No.: UHF/EVS/3-63/2025/-28

Department of Environmental Science -cum-Work Centre IGNOU

Dr. YS Parmar University of Horticulture & Forestry,

**Nauni-173 230, Distt. Solan (H.P.)** 

Senior Regional Director IGNOU Regional Centre Shimla-171005 (HP)

Dated: 10/04/2025

Sub:

Regarding revised practical schedule of MSc Environmental Science programme of

IGNOU-submission thereof.

Sir,

In reference to your email dated 9th April, 2025 kindly find enclosed herewith the revised schedule of practical of Lab course-3 (MEVL 013) of MSc Environmental Science programme. The practical of this lab courses will be conducted in five batches (38×5) for 190 students, as per lists provided by your goodself, for the duration of 8 hours in a day in the labs of this department wef 23<sup>rd</sup> April to 10<sup>th</sup> August, 2025. The list of learners allocated in five batches is also attached for your kind perusal and further necessary action, please.

Thanking you.

Yours sincerely,

**Professor and Head** 

## Proposed schedule for conducting practical Examination for the course MEVL 013, Lab course-3, Environmental Science w.e.f $23^{rd}$ April, 2025 to $06^{th}$ May, 2025

#### (First Batch)

Day	Date	Practical exercise	Theory	Hand on Exercises/ Lab Practical
1	23/04/2025	<ul> <li>✓ Determination of Suspended Particulate Matter (SPM) in Ambient Air Using High Air Sampler (HVS)</li> <li>✓ Isolation and Enumeration of Air Borne Microorganisms by All Glass Impinger Technique</li> </ul>		
2	24/04/2025	✓ Determination of Sodium and Potassium in Water Using Flame Photometer		
3	25/04/2025	✓ Determination of Trace Metals in Environmental Samples using Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES)		
4	26/04/2025	<ul> <li>✓ Composting of Biodegradable Waste and determination of compost quality</li> <li>✓ Determination of Biogas Production from Organic Waste by Liquid Displacement Method</li> </ul>		
5	27/04/2025	✓ Determination of Pesticides in Environmental Samples Using Gas Chromatography	Morning Session	Evening Session
			(9:30 am -1:30	
		✓ Separation of Amino Acids by Thin Liquid Chromatography	pm)	(2:00 -6:00 pm)
6	28/04/2025	✓ Determination of Effect of Industrial Effluents on Seed Germination and Seedling Growth of Rice and Wheat		
		✓ Determination of Alcoholic fermentation from Grape Juice by Saccharomyces cerevisiae		
7	29/04/2025	<ul> <li>✓ Sterilization, Media Preparation and Isolation of Pure Culture</li> <li>✓ Determination of Gram Staining of Bacterial Sample</li> </ul>		
8	30/04/2025	✓ Isolation and Characterization of Bacteria from Soil		
		Samples ✓ Isolation and Characterization of Actinomycetes from Soil Samples		
9	01/05/2025	✓ Isolation of Pure Culture by Streak Plate Method, Pour Plate Method and Spread Plate Method		
10	02/05/2025	✓ Isolation and Characterization of Fungi from Soil Samples		
11	03/05/2025	✓ Determination of Metabolic Activities of Bacteria through Biochemical Tests		
12	04/05/2025	✓ Determination of Biological Activity of Soil by Dehydrogenase Assay		
13	05/05/2025	✓ Isolation of Bio-Surfactant Producing Bacteria from Environmental Samples		
14	06/05/2025	✓ Detection of Coliform in Water Samples by Membrane Filter Technique		

### Proposed schedule for conducting practical Examination for the course MEVL 013, Lab course-3, Environmental Science w.e.f $07^{\rm th}$ May, 2025 to $20^{\rm th}$ May, 2025

