

MAHARISHI MARKANDESHWAR DEEMED TO BE UNIVERSITY, MULLANA - AMBALA  
(Established under Section 3 of the UGC Act 1956)(NAAC Accredited Grade 'A' University)

Name of the Discipline: B.Sc.(Hons)Agriculture: w.e.f. April., 2021  
Scheme and Syllabus (Batch 2021 onwards)  
Semester I

S.No.	Paper Code	Paper	Hrs/Week				Examination Marks				Total
			L	T	P	Cr.	Theory		Practical		
							External	Internal	External	Internal	
1	HOR- 101	Fundamentals of Horticulture	2	0	2	3	60	40	40	60	200
2	BCT- 101	Fundamentals of Biochemistry	3	0	2	4	60	40	40	60	200
3	SOL- 101	Fundamentals of Soil Science	2	0	2	3	60	40	40	60	200
4	FOR- 101	Introduction to Forestry	1	0	2	2	60	40	40	60	200
5	ENG- 101	Comprehension & Communication Skills in English	1	0	2	2	60	40	40	60	200
6	AGR- 101	Fundamentals of Agronomy	3	0	2	4	60	40	40	60	200
7	BIO- 101/ MTH 101	Introductory Biology/	2	0	2	3	60	40	40	60	200
		or Elementary Mathematics	3	0	0	3	60	40	-	-	100
8	AGR- 103	Agricultural Heritage	1	0	0	1	60	40	-	-	100
9	SOC- 101	Rural Sociology & Educational Psychology	2	0	0	2	60	40	-	-	100
10	HVE- 101	Human Values & Ethics	1	0	0	1	60	40	-	-	100
11	*NSS/NCC - 101	NSS/NCC	0	0	2	-	-	-	-	100*	S/US
		TOTAL	18/19	0	14/12	25	600	400	280/240	420/360	1700/1600

\*Non credited course  
S/US (Satisfactory/Unsatisfactory)

*[Signature]*

Department of Agriculture  
Maharishi Markandeshwar  
Deemed to be University,  
Mullana - Ambala

Approved by the AC vide its Res.No. 26 dated 27-08-2021 on the recommendations of  
the Faculty of Agriculture vide its Res.No. 1.1 and BOS vide Res. No. 2 dated 09-9-2021.

MAHARISHI MARKANDESHWAR DEEMED TO BE UNIVERSITY, MULLANA - AMBALA  
(Established under Section 3 of the UGC Act 1956)(NAAC Accredited Grade 'A' University)

MAHARISHI MARKANDESHWAR (DEEMED TO BE UNIVERSITY)  
MULLANA - (AMBALA)

Name of the Discipline: **B.Sc. (Hons) Agriculture: w.e.f. November, 2020**

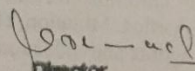
Scheme and Syllabus (Batch 2020 onwards)

**Semester-II**

S.No.	Paper Code	Paper	Hrs/Week				Examination Marks				Total
			L	T	P	Cr.	Theory		Practical		
							External	Internal	External	Internal	
1	PBG 102	Fundamentals of Genetics	2	0	2	3	60	40	40	60	200
2	MIC 102	Fundamentals of Microbiology	2	0	2	3	60	40	40	60	200
3	AGE 102	Soil and Water Conservation Engineering	1	0	2	2	60	40	40	60	200
4	CPH 102	Fundamentals of Crop Physiology	2	0	2	3	60	40	40	60	200
5	AEC 102	Fundamentals of Agricultural Economics	2	0	0	2	60	40	-	-	100
6	PTH 102	Fundamentals of Plant Pathology	2	0	2	3	60	40	40	60	200
7	ENT 102	Fundamentals of Entomology	3	0	2	4	60	40	40	60	200
8	EXT 102	Fundamentals of Agricultural Extension Education	2	0	2	3	60	40	40	60	200
9	COMP-102	Introduction to Computer Application	1	0	2	2	60	40	40	60	200
10	NSS/ NCC 102*	NSS/NCC	0	0	2	-	-	-	-	100*	S/US**
		TOTAL	17	0	16	25	540	360	320	480	1700

\*Non credited course

\*\*S/US (Satisfactory/Unsatisfactory)

  
Director  
Department of Agriculture  
Maharishi Markandeshwar  
(Deemed to be University),  
Mullana-Ambala, 133207, HR

MAHARISHI MARKANDESHWAR (DEEMED TO BE UNIVERSITY)  
MULLANA - (AMBALA)

Name of the Discipline: **B.Sc. (Hons) Agriculture: w.e.f. November, 2020)**

Scheme and Syllabus (Batch 2020 onwards)

**Semester-III**

S.No.	Paper Code	Paper	Hrs/Week				Examination Marks				Total
			L	T	P	Cr.	Theory		Practical		
							External	Internal	External	Internal	
1	AGR 201	Crop Production Technology - I (Kharif Crops)	2	0	2	3	60	40	40	60	200
2	PBG 201	Fundamentals of Plant Breeding	2	0	2	3	60	40	40	60	200
3	AEC 201	Agriculture Finance and Cooperation	2	0	2	3	60	40	40	60	200
4	INF 201	Agri-Informatics	1	0	2	2	60	40	40	60	200
5	AGE 201	Farm Machinery and Power	2	0	2	3	60	40	40	60	200
6	VPT 201	Production Technology for Vegetables and Spices	1	0	2	2	60	40	40	60	200
7	EVS 201	Environmental Studies and Disaster Management	2	0	2	3	60	40	40	60	200
8	STT 201	Statistical Methods	2	0	2	3	60	40	40	60	200
9	LPM 201	Livestock and Poultry Management	1	0	2	2	60	40	40	60	200
10	NSS/NCC 102*	NSS/NCC	0	0	2	-	-	-	-	100*	S/US**
		<b>TOTAL</b>	<b>15</b>	<b>0</b>	<b>18</b>	<b>24</b>	<b>540</b>	<b>360</b>	<b>360</b>	<b>540</b>	<b>1800</b>

\*Non credited course

\*\*S/US (Satisfactory/Unsatisfactory)

*Jan - 21*

Department of Agriculture  
Maharishi Markandeshwar  
Deemed to be University

**Name of the Discipline: B.Sc. (Hons) Agriculture: w.e.f. April, 2021)**  
Scheme and Syllabus (Batch 2020/21 onwards)  
Semester-IV

S.No.	Paper Code	Paper	Hrs/Week				Examination Marks				Total
			L	T	P	Cr.	Theory		Practical		
							External	Internal	External	Internal	
1	AGR 202	Crop Production Technology -II (Rabi Crops)	1	0	2	2	60	40	40	60	200
2	VPT 202	Production Technology for Ornamental Crops, MAP and Landscaping	1	0	2	2	60	40	40	60	200
3	AGE 202	Renewable Energy and Green Technology	1	0	2	2	60	40	40	60	200
4	SOL 202	Problematic Soils and their Management	2	0	0	2	60	40	-	-	100
5	HOR 202	Production Technology for Fruit and Plantation Crops	1	0	2	2	60	40	40	60	200
6	PBG 202	Principles of Seed Technology	1	0	2	2	60	40	40	60	200
7	AGR 204	Farming System & Sustainable Agriculture	1	0	0	1	60	40	-	-	100
8	AEC 202	Agricultural Marketing Trade & Prices	2	0	2	3	60	40	40	60	200
9	AGR 206	Introductory Agrometeorology & Climate Change	2	0	1	3	60	40	40	60	200
10	BCT 202	Agricultural Biotechnology	2	0	2	3	60	40	40	60	200
11	<i>ETEC-VII</i>	<i>Elective Course Protected Cultivation</i>	2	0	2	3	60	40	40	60	200
		TOTAL	16	0	18	25	660	440	360	540	2000

\*Non credited course

\*\*S/US (Satisfactory/Unsatisfactory)

*for use*

Department of Agriculture  
Maharishi Markandeshwar  
Deemed to be University

**Name of the Discipline: B.Sc. (Hons) Agriculture: w.e.f. April, 2021)**  
**Scheme and Syllabus (Batch 2020/21 onwards)**  
**Semester-V**

S.No.	Paper Code	Paper	Hrs/Week				Examination Marks				Total
			L	T	P	Cr.	Theory		Practical		
							External	Internal	External	Internal	
1	PATH 301	Principles of Integrated Disease Management	1	0	2	2	60	40	40	60	200
2	SOL 301	Manures, Fertilizers and Soil Fertility Management	2	0	2	3	60	40	40	60	200
3	ENT 301	Pests of Crops and Stored Grain and their Management	2	0	2	3	60	40	40	60	200
4	PATH 303	Diseases of Field and Horticultural Crops and their Management- I	2	0	2	3	60	40	40	60	200
5	PBG 301	Crop Improvement-I (Kharif Crops)	1	0	2	2	60	40	40	60	200
6	AEC 301	Entrepreneurship Development and Business Communication	1	0	2	2	60	40	40	60	200
7	AGR 301	Geoinformatics and Nano-technology and Precision Farming	2	0	2	3	60	40	40	60	200
8	AGR 303	Practical Crop Production - I (Kharif crops)	0	0	4	2	-	-	40	60	100
9	AEC 303	Farm Management, Production & Resource Economics	1	0	2	2	60	40	40	60	200
10		Elective Course	2	0	2	3	60	40	40	60	200
		<b>TOTAL</b>	<b>14</b>	<b>0</b>	<b>22</b>	<b>25</b>	<b>540</b>	<b>360</b>	<b>400</b>	<b>600</b>	<b>1900</b>

\*Non credited course

\*\*S/US (Satisfactory/Unsatisfactory)

*Handwritten signature*

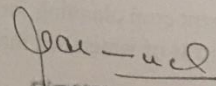
Department of Agriculture  
Maharishi Markandeshwar  
Deemed to be University

**Name of the Discipline: B.Sc. (Hons) Agriculture: w.e.f. April, 2021)**  
**Scheme and Syllabus (Batch 2020/21 onwards)**  
**Semester-VI**

S.No.	Paper Code	Paper	Hrs/Week				Examination Marks				Total
			L	T	P	Cr.	Theory		Practical		
							External	Internal	External	Internal	
1	AGR 302	Rainfed Agriculture & Watershed Management	1	0	2	2	60	40	40	60	200
2	AGE 302	Protected Cultivation and Secondary Agriculture	1	0	2	2	60	40	40	60	200
3	PATH 302	Diseases of Field and Horticultural Crops and their Management-II	2	0	2	3	60	40	40	60	200
4	HOR 302	Post-harvest Management and Value Addition of Fruits and Vegetables	1	0	2	2	60	40	40	60	200
5	ENT 302	Management of Beneficial Insects	1	0	2	2	60	40	40	60	200
6	PBG 302	Crop Improvement-II (Rabi crops)	1	0	2	2	60	40	40	60	200
7	AGR 304	Practical Crop Production -II (Rabi crops)	0	0	4	2	-	-	40	60	100
8	AGR 306	Principles of Organic Farming	1	0	2	2	60	40	40	60	200
9	IPR 302	Intellectual Property Rights	1	0	0	1	60	40	-	-	100
10	FSN 302	Principles of Food Science and Nutrition	2	0	0	2	60	40	-	-	200
		Elective Course	2	0	2	3	60	40	40	60	200
		<b>TOTAL</b>	<b>13</b>	<b>0</b>	<b>20</b>	<b>23</b>	<b>600</b>	<b>400</b>	<b>360</b>	<b>540</b>	<b>2000</b>

\*Non credited course

\*\*S/US (Satisfactory/Unsatisfactory)



Director  
Department of Agriculture  
Maharishi Markandeshwar  
(Deemed to be University),  
Mullana - Ambala, Haryana

Name of the Discipline: B.Sc. (Hons) Agriculture: w.e.f. April, 2021)  
Scheme and Syllabus (Batch 2020/21 onwards)  
Semester-VII

Rural Agricultural Work Experience (RAWE)  
Course Credits: 20 (0+20)

S. No.	Rural Agricultural Work Experience and Agro-industrial Attachment (RAWE & AIA)			Credits
	Activities	CODE	No. of weeks	
1.	General orientation & on campus training by different faculties	RAWE-I	1	14
	Village attachment		8	
	Unit attachment in Univ./ College. KVK/ Research Station attachment		5	
2	Plant clinic	RAWE-II	2	2
3	Agro-industrial attachment	RAWE-III	3	4
	Project report preparation, presentation and evaluation		1	
Total weeks for RAWE & AIA			20	20

- Agro- Industrial Attachment: The students would be attached with the agro-industries for a period of 3 weeks to get an experience of the industrial environment and working.
- Educational tour will be conducted in break between IV & V Semester or VI & VII Semester.

RAWE Component-I:

Village Attachment Training Programme:

S. No.	Activity	Duration
1.	Orientation and Survey of Village	1 week
2.	Agronomical Interventions	1 week
3.	Plant Protection Interventions	1 week
4.	Soil Improvement Interventions (Soil sampling and testing)	1 week
5.	Fruit and Vegetable Production Interventions	1 week
6.	Food Processing and Storage Interventions	1 week
7.	Animal Production Interventions	1 week
8.	Extension and Transfer of Technology activities	1 week

RAWE Component -II:

*Handwritten signature*

**Scheme and Syllabus (Batch 2020/21 onwards)**  
**Semester-VIII**  
**Modules for Skill Development and Entrepreneurship**

A student has to register 20 credits opting for two modules of (0+10) credits each (total 20 credits) from the package of modules.

Paper Code	Title of the module	Credits
MOD-I	Production Technology for Bioagents and Biofertilizers	0+10
MOD-II	Seed Production and Technology	0+10
MOD-III	Mushroom Cultivation Technology	0+10
MOD-IV	Soil, Plant, Water and Seed Testing	0+10
MOD-V	Commercial Beekeeping	0+10
MOD-VI	Poultry Production Technology	0+10
MOD-VII	Commercial Horticulture	0+10
MOD-VIII	Floriculture and Landscaping	0+10
MOD-IX	Food Processing	0+10
MOD-X	Agriculture Waste Management	0+10
MOD-XI	Organic Production Technology	0+10
MOD-XII	Commercial Sericulture	0+10

Note: In addition to above ELP modules other important modules may be given to the students.

**Evaluation of Experiential Learning Programme (ELP):**

S. No.	Parameters	Max. Marks
1.	Project Planning and Writing	10
2.	Presentation	10
3.	Regularity	10
4.	Monthly Assessment	10
5.	Output Delivery	10
6.	Technical Skill Development	10
7.	Entrepreneurship Skills	10
8.	Business Networking Skills	10
9.	Report Writing Skills	10
10.	Final Presentation	10
	Total	100

*Signature*  
Director  
Department of Agriculture  
Maharishi Markandeshwar  
(Deemed to be University)  
Mullana - Ambala



MAHARISHI MARKANDESHWAR DEEMED TO BE UNIVERSITY, MULLANA - AMBALA  
(Established under Section 3 of the UGC Act 1956)(NAAC Accredited Grade 'A' University)

Name of the Discipline: B.Sc. Agriculture-Integrated: w.e.f. April, 2021  
Scheme and Syllabus (Batch 2021 onwards)  
Semester I

No	Paper Code	Paper	Hrs/Week				Examination Marks				Total
			L	T	P	Cr.	Theory		Practical		
							External	Internal	External	Internal	
1	BIO-I	Biology-I	2	-	2	3	60	40	40	60	200
2	CHEM-I	Principles of Chemistry-I	3	-	2	4	60	40	40	60	200
3	PHY-I	Principles of Physics-I	3	-	2	4	60	40	40	60	200
4	COMP-I	Computer Techniques-I	0	-	2	1	-	-	40	60	100
5	ENG-I	Composition and Elementary Grammar	2	-	2	3	60	40	40	60	200
6	MATH-I	Algebra and Trigonometry	3	-	0	3	60	40	-	-	100
		TOTAL	13		10	18	300	200	200	300	1000

*Jac - u.d.*

Director  
Department of Agriculture  
Maharishi Markandeshwar  
(Deemed to be University),  
Mullana-Ambala, 133207. Haryana

MAHARISHI MARKANDESHWAR DEEMED TO BE UNIVERSITY, MULLANA - AMBALA  
(Established under Section 3 of the UGC Act 1956)(NAAC Accredited Grade 'A' University)

Name of the Discipline: **B.Sc. Agriculture-Integrated: w.e.f. April, 2021**  
Scheme and Syllabus (Batch 2021 onwards)  
Semester II

No	Paper Code	Paper	Hrs/Week				Examination Marks				Total
			L	T	P	Cr.	Theory		Practical		
							External	Internal	External	Internal	
1	BIO-II	Biology-II	2	-	2	3	60	40	40	60	200
2	CHEM-II	Principles of Chemistry-II	3	-	2	4	60	40	40	60	200
3	PHY-II	Principles of Physics-II	3	-	2	4	60	40	40	60	200
4	COMP-II	Computer Techniques-II	0	-	2	1	-	-	40	60	100
5	ENG-II	Applied Grammer and Comprehension	2	-	2	3	60	40	40	60	200
6	MATH-II	Coordinate geometry, calculus and elementary statistics	3	-	0	3	60	40	-	-	100
		TOTAL	13		10	18	300	200	200	300	1000

*[Handwritten Signature]*

Director  
Department of Agriculture  
Maharishi Markandeshwar  
(Deemed to be University),  
Mullana-Ambala, 133007, H.P.

MAHARISHI MARKANDESHWAR DEEMED TO BE UNIVERSITY, MULLANA - AMBALA  
(Established under Section 3 of the UGC Act 1956)(NAAC Accredited Grade 'A' University)

Name of the Discipline: **B.Sc. Agriculture-Integrated: w.e.f. April, 2021)**  
Scheme and Syllabus (Batch 2021 onwards)  
Semester III

No	Paper Code	Paper	Hrs/Week				Examination Marks				Total
			L	T	P	Cr.	Theory		Practical		
							External	Internal	External	Internal	
1	BIO-III	Biology-III	2	-	2	3	60	40	40	60	200
2	CHEM-III	Principles of Chemistry-III	3	-	2	4	60	40	40	60	200
3	PHY 3-III	Principles of Physics-III	3	-	2	4	60	40	40	60	200
4	COMP-III	Computer Techniques-III	0	-	2	1	-	-	40	60	100
5	ENG-III	English Composition and Comprehension	2	-	2	3	60	40	40	60	200
6	MATH-III	Matrices, Determinants, Differential Calculus and Probability	3	-	0	3	60	40	-	-	100
<b>Total</b>			<b>13</b>		<b>10</b>	<b>18</b>	<b>300</b>	<b>200</b>	<b>200</b>	<b>300</b>	<b>1000</b>

*Free - u.s.*

Director  
Department of Agriculture  
Maharishi Markandeshwar  
Deemed to be University  
Mullana Ambala

MAHARISHI MARKANDESHWAR DEEMED TO BE UNIVERSITY, MULLANA - AMBALA  
(Established under Section 3 of the UGC Act 1956)(NAAC Accredited Grade 'A' University)

Name of the Discipline: **B.Sc. Agriculture-Integrated: w.e.f. April, 2021)**  
Scheme and Syllabus (Batch 2021 onwards)  
Semester IV

No	Paper Code	Paper	Hrs/Week			Cr.	Examination Marks				Total
			L	T	P		Theory		Practical		
							External	Internal	External	Internal	
1	BIO-IV	Biology-IV	2	-	2	3	60	40	40	60	200
2	CHEM -IV	Principles of Chemistry-IV	3	-	2	4	60	40	40	60	200
3	PHY -IV	Principles of Physics-IV	3	-	2	4	60	40	40	60	200
4	COMP -IV	Computer Techniques-IV	0	-	2	1	-	-	40	60	100
5	ENG -IV	Functional English	2	-	2	3	60	40	40	60	200
6	MATH -IV	Integral, Calculus, Vectors & 3D Geometry	3	-	0	3	60	40	-	-	100
		<b>Total</b>	<b>13</b>		<b>10</b>	<b>18</b>	<b>300</b>	<b>200</b>	<b>200</b>	<b>300</b>	<b>1000</b>

*[Handwritten Signature]*

Director  
Department of Agriculture  
Maharishi Markandeshwar  
(Deemed to be University),  
Mullana-Ambala, 133207, HR

Name of the Discipline: **M.Sc., Agriculture in AGRONOMY**

Scheme and Syllabus (Batch 2021 onwards)

Semester I

Paper Code	Course Title	Hours/Week				Examination Marks				Total
		L	T	P	Cr	Theory		Practical		
						External	Internal	External	Internal	
<b>#Major Courses</b>										
AGRON-501	Modern Concepts in Crop Production	3	-	-	3	60	40	-	-	100
AGRON-502	Principles and Practices of Soil Fertility and Nutrient Management	2	-	2	3	60	40	40	60	200
AGRON-503	Principles and Practices of Weed Management	2	-	2	3	60	40	40	60	200
AGRON-504	Principles and Practices of water management	2	-	2	3	60	40	40	60	200
AGRON-506	Agromony of Major Cereals and Pulses	2	-	2	3	60	40	40	60	200
<b># Supporting Courses</b>										
COMP-501	Computer Fundamentals And Programming	2	-	2	3	60	40	40	60	200
<b># Research</b>										
AGRON-599	Master's Research	-	-	20	20					*(S/US)
<b>Total</b>		<b>13</b>		<b>10</b>	<b>18</b>	<b>360</b>	<b>240</b>	<b>200</b>	<b>300</b>	<b>1100</b>

\*(Satisfactory/Unsatisfactory)

*[Signature]*  
 Director  
 Department of Agriculture  
 Maharishi Markandeshwar  
 (Deemed to be) Univ.  
 Mullana Ambala, 133207, Haryana

**Name of the Discipline: M.Sc., Agriculture in AGRONOMY**  
Scheme and Syllabus (Batch 2021 onwards)  
Semester-II

Paper Code	Course Title	Hours/Week				Examination Marks				Total
		L	T	P	Cr.	Theory		Practical		
#Major Courses						External	Internal	External	Internal	
AGRON 507	CROPPING SYSTEMS AND SUSTAINABLE AGRICULTURE	2	-	-	2	60	40	-	-	200
AGRON 508	PRINCIPLES AND PRACTICES OF ORGANIC FARMING	2	-	2	3	60	40	40	60	200
#Minor Courses										
SOIL 501	SOIL FERTILITY AND FERTILIZER USE	3	-	2	4	60	40	40	60	200
SOIL 502	SOIL EROSION AND CONSERVATION	2	-	2	3	60	40	40	60	200
#Supporting Courses										
STAT 511	STATISTICAL METHODS FOR APPLIED SCIENCES	3	-	2	4	60	40	40	60	200
#Non Credit Courses										
HVE 501	HUMAN VALUES AND ETHICS	1	-	-	1	60	40	-	-	*(S/US)
# Research										
AGRON 591	MASTER'S SEMINAR	1	-	-	1		100			100
AGRON 599	MASTER'S RESEARCH	-	-	20	20					*(S/US)
<b>Total</b>		<b>13</b>	<b>8</b>	<b>17</b>	<b>360</b>	<b>340</b>	<b>160</b>	<b>240</b>	<b>1100</b>	

\*(S/US)=\*Satisfactory/ Unsatisfactory

*Jeevan*  
Department of Agriculture  
Maharishi Markandeshwar  
(Deemed to be University)  
Mullana

MAHARISHI MARKANDESHWAR DEEMED TO BE UNIVERSITY, MULLANA - AMBALA  
(Established under Section 3 of the UGC Act 1956)(NAAC Accredited Grade 'A' University)

**Name of the Discipline: M.Sc., Agriculture in AGRONOMY**  
**Scheme and Syllabus (Batch 2021 onwards)**  
**Semester-III**

Paper Code	Course Title	Hours/Week				Examination Marks				Total
		L	T	P	Cr.	Theory		Practical		
					External	Internal	External	Internal		
<b>#Supporting Courses</b>										
STAT 512	EXPERIMENTAL DESIGNS	2	-	2	3	60	40	40	60	200
<b>#Minor Courses</b>										
SOIL 509	SOIL, WATER AND AIR POLLUTION	2	-	2	3	60	40	40	60	200
<b>#Non Credit Courses</b>										
PGS 501	TECHNICAL WRITING, COMMUNICATION SKILLS AND LIBRARY AND INFORMATION SERVICES	1	-	2	2		100		100	*(S/US)
PAG 501	ENVIRONMENTAL SCIENCES AND DISASTER MANAGEMENT	2	-	2	3		100		100	*(S/US)
<b># Research</b>										
AGRON 599	MASTER'S RESEARCH	-	-	20	20					*(S/US)
<b>Total</b>		<b>4</b>		<b>4</b>	<b>6</b>	<b>120</b>	<b>80</b>	<b>80</b>	<b>120</b>	<b>400</b>

\*(S/US)= \*Satisfactory/ Unsatisfactory

*Joe - arl*

Department of Agriculture  
Maharishi Markandeshwar  
Deemed to be University

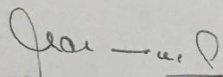
MAHARISHI MARKANDESHWAR DEEMED TO BE UNIVERSITY, MULLANA - AMBALA (Established under  
Section 3 of the UGC Act 1956)(NAAC Accredited Grade 'A' University)

**Name of the Discipline: M.Sc., Agriculture in AGRONOMY**  
Scheme and Syllabus (Batch 2021 onwards)  
Semester IV

Paper Code	Paper Title	Hours/Week				Examination Marks				
		L	T	P	Cr.	Theory		Practical		Total
						External	Internal	External	Internal	
AGRON 599	Master's Research (I to IV)	-	-	20	20					*(S/US)
	Total			20	20					

Thesis seminar  
Thesis submission  
Thesis viva voce

\*(S/US)= \*Satisfactory/ Unsatisfactory

  
Director  
Department of Agriculture  
Maharishi Markandeshwar  
(Deemed to be University)  
Mullana - Ambala



**SCHEME FOR M.Sc., Agriculture in Entomology**  
**(for Batch 2021 onwards)**  
**Semester I**

Paper Code	Paper	Hours/Week				Examination Marks				
		L	T	P	Cr.	Theory		Practical		Total
Major Courses						External	Internal	External	Internal	
ENT 501	Insect Morphology	2	-	2	3	60	40	40	60	200
ENT 503	Insect Anatomy, Physiology and Nutrition	2	-	2	3	60	40	40	60	200
ENT 505	Classification of Insects	2	-	2	3	60	40	40	60	200
Supporting Courses										
COMP 501	Computer Fundamentals and Programming	1	-	2	2	60	40	40	60	200
Minor Courses										
PTH 507	Principles of Plant Disease Management	2	-	2	3	60	40	40	60	200
PTH 509	Diseases of Field and Medicinal Crops	2	-	2	3	60	40	40	60	200
Research										
ENT 599	Master's Research (I to IV)	-	-	20	20					*(S/US)
<b>Total</b>		<b>11</b>		<b>12</b>	<b>17</b>	<b>360</b>	<b>240</b>	<b>240</b>	<b>360</b>	<b>1200</b>

Student has to complete 20 credit hours from the list of Major courses

- In addition to the above mentioned major discipline Student has to complete 14 credit hours from the list of minor (09) and supporting (5).

- Student also has to complete Non-Credit compulsory courses of 6 credit hours from the following courses:

Environmental Science & Disaster Management (2+1)

Human Value ethics (1+0)

Technical Writing Skills (1+1)

Approved by the AC Res. No. 26 dated 27-08-2021 as recommendations of the  
Director of Agriculture vide its Res. No. 131 and 805 its vide Res. No. 4  
dated 09-04-2021. dated 27-04-2021 1

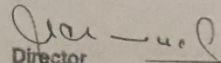
Director  
Department of Agriculture  
Maharishi Markandeshwar  
(Deemed to be University)  
Mullana - Ambala

**SCHEME FOR M.Sc., Agriculture in Entomology**  
**(for Batch 2021 onwards)**  
Semester II

Paper Code	Paper	Hours/Week				Examination Marks				
		L	T	P	Cr.	Theory		Practical		Total
<b>Major Courses</b>										
ENT 502	Principles of Integrated Pest Management	2	-	2	3	60	40	40	60	200
ENT 504	Toxicology of Insecticides	2	-	2	3	60	40	40	60	200
ENT 506	Pests of Field and Horticultural Crops	2	-	2	3	60	40	40	60	200
<b>Supporting Courses</b>										
STAT 511	Statistical Methods for Applied Sciences	3	-	2	4	60	40	40	60	200
<b>Minor Courses</b>										
PTH 508	Insect vectors of plant viruses and other pathogens	2	-	2	3	60	40	40	60	200
<b>Non Credit Courses*</b>										
HVE 501	Human values and Ethics	1	-	0	1	60	40	-	-	*(S/US)
<b>Research</b>										
ENT 591	Master's Seminar	1	-	-	1	-	100	-	-	100
ENT- 599	Master's Research (I to IV)	-	-	20	20	-	-	-	-	*(S/US)
<b>Total</b>		<b>12</b>	<b>10</b>	<b>17</b>		<b>360</b>	<b>340</b>	<b>200</b>	<b>300</b>	<b>1100</b>

\*Non credited course

\*\*S/US (Satisfactory/Unsatisfactory)

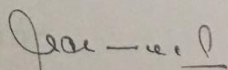
  
Director  
Department of Agriculture  
Maharishi Markandeshwar  
(Deemed to be University),  
Mullana-Ambala, 133207, HR

**SCHEME FOR M.Sc., Agriculture in Entomology**  
**(for Batch 2021 onwards)**  
**Semester III**

Paper Code	Paper	Hours/Week				Examination Marks				
		L	T	P	Cr.	Theory		Practical		Total
<b>Major Courses</b>										
ENT 513	Commercial entomology	1	-	2	2	60	40	40	60	200
<b>Non Credit Courses*</b>										
PAG 501	Environmental Sciences and Disaster Management	2	-	2	3		100*	-	100*	*(S/US)
PGS 501	Technical Writing, Communication Skills and Library and Information Services	1	-	2	2		100*	-	100*	*(S/US)
<b>Research</b>										
ENT- 599	Master's Research (I to IV)	-	-	20	20					*(S/US)
<b>Total</b>		<b>01</b>	<b>2</b>	<b>2</b>		<b>60</b>	<b>40</b>	<b>40</b>	<b>60</b>	<b>200</b>

\*Non credited course

\*\*S/US (Satisfactory/Unsatisfactory)



Director  
Department of Agriculture  
Maharishi Markandeshwar  
(Deemed to be University)  
Mullana-Ambala-131001

**SCHEME FOR M.Sc., Agriculture in Entomology**  
**(for Batch 2021 onwards)**  
**Semester IV**

Paper Code	Paper	Hours/Week				Examination Marks				
		L	T	P	Cr.	Theory		Practical		Total
						External	Internal	External	Internal	
ENT-599	Master's Research (I to IV)	-	-	20	20	-	-	-	-	*(S/US)
	<b>Total</b>			<b>20</b>	<b>20</b>	-	-	-	-	-

Thesis seminar  
Thesis submission  
Thesis viva voce

\*(S/US)= \*Satisfactory/ Unsatisfactory

**Executive Summary**

Entomology will provide an opportunity for students to gain in-depth knowledge on Entomology and to acquire intense training on modern approaches of epidemiology and control of vectors and vector-borne diseases. The course constitutes advanced studies about pest management strategies and methods to prevent pests from spreading agents which might be responsible for causing fatal diseases. Course deals in various important aspects of insects and agriculture. So, it can be said that entomologists are at the revolutionary stage of scientific research in different fields of entomology like systematic, biological control and pest management to name few. Commercial entomology with hands-on training at the place provides employments after completion of the course. Provisions are made in the curricula for the students undergoing Masters programme in Entomology to undergo attachment training will to prevent from epidemic condition and increasing production of yield and quality evaluation in private/public industry.

*[Signature]*  
Director  
Department of Agriculture  
Maharishi Markandeshwar  
Deemed to be University  
Mullana-Ambala