KURUKSHETRA UNIVERSITY KURUKSHETRA

[Established by the State Legislature Act XII of 1956] ('A+' Grade, NAAC Accredited)

AQAR-2020-21

1.2.2 : Scheme of Examination for the programmes in the Department/Institute of

Institute of Environmental Studies

Kurukshetra University, Kurukshetra Institute of Environmental Studies

M. Sc. (Environmental Science)

Scheme and Syllabus (Based on CBCS-LOCF Pattern) (Effective from 2020-21 in phased manner)



Faculty of Life Science, KUK (August, 2020)

J. W.



KURUKSHETRA UNIVERSITY KURUKSHETRA INSTITUTE OF ENVIRONMENTAL STUDIES SCHEME OF EXAMINATION FOR M.Sc. ENVIRONMENTAL SCIENCE

First Semester

Paper code	Title of Paper	Type of paper	Hours/ week	Credits	Internal Assessmen t	Final Exam	Total Marks
MES-101	The Biophysical Environment	Core	4	4	20	80	100
MES-102	Environmental Chemistry	Core	4	4	20	80	100
MES-103	Ecology and Ecosystem Dynamics	Core	4	4	20	80	100
MES-104	Environmental Modelling and Statistics	Core	4	4	20	80	100
MES-105	Practical-I	Core	8	4	20	80	100
MES-106	Practical-II	Core	8	4	20	80	100
	Semester Total			24	7		600

Note 1: Each core paper final examination will be of 3 hours and practical examination will be of 6 hours duration.

Note 2: The practical classes will be held in two groups.





KURUKSHETRA UNIVERSITY KURUKSHETRA INSTITUTE OF ENVIRONMENTAL STUDIES SCHEME OF EXAMINATION FOR M.Sc. ENVIRONMENTAL SCIENCE

Second Semester

Paper code	Title of Paper	Type of paper	Hours /week	Credit s	Internal Assessmen t	Final Exam	Total Marks
MES-201	Natural Resource Management	Core	4	4	20	80	100
MES-202	Conservation and Biodiversity	Core	4	4	20	80	100
MES-203	Pollution and Global Climate Change	Core	4	4	20	80	100
MES-204	Environmental Methods and Analytical Techniques	Core	4	4	20	80	100
MES-205	Seminars	Core		1			25
MES-206	Water Resource Management	Open Elective	2	2	10	40	50
MES-207	Practical-III	Core	8	4	20	80	100
MES-208	Practical-IV	Core	8	4	20	80	100
	Semester Total	2.		27			675

Note 1: Each core paper final examination will be of 3 hours and practical examination will be of 6 hours duration.

Note 2: The practical classes will be held in two groups.





Third Semester

Paper code	Title of Paper	Type of paper	Hours/ Week	Credits	Internal Assessmen t	Final Exam	Total Marks
MES- 301	Environmental Biotechnology	Core	4	4	20	80	100
MES- 302	Remote Sensing and Geographical Information Systems	Core	4	4	20	80	100
MES- 303	Ecotoxicology and Environmental Health	Core	4	4	20	80	100
MES- 304	(EL-1A) Environmental Planning , Policy and Law (EL-1B) Waste Management	Elective	4	4	20	80	100
MES- 305	Summer training (Report +Seminar)	Core	2	2	10	40	50
MES- 306	Global Climate Change	Open elective	2	2	10	40	50
MES- 307	Practical-V	Core	8	4	20	80	100
MES- 308	Practical-VI	Core + Elective	6	3	15	60	75
	Semester Total		34	27	224		675

Note: (a) Each core paper final examination will be of 3 hours and practical examination will be of 6 hours duration.

(b) The minor project in the form of summer training (4-5 weeks) with some industry/NGO/Research Institute/organization will be submitted by the student in the 3rd Semester and the student will give a presentation on the training.

(c) The practical classes will be held in two groups.





Fourth Semester

Paper code	Title of Paper	Type of paper	Hours /week	Credit s	Internal Assessme nt	Final Exam	Total Marks
MES-401	Agroecology and Agroforestry	Core	4	4	20	80	100
MES-402	Environmental Impact Assessment and Auditing	Core	4	4	20	80	100
MES-403	Ecotechnology and Ecological Restoration	Core	4	4	20	80	100
MES-404	(EL-II A)Ecological Economics (EL-II B) Environmental Health and Industrial Safety	Elective	4	4	20	80	100
MES-405	Practical-VII	Core	8	4	20	80	100
MES-406	Practical- VIII/ Dissertation	Core	8	4	20	80	100
-	Semester Total			24	(=		600

Note: (a) Each core paper final examination will be of 3 hours and practical examination will be of 6 hours duration.

(c) M.Sc. Dissertation will be based on scientific data collection, fieldwork as well as community participation and will be evaluated by the Internal Supervisor/Examiner and an External Examiner.

(d) The practical classes will be held in two groups.



Kurukshetra University, Kurukshetra Institute of Environmental Studies

M. Tech.

(Energy & Environmental Management)

Scheme and Syllabus (Based on CBCS-LOCF Pattern) (Effective from 2020-21 in phased manner)



Faculty of Life Science, KUK (August, 2020)

M.Tech. Energy and Environmental Management (EEM)

FIRST SEMESTER

Paper Code	Title of	Type	Hours/Week	rs/Week Credits		Marks			
	Paper	of Paper	£		Internal Assessment	Final Examination	Total		
MEMT- 101	Ecology and Systems Analysis	Core	4	4	40	60	100		
MEMT- 102	Energy Resources and Management	Core	4	4	40	60	100		
MEMT- 103	Energy and Climate Change	Core	4	4	40	60	100		
MEMT- 104	Research Techniques and Quantitative Methods	Core	4	4	40	60	100		
MEMT- 105	Practical - I	Core	8	4	40	60	100		
MEMT- 106	Practical - II	Core	8	4	40	60	100		
	To	tal		24	240	360	600		

Note: Each Theory Final Examination will be of 3 hours and practical examination will be of 6 hours duration.

M.Tech. Energy and Environmental Management (EEM)

SECOND SEMESTER

Paper Code	Title of Paper	Type of Hours/Week Paper	Hours/Week	Credits	Marks			
				Internal Assessment	Final Examination	Total		
MEMT- 201	Environmental Assessment and Management	Core	4	4	40	60	100	
MEMT- 202	Renewable Energy and Technology	Core	4	4	40	60	100	
MEMT- 203	Environmental Remote Sensing & GIS	Core	4	4	40	60	100	
MEMT- 204	Environmental Biotechnology and Biofuels	Core	4	4	40	60	100	
MEMT- 205	Seminar	Core	1	1	25	-	25	
MEMT- 206	Practical - I	Core	8	4	40	60	100	
MEMT- 207	Practical - II	Core	8	4	40	60	100	
	Tota	al		25	265	360	625	

Note: Each Theory Final Examination will be of 3 hours and practical examination will be of 6 hours duration.

M.Tech. Energy and Environmental Management (EEM)

THIRD SEMESTER

Paper	Title of Paper	Type of	Hours/	Credits		Marks	
Code		Paper	Week	Week	Internal Assessment	Final Examination	Total
MEMT- 301	EL-1A (Energy Conservation and Efficient Systems) EL-1B (Environmental Bioremediation Technology) EL-1C (Environmental Policies, Laws and Impact Assessment)	Elective	4	4	40	60	100
MEMT- 302	EL-2A (Industrial Energy) EL-2B (Energy from Waste) EL-2C (Environmental Modelling)	Elective	4	4	40	60	100
MEMT- 303	Minor Project/Practical	Core	8	4	40	60	100
MEMT- 304	Summer training (Report and Seminar)	Core	75	2	50	-	50
MEMT- 305	Seminar	Core	1	1	25	191 192	25
MEMT- 306	Practical	Elective	8	4	40	60	100
	Total			19	235	240	475

Note: The minor project in the form of summer training (8 weeks) report with some Industry/NGO/Research Institute/ organization will be submitted by the student in the 3rd Semester and the student will give a presentation on the training.

M.Tech. Energy and Environmental Management (EEM)

FOURTH SEMESTER

Paper Code	Title of	Type Credits		Marks			
	Paper	of Paper		Internal Assessment	Final Examination	Total	
MEMT- 401	Dissertation	Core	10	-	250	250	
MEMT- 402	Seminar on Dissertation	Core	2	50	-	50	
MEMT- 403	Viva-voce on Dissertation	Core	2	-	50	50	
MEMT- 404	Progressive Seminar/ Laboratory Development Work	Core	2	50	-	50	
	Total		16	100	300	400	

Note:

M.Tech Dissertation will be evaluated by the Internal Supervisor/ Examiner and an External Examiner.

The Dissertation will be based on scientific data collection, analysis and fieldwork.