### (Second Batch)

Day	Date	Practical exercise	Theory	Hand on
			•	Exercises/ Lab
1	07/05/2025	✓ Determination of Suspended Particulate Matter (SPM)		Practical
	07/03/2023	in Ambient Air Using High Air Sampler (HVS)  ✓ Isolation and Enumeration of Air Borne  Microorganisms by All Glass Impinger Technique		
2	08/05/2025	✓ Determination of Sodium and Potassium in Water Using Flame Photometer		
3	09/05/2025	✓ Determination of Trace Metals in Environmental Samples using Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES)		
4	10/05/2025	<ul> <li>✓ Composting of Biodegradable Waste and determination of compost quality</li> <li>✓ Determination of Biogas Production from Organic Waste by Liquid Displacement Method</li> </ul>		
5	11/05/2025	✓ Determination of Pesticides in Environmental	<b>Morning Session</b>	Evening
		Samples Using Gas Chromatography	(9:30 am -1:30	Session
		✓ Separation of Amino Acids by Thin Liquid Chromatography	pm)	(2:00 -6:00 pm)
6	12/05/2025	<ul> <li>✓ Determination of Effect of Industrial Effluents on Seed Germination and Seedling Growth of Rice and Wheat</li> <li>✓ Determination of Alcoholic fermentation from Grape</li> </ul>		
		Juice by Saccharomyces cerevisiae		
7	13/05/2025	✓ Sterilization, Media Preparation and Isolation of Pure Culture		
8	14/05/2025	<ul> <li>✓ Determination of Gram Staining of Bacterial Sample</li> <li>✓ Isolation and Characterization of Bacteria from Soil</li> </ul>		
		Samples ✓ Isolation and Characterization of Actinomycetes from Soil Samples		
9	15/05/2025	✓ Isolation of Pure Culture by Streak Plate Method, Pour Plate Method and Spread Plate Method		
10	16/05/2025	✓ Isolation and Characterization of Fungi from Soil Samples		
11	17/05/2025	✓ Determination of Metabolic Activities of Bacteria through Biochemical Tests		
12	18/05/2025	✓ Determination of Biological Activity of Soil by Dehydrogenase Assay		
13	19/05/2025	✓ Isolation of Bio-Surfactant Producing Bacteria from Environmental Samples		
14	20/05/2025	✓ Detection of Coliform in Water Samples by Membrane Filter Technique		
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# Proposed schedule for conducting practical Examination for the course MEVL 013, Lab course-3, Environmental Science w.e.f $21^{st}$ May, 2025 to $03^{rd}$ June, 2025

#### (Third Batch)

Da	Data	Venue: Department of Environmental Science, Dr YSP UHF, Nauni, Solan  Drastical systems  Hand on				
Day	Date	Practical exercise	Theory	Hand on Exercises/ Lab Practical		
1	21/05/2025	<ul> <li>✓ Determination of Suspended Particulate Matter (SPM) in Ambient Air Using High Air Sampler (HVS)</li> <li>✓ Isolation and Enumeration of Air Borne Microorganisms by All Glass Impinger Technique</li> </ul>				
2	22/05/2025	✓ Determination of Sodium and Potassium in Water Using Flame Photometer				
3	23/05/2025	✓ Determination of Trace Metals in Environmental Samples using Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES)				
4	24/05/2025	<ul> <li>✓ Composting of Biodegradable Waste and determination of compost quality</li> <li>✓ Determination of Biogas Production from Organic Waste by Liquid Displacement Method</li> </ul>				
5	25/05/2025	✓ Determination of Pesticides in Environmental Samples Using Gas Chromatography	<b>Morning Session</b>	Evening Session		
		✓ Separation of Amino Acids by Thin Liquid	(9:30 am -1:30 pm)	(2:00 -6:00 pm)		
6	26/05/2025	Chromatography  ✓ Determination of Effect of Industrial Effluents on Seed Germination and Seedling Growth of Rice and Wheat  ✓ Determination of Alcoholic fermentation from Grape				
7	27/05/2025	Juice by Saccharomyces cerevisiae  ✓ Sterilization, Media Preparation and Isolation of Pure Culture ✓ Determination of Gram Staining of Bacterial Sample				
8	28/05/2025	<ul> <li>✓ Isolation and Characterization of Bacteria from Soil Samples</li> <li>✓ Isolation and Characterization of Actinomycetes from Soil Samples</li> </ul>				
9	29/05/2025	✓ Isolation of Pure Culture by Streak Plate Method, Pour Plate Method and Spread Plate Method				
10	30/05/2025	✓ Isolation and Characterization of Fungi from Soil Samples				
11	31/05/2025	✓ Determination of Metabolic Activities of Bacteria through Biochemical Tests				
12	01/06/2025	✓ Determination of Biological Activity of Soil by Dehydrogenase Assay				
13	02/06/2025	✓ Isolation of Bio-Surfactant Producing Bacteria from Environmental Samples				
14	03/06/2025	✓ Detection of Coliform in Water Samples by Membrane Filter Technique				

## Proposed schedule for conducting practical Examination for the course MEVL 013, Lab course-3, Environmental Science w.e.f $14^{th}$ July, 2025 to $27^{th}$ July, 2025

#### (Fourth Batch)

Da	Data	Venue: Department of Environmental Science, Dr YSP UHF, Nauni, Solan  Drastical avarages  Hand on				
Day	Date	Practical exercise	Theory	Hand on Exercises/ Lab Practical		
1	14/07/2025	<ul> <li>✓ Determination of Suspended Particulate Matter (SPM) in Ambient Air Using High Air Sampler (HVS)</li> <li>✓ Isolation and Enumeration of Air Borne Microorganisms by All Glass Impinger Technique</li> </ul>				
2	15/07/2025	✓ Determination of Sodium and Potassium in Water Using Flame Photometer				
3	16/07/2025	✓ Determination of Trace Metals in Environmental Samples using Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES)				
4	17/07/2025	<ul> <li>✓ Composting of Biodegradable Waste and determination of compost quality</li> <li>✓ Determination of Biogas Production from Organic Waste by Liquid Displacement Method</li> </ul>				
5	18/07/2025	✓ Determination of Pesticides in Environmental Samples Using Gas Chromatography	<b>Morning Session</b>	Evening Session		
		✓ Separation of Amino Acids by Thin Liquid Chromatography	(9:30 am -1:30 pm)	(2:00 -6:00 pm)		
6	19/07/2025	<ul> <li>✓ Determination of Effect of Industrial Effluents on Seed Germination and Seedling Growth of Rice and Wheat</li> <li>✓ Determination of Alcoholic fermentation from Grape Juice by Saccharomyces cerevisiae</li> </ul>				
7	20/07/2025	<ul> <li>✓ Sterilization, Media Preparation and Isolation of Pure Culture</li> <li>✓ Determination of Gram Staining of Bacterial Sample</li> </ul>				
8	21/07/2025	<ul> <li>✓ Isolation and Characterization of Bacteria from Soil Samples</li> <li>✓ Isolation and Characterization of Actinomycetes from Soil Samples</li> </ul>				
9	22/07/2025	✓ Isolation of Pure Culture by Streak Plate Method, Pour Plate Method and Spread Plate Method				
10	23/07/2025	✓ Isolation and Characterization of Fungi from Soil Samples				
11	24/07/2025	✓ Determination of Metabolic Activities of Bacteria through Biochemical Tests				
12	25/07/2025	✓ Determination of Biological Activity of Soil by Dehydrogenase Assay				
13	26/07/2025	✓ Isolation of Bio-Surfactant Producing Bacteria from Environmental Samples				
14	27/07/2025	✓ Detection of Coliform in Water Samples by Membrane Filter Technique				

## Proposed schedule for conducting practical Examination for the course MEVL 013, Lab course-3, Environmental Science w.e.f 28<sup>th</sup> July, 2025 to 10<sup>th</sup> August, 2025

#### (Fifth Batch)

	Venue: Department of Environmental Science, Dr YSP UHF, Nauni, Solan				
Day	Date	Practical exercise	Theory	Hand on Exercises/ Lab Practical	
1	28/07/2025	<ul> <li>✓ Determination of Suspended Particulate Matter (SPM) in Ambient Air Using High Air Sampler (HVS)</li> <li>✓ Isolation and Enumeration of Air Borne Microorganisms by All Glass Impinger Technique</li> </ul>			
2	29/07/2025	✓ Determination of Sodium and Potassium in Water Using Flame Photometer			
3	30/07/2025	✓ Determination of Trace Metals in Environmental Samples using Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES)			
4	31/07/2025	<ul> <li>✓ Composting of Biodegradable Waste and determination of compost quality</li> <li>✓ Determination of Biogas Production from Organic Waste by Liquid Displacement Method</li> </ul>			
5	01/08/2025	✓ Determination of Pesticides in Environmental	Morning Session	Evening	
		Samples Using Gas Chromatography	(9:30 am -1:30	Session	
		✓ Separation of Amino Acids by Thin Liquid Chromatography	pm)	(2:00 -6:00 pm)	
6	02/08/2025	✓ Determination of Effect of Industrial Effluents on Seed Germination and Seedling Growth of Rice and Wheat			
		✓ Determination of Alcