reskilling

PO9 Self-directed learning

Ability to work independently, identify appropriate resources required for a project, and manage a project through to completion.

PO10 Communication Skills

Ability to express thoughts and ideas effectively in writing and orally; Communicate with others using appropriate media; confidently share one's views and express herself/himself; demonstrate the ability to listen carefully, read and write analytically, and present complex information in a clear and concise manner to different groups.

PO11 Research-related skills

A sense of inquiry and capability for asking relevant/appropriate questions, problematizing, synthesising and articulating; Ability to recognise cause-and-effect relationships, define problems, formulate hypotheses, test hypotheses, analyse, interpret and draw conclusions from data, establish hypotheses, predict cause-and-effect relationships; ability to plan, execute and report the results of an experiment or investigation.

PO12 Cooperation/Team work

Ability to work effectively and respectfully with diverse teams; facilitate cooperative or coordinated effort on the part of a group, and act together as a group or a team in the interests of a common cause and work efficiently as a member of a team.

PO13 Information/digital literacy

Capability to use ICT in a variety of learning situations, demonstrate ability to access, evaluate, and use a variety of relevant information sources; and use appropriate software for analysis of data.

PO14 Moral and ethical awareness/reasoning

Ability to embrace moral/ethical values in conducting one's life, formulate a position/argument about an ethical issue from multiple perspectives, and use ethical practices in all work. Capable of demonstrating the ability identify ethical issues related to one's work avoid unethical behaviour such as fabrication, falsification or misrepresentation of data or committing plagiarism, not adhering to intellectual property rights; appreciating environmental and sustainability issues; and adopting objective, unbiased and truthful actions in all aspects of work.

PO15 Leadership readiness/qualities

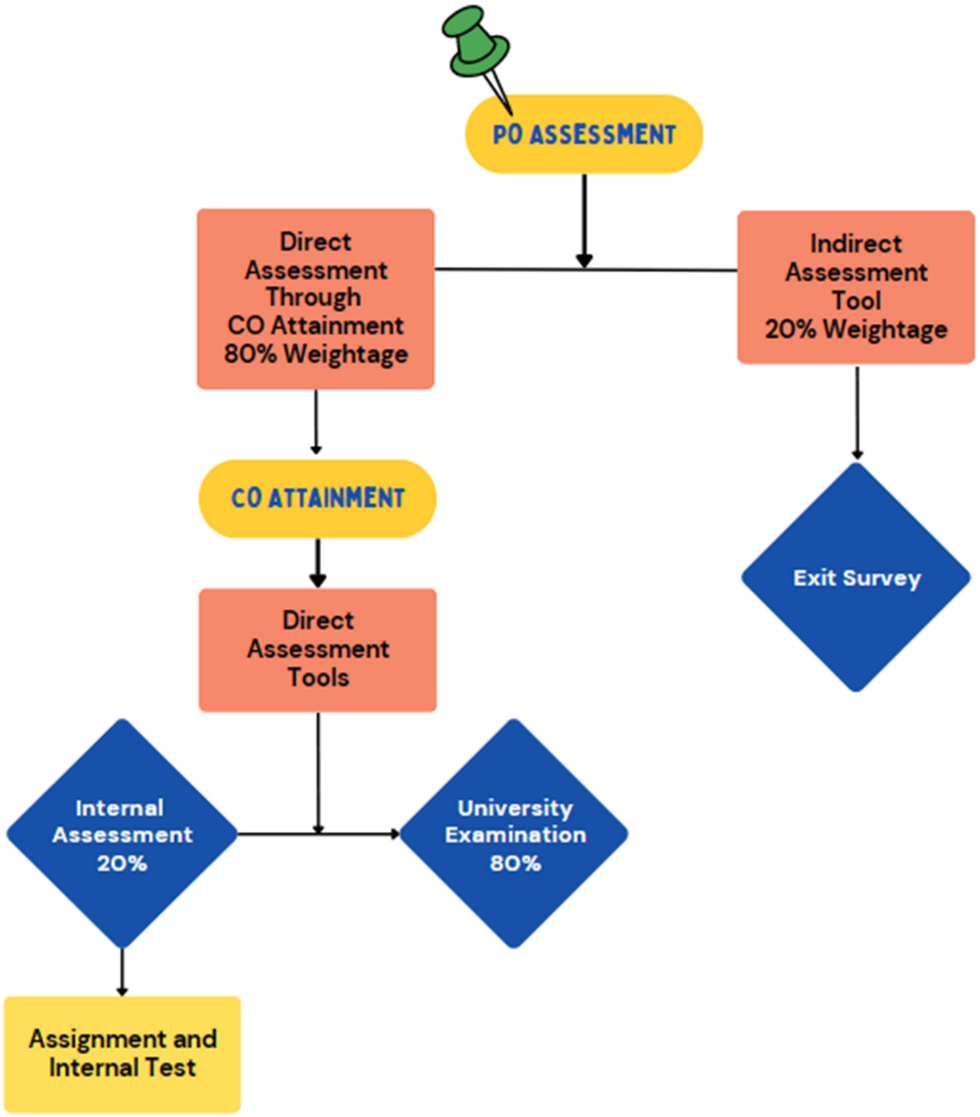
Capability for mapping out the tasks of a team or an organization, and setting direction, formulating an inspiring vision, building a team who can help achieve the vision, motivating and inspiring team members to engage with that vision, and using management skills to guide people to the right destination, in a smooth and efficient way.

Course Outcomes (CO): B.Sc. (H) Botany

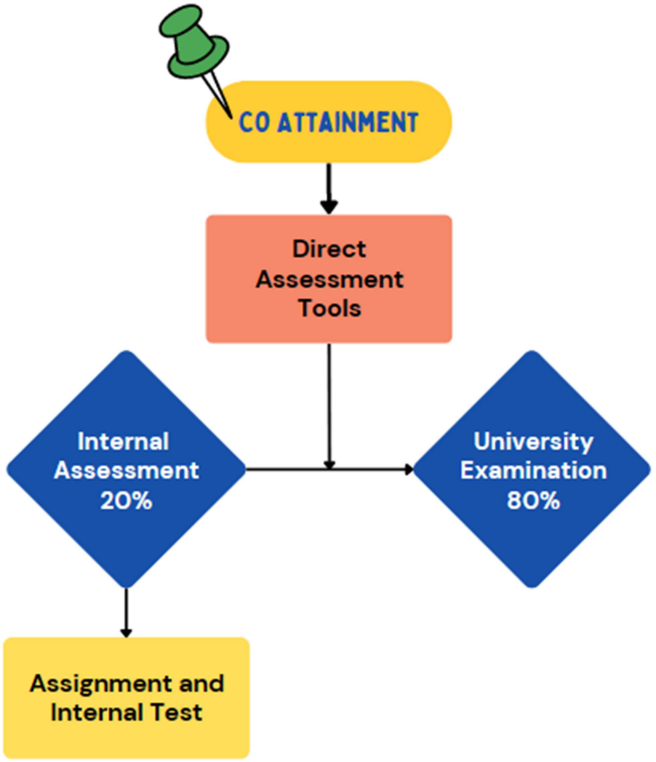
Sem	Code	Course	CO	Statement
I	32161101	Microbiology And Phycology	CO1	Students would have understanding of the classification, characteristic features, cell structure.
			CO2	Growth and reproduction in viruses, bacteria, and various groups of marine and fresh water algae.
			CO3	Ecological and economic importance.
II	32161201	Mycology And Phytopathology	CO1	Understand the world of fungi, lichens and pathogens of plants.
			CO2	Understand characteristics the ecological and economic significance of the fungi and lichens.
			CO3	Understand the application of mycology in various fields of economic and ecological.
			CO4	Significance
			CO5	Understand the economic and pathological importance of fungi, bacteria and viruses
			CO6	Identify common plant diseases and their control measures.
III	32161301	Anatomy Of Angiosperms	CO1	Knowledge of various cells and tissues, meristem, epidermal and vascular tissue system in plants.
			CO2	Various aspects of growth, development of the tissues and differentiation of various plant organs. Knowledge of basic structure and organization of plant parts in angiosperms.
			CO3	Correlation of structure with morphology and functions.
IV	32161401	Molecular Biology	CO1	Understanding of nucleic acid, organization of DNA in prokaryotes and Eukaryotes, DNA replication mechanism, genetic code and transcription process.
			CO2	Processing and modification of RNA and translation process, function and regulation of expression.
			CO3	Application in biotechnology.

V	32161501	Reproductive Biology Of Angiosperms	CO1	Induction of flowering, molecular and genetic aspects of flower development.
			CO2	Anther structure, pollen development, dispersal and pollination.
			CO3	Ovule, embryo sac development and fertilization.
			CO4	Endosperm development and its importance.
			CO5	Alternative pathways of reproduction and their importance.
			CO6	Student would be able to apply this knowledge for conservation of plants, pollinators and fruit development.
VI	32161601	Plant Metabolism	CO1	Concept and significance of metabolic redundancy in plants.
			CO2	Students will also be able to learn the similarity and differences in metabolic pathways in animals and plants.
			CO3	To have understanding of water and nutrient uptake and movement in plants, role of mineral elements, translocation of sugars, Role of various plant growth regulators, phytochrome cytochromes and phototropins, and flowering stimulus.

ASSESSMENT TOOLS:



CO Attainment Tools:



Internal Assessment Score:

➢ The internal assessment score is determined as per the following rubrics:

Range	Level of Attainment
60-70 %	1
>70 to <80 %	2
>=80 %	3

University Examination Score:

➢ The University examination score is determined as per the following rubrics:

Range	Level of Attainment
60-70 %	1
>70 to <80 %	2
>=80 %	3

Overall CO Attainment

➢ The overall CO attainment is calculated on a scale of 3 by considering 80 % of the level of attainment from University examination and 20% of the level of attainment from Internal assessment.

Program: B.Sc. (H) Botany
Course Name: MICROBIOLOGY AND PHYCOLOGY
Course Code: 32161101
Semester I

COPO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14	PO15
CO1	x														
CO2		x													
CO3								x							

Attainment (Direct Assessment)

Roll No.	Name	Internal Assessment Out of 25	University Exam. Out of Scale 10
19026556001	KAPIL GARG	23	8
19026556002	SOUMYA SINGH	17	8
19026556003	SANDRA S. P.	19	7
19026556004	BANITA GAWARIA	24	9
19026556005	DIYA SHARMA	23	10
19026556006	ARADHYA PANWAR	22	9
19026556007	B. GOPAL	21	9
19026556008	KABALAPALLY JAGAN	18	7
19026556009	KHATRAVATH AJAY	20	8
19026556010	SIMRAN CHAUHAN	21	9
19026556012	BOKKA PRAVARDHAN	19	7
19026556013	NAVEEN	24	9

19026556014	DIVITA	23	9
19026556015	SIMRAN MORAL	16	8
19026556016	DEVIKA K. V.	20	9
19026556017	PRAGYA	22	9
19026556018	ARVIND KUMAR VAISHNAV	22	9
19026556019	NITIKA	22	9
19026556021	PERRY WINKLE	19	9
19026556022	NIKHILA KUNNUTHOTTIYIL	23	9
19026556023	ABHAY BANYAL	23	10
19026556024	MANASVI CHATURVEDI	24	10
19026556025	AKANKSHA KUSHWAHA	25	10
19026556026	RANIA RAZAK KUNHIPARAMBATH	19	8
19026556027	SIYA DEONIAN	23	10
19026556028	KASHISH GANGASH	21	9
19026556029	PRACHI SHARMA	21	9
19026556030	NIHARIKA SINGH	8	5
19026556031	ROHAN YADAV	22	9
19026556032	VASUPRIYA	21	9
19026556033	MOHAMMED SANEEN P	20	8

Level of CO Attainment

COs	Attempts	Internal Assessment	Level of Attainment	University Examination	Level of Attainment	*Overall CO Attainment
CO1	No: of attempts >= 60%	30	3	30	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	96.77		96.77		
CO2	No: of attempts >= 60%	30	3	30	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	96.77		96.77		
CO3	No: of attempts >= 60%	30	3	30	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	96.77		96.77		
					Average	**3**

*Overall Attainment = (20% of Internal Assessment Attainment + 80% of University Examination Attainment)

Course Level COPO Metrix

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14	PO15
CO1	3														
CO2		3													
CO3								3							
Overall	**3**	**3**						**3**							

Program: B.Sc. (H) Botany
Course Name: MYCOLOGY AND PHYTOPATHOLOGY
Course Code: 32161201
Semester II

COPO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14	PO15
CO1	x														
CO2		x													
CO3				x		x									
CO4								x							
CO5			x		x										
CO6									x			x		x	

Attainment (Direct Assessment)

Roll No.	Name	Internal Assessment Out of 25	University Exam. Out of Scale 10
19026556001	KAPIL GARG	25	10
19026556002	SOUMYA SINGH	21	9
19026556003	SANDRA S. P.	24	9
19026556004	BANITA GAWARIA	25	10
19026556005	DIYA SHARMA	25	10
19026556006	ARADHYA PANWAR	25	10
19026556007	B. GOPAL	23	9
19026556008	KABALAPALLY JAGAN	23	9
19026556009	KHATRAVATH AJAY	23	9
19026556010	SIMRAN CHAUHAN	23	9

19026556012	BOKKA PRAVARDHAN	22	9
19026556013	NAVEEN	23	10
19026556014	DIVITA	25	10
19026556015	SIMRAN MORAL	23	9
19026556016	DEVIKA K. V.	25	10
19026556017	PRAGYA	25	10
19026556018	ARVIND KUMAR VAISHNAV	25	10
19026556019	NITIKA	24	10
19026556021	PERRY WINKLE	24	9
19026556022	NIKHILA KUNNUTHOTTIYIL	24	10
19026556023	ABHAY BANYAL	25	10
19026556024	MANASVI CHATURVEDI	24	10
19026556025	AKANKSHA KUSHWAHA	25	10
19026556026	RANIA RAZAK KUNHIPARAMBATH	22	9
19026556027	SIYA DEONIAN	25	10
19026556028	KASHISH GANGASH	23	9
19026556029	PRACHI SHARMA	23	10
19026556030	NIHARIKA SINGH	23	9
19026556031	ROHAN YADAV	24	9
19026556032	VASUPRIYA	24	10
19026556033	MOHAMMED SANEEN P	23	9

Level of CO Attainment

COs	Attempts	Internal Assessment	Level of Attainment	University Examination	Level of Attainment	*Overall CO Attainment
CO1	No: of attempts >= 60%	31	3	31	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	100		100		
CO2	No: of attempts >= 60%	31	3	31	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	100		100		
CO3	No: of attempts >= 60%	31	3	31	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	100		100		
CO4	No: of attempts >= 60%	31	3	31	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	100		100		
CO5	No: of attempts >= 60%	31	3	31	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	100		100		
CO6	No: of attempts >= 60%	31	3	31	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	100		100		
					Average	**3**

*Overall Attainment = (20% of Internal Assessment Attainment + 80% of University Examination Attainment)

Course Level COPO Metrix

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14	PO15
CO1	3														
CO2		3													
CO3				3		3									
CO4								3							
CO5			3		3										
CO6									3			3		3	
Overall	**3**	**3**	**3**		**3**			**3**	**3**			**3**		**3**	

Program: B.Sc. (H) Botany
Course Name: ANATOMY OF ANGIOSPERMS
Course Code: 32161301
Semester III

COPO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14	PO15
CO1	x														
CO2		x								x					
CO3					x				x						

Attainment (Direct Assessment)

Roll No.	Name	Internal Assessment Out of 25	University Exam. Out of Scale 10
19026556001	KAPIL GARG	24	10
19026556002	SOUMYA SINGH	25	9
19026556003	SANDRA S. P.	22	8
19026556004	BANITA GAWARIA	24	8
19026556005	DIYA SHARMA	24	9
19026556006	ARADHYA PANWAR	24	9
19026556007	B. GOPAL	24	9
19026556008	KABALAPALLY JAGAN	23	7
19026556009	KHATRAVATH AJAY	23	8
19026556010	SIMRAN CHAUHAN	23	9
19026556012	BOKKA PRAVARDHAN	23	9
19026556013	NAVEEN	24	8

19026556014	DIVITA	24	9
19026556015	SIMRAN MORAL	22	8
19026556016	DEVIKA K. V.	24	10
19026556017	PRAGYA	24	9
19026556018	ARVIND KUMAR VAISHNAV	23	8
19026556019	NITIKA	24	9
19026556021	PERRY WINKLE	25	9
19026556022	NIKHILA KUNNUTHOTTIYIL	24	10
19026556023	ABHAY BANYAL	24	9
19026556024	MANASVI CHATURVEDI	25	9
19026556025	AKANKSHA KUSHWAHA	24	9
19026556026	RANIA RAZAK KUNHIPARAMBATH	21	9
19026556027	SIYA DEONIAN	24	9
19026556028	KASHISH GANGASH	23	9
19026556029	PRACHI SHARMA	24	10
19026556030	NIHARIKA SINGH	24	9
19026556031	ROHAN YADAV	23	9
19026556032	VASUPRIYA	24	9
19026556033	MOHAMMED SANEEN P	23	8

Level of CO Attainment

COs	Attempts	Internal Assessment	Level of Attainment	University Examination	Level of Attainment	*Overall CO Attainment
CO1	No: of attempts >= 60%	31	3	31	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	100		100		
CO2	No: of attempts >= 60%	31	3	31	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	100		100		
CO3	No: of attempts >= 60%	31	3	31	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	100		100		
					Average	**3**

*Overall Attainment = (20% of Internal Assessment Attainment + 80% of University Examination Attainment)

Course Level COPO Metrix

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14	PO15
CO1	3														
CO2		3								3					
CO3					3				3						
Overall	**3**	**3**			**3**				**3**	**3**					

Program: B.Sc. (H) Botany
Course Name: MOLECULAR BIOLOGY
Course Code: 32161401
Semester IV

COPO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14	PO15
CO1	x	x			x			x			x				
CO2	x		x						x	x					
CO3		x		x					x		x	x			

Attainment (Direct Assessment)

Roll No.	Name	Internal Assessment Out of 25	University Exam. Out of Scale 10
19026556001	KAPIL GARG	22	10
19026556002	SOUMYA SINGH	23	9
19026556003	SANDRA S. P.	22	9
19026556004	BANITA GAWARIA	23	10
19026556005	DIYA SHARMA	23	10
19026556006	ARADHYA PANWAR	21	9
19026556007	B. GOPAL	23	9
19026556008	KABALAPALLY JAGAN	20	9
19026556009	KHATRAVATH AJAY	20	9
19026556010	SIMRAN CHAUHAN	23	10

19026556012	BOKKA PRAVARDHAN	21	9
19026556013	NAVEEN	20	9
19026556014	DIVITA	20	9
19026556015	SIMRAN MORAL	21	9
19026556016	DEVIKA K. V.	24	10
19026556017	PRAGYA	24	9
19026556018	ARVIND KUMAR VAISHNAV	21	9
19026556019	NITIKA	22	10
19026556021	PERRY WINKLE	25	10
19026556022	NIKHILA KUNNUTHOTTIYIL	23	9
19026556023	ABHAY BANYAL	24	10
19026556024	MANASVI CHATURVEDI	25	10
19026556025	AKANKSHA KUSHWAHA	22	9
19026556026	RANIA RAZAK KUNHIPARAMBATH	22	9
19026556027	SIYA DEONIAN	24	10
19026556028	KASHISH GANGASH	25	10
19026556029	PRACHI SHARMA	22	10
19026556030	NIHARIKA SINGH	23	9
19026556031	ROHAN YADAV	23	9
19026556032	VASUPRIYA	24	9
19026556033	MOHAMMED SANEEN P	20	9

Level of CO Attainment

COs	Attempts	Internal Assessment	Level of Attainment	University Examination	Level of Attainment	*Overall CO Attainment
CO1	No: of attempts >= 60%	31	3	31	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	100		100		
CO2	No: of attempts >= 60%	31	3	31	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	100		100		
CO3	No: of attempts >= 60%	31	3	31	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	100		100		
					Average	**3**

*Overall Attainment = (20% of Internal Assessment Attainment + 80% of University Examination Attainment)

Course Level COPO Metrix

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14	PO15
CO1	3	3			3			3			3				
CO2	3		3						3	3					
CO3		3		3					3		3	3			
Overall	**3**	**3**	**3**	**3**	**3**			**3**	**3**	**3**	**3**	**3**			

Program: B.Sc. (H) Botany
Course Name: Reproductive Biology of Angiosperms
Course Code: 32161501
Semester V

COPO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14	PO15
CO1			x												
CO2	x				x										
CO3		x													
CO4								x							
CO5							x				x				
CO6										x				x	

Attainment (Direct Assessment)

Roll No.	Name	Internal Assessment Out of 25	University Exam. Out of Scale 10
19026556001	KAPIL GARG	24	10
19026556002	SOUMYA SINGH	18	10
19026556003	SANDRA S. P.	17	9
19026556004	BANITA GAWARIA	24	10
19026556005	DIYA SHARMA	24	9
19026556006	ARADHYA PANWAR	22	10
19026556007	B. GOPAL	21	9

19026556008	KABALAPALLY JAGAN	18	9
19026556009	KHATRAVATH AJAY	21	8
19026556010	SIMRAN CHAUHAN	21	9
19026556012	BOKKA PRAVARDHAN	19	10
19026556013	NAVEEN	22	9
19026556014	DIVITA	23	9
19026556015	SIMRAN MORAL	16	10
19026556016	DEVIKA K. V.	20	10
19026556017	PRAGYA	23	10
19026556018	ARVIND KUMAR VAISHNAV	22	9
19026556019	NITIKA	22	9
19026556021	PERRY WINKLE	19	10
19026556022	NIKHILA KUNNUTHOTTIYIL	23	9
19026556023	ABHAY BANYAL	23	9
19026556024	MANASVI CHATURVEDI	24	10
19026556025	AKANKSHA KUSHWAHA	24	10
19026556026	RANIA RAZAK KUNHIPARAMBATH	19	9
19026556027	SIYA DEONIAN	23	9
19026556028	KASHISH GANGASH	22	9
19026556029	PRACHI SHARMA	21	10
19026556030	NIHARIKA SINGH	9	9
19026556031	ROHAN YADAV	21	9
19026556032	VASUPRIYA	21	9
19026556033	MOHAMMED SANEEN P	22	9

Level of CO Attainment

COs	Attempts	Internal Assessment	Level of Attainment	University Examination	Level of Attainment	*Overall CO Attainment
CO1	No: of attempts >= 60%	30	3	30	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	96.77		96.77		
CO2	No: of attempts >= 60%	30	3	30	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	96.77		96.77		
CO3	No: of attempts >= 60%	30	3	30	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	96.77		96.77		
CO4	No: of attempts >= 60%	30	3	30	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	96.77		96.77		
CO5	No: of attempts >= 60%	30	3	30	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	96.77		96.77		
CO6	No: of attempts >= 60%	30	3	30	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	96.77		96.77		
					Average	**3**

*Overall Attainment = (20% of Internal Assessment Attainment + 80% of University Examination Attainment)

Course Level COPO Metrix

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14	PO15
CO1			3												
CO2	3				3										
CO3		3													
CO4								3							
CO5							3				3				
CO6										3				3	
Overall	**3**	**3**	**3**		**3**		**3**	**3**		**3**	**3**			**3**	

Program: B.Sc. (H) Botany
Course Name: PLANT METABOLISM
Course Code: 32161601
Semester VI

COPO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14	PO15
CO1						x									
CO2									x						
CO3												x	x		x

Attainment (Direct Assessment)

Roll No.	Name	Internal Assessment Out of 25	University Exam. Out of Scale 10
19026556001	KAPIL GARG	22	10
19026556002	SOUMYA SINGH	22	9
19026556003	SANDRA S. P.	20	7
19026556004	BANITA GAWARIA	24	10
19026556005	DIYA SHARMA	22	9
19026556006	ARADHYA PANWAR	22	9
19026556007	B. GOPAL	22	7
19026556008	KABALAPALLY JAGAN	14	5
19026556009	KHATRAVATH AJAY	16	5

19026556010	SIMRAN CHAUHAN	22	9
19026556012	BOKKA PRAVARDHAN	15	5
19026556013	NAVEEN	17	9
19026556014	DIVITA	22	9
19026556015	SIMRAN MORAL	16	9
19026556016	DEVIKA K. V.	22	9
19026556017	PRAGYA	22	9
19026556018	ARVIND KUMAR VAISHNAV	19	9
19026556019	NITIKA	18	8
19026556021	PERRY WINKLE	23	8
19026556022	NIKHILA KUNNUTHOTTIYIL	21	9
19026556023	ABHAY BANYAL	24	10
19026556024	MANASVI CHATURVEDI	24	10
19026556025	AKANKSHA KUSHWAHA	22	9
19026556026	RANIA RAZAK KUNHIPARAMBATH	20	8
19026556027	SIYA DEONIAN	23	9
19026556028	KASHISH GANGASH	23	9
19026556029	PRACHI SHARMA	23	10
19026556030	NIHARIKA SINGH	16	6
19026556031	ROHAN YADAV	17	9
19026556032	VASUPRIYA	23	10
19026556033	MOHAMMED SANEEN P	15	5

Level of CO Attainment

COs	Attempts	Internal Assessment	Level of Attainment	University Examination	Level of Attainment	*Overall CO Attainment
CO1	No: of attempts >= 60%	30	3	27	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	96.77		87.09		
CO2	No: of attempts >= 60%	30	3	27	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	96.77		87.09		
CO3	No: of attempts >= 60%	30	3	27	3	3
	Total Attempts	31		31		
	% of attempts >= 60%	96.77		87.09		
					Average	**3**

*Overall Attainment = (20% of Internal Assessment Attainment + 80% of University Examination Attainment)

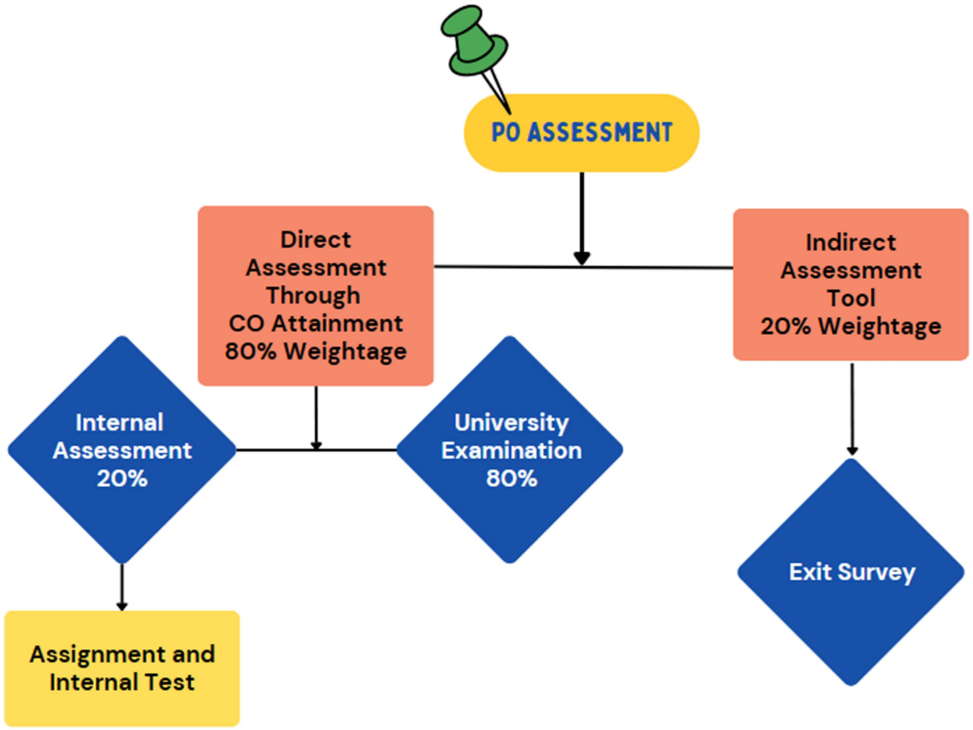
Course Level COPO Metrix

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14	PO15
CO1						3									
CO2									3						
CO3												3	3		3
Overall						**3**			**3**			**3**	**3**		**3**

Program level CO-PO matrix of one course from each semester:

Sem	Code	POs / Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14	PO15
I	32161101	MICROBIOLOGY AND PHYCOLOGY	3	3						3							
II	32161201	MYCOLOGY AND PHYTOPATHOLOGY	3	3	3		3			3	3			3		3	
III	32161301	ANATOMY OF ANGIOSPERMS	3	3			3				3	3					
IV	32161401	MOLECULAR BIOLOGY	3	3	3	3	3			3	3		3	3			
V	32161501	Reproductive Biology of Angiosperms	3	3	3		3		3	3		3	3			3	
VI	32161601	PLANT METABOLISM						3			3			3	3		3
Overall			**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**

PO Assessment Tools:



	Assessment Methods	Weightage 1	Weightage 2	Remarks
DIRECT ASSESSMENT	University Examination	80%	80%	Assessment through Cos attainment
	Assignments	20%		
	Internal Examination			
INDIRECT ASSESSMENT	Exit Survey	100%	20%	Direct evaluation to POs

Indirect PO Assessment (Through Exit Survey)

S. No.	Question	Score					Pos	No: of Attempts >=60% of Excellent Score	Total No. of Attempts
		Excellent (5)	Very Good (4)	Good (3)	Fair (2)	Poor (1)			
1	Syllabus is need based and suitable to the course.	14	12	3	2	-	PO1	29	31
2	The curriculum contains adequate balance between theory and practicals.	15	9	4	3	-	PO2, PO3	28	31
3	The curriculum provides options for continuous assessment through quiz and exams	5	11	14	1	-	PO4	30	31
4	The curriculum gives exposure to latest developments in the field.	8	18	4	1	-	PO5, PO11	30	31
5	Curriculum developed and implementation have relevance to the local and national care needs	2	12	15	2	-	PO6, PO14	29	31
6	The curriculum contains sufficient elective papers	19	8	4	-	-	PO7	31	31
7	The curriculum has components to address requirements of job.	5	7	16	2	1	PO8	28	31
8	The curriculum facilitates adequate self-learning.	7	17	6	1	-	PO9	30	31
9	The curriculum provides the ability to express thoughts and ideas effectively in writing and orally.	9	19	2	1	-	PO10	30	31
10	The curriculum provides experiential learning through student seminar, group discussion, projects, field visits.	3	4	20	3	1	PO12, PO15	27	31
11	Learning through ICT tools such as LCD projector, Multimedia, etc. is effective.	7	16	4	2	2	PO13	27	31

Indirect PO Assessment (Attainment Through Survey)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14	PO15
No: of Attempts >=60% of Excellent Score	29	28	28	30	30	29	31	28	30	30	30	27	27	29	27
Total No. of Attempts	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
% of attempts >= 60%	93.54	90.32	90.32	96.77	96.77	93.54	100	90.32	96.77	96.77	96.77	87.09	87.09	93.54	87.09
Attainment	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**

% of attempts >= 60%	Level of Attainment
60-70 %	1
>70 to <80 %	2
>=80 %	3

PO ATTAINMENT LEVEL:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14	PO15
*PO Attainment	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Direct Attainment	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Indirect Attainment	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

*PO Attainment = (80% of Direct Attainment + 20% of Indirect Attainment)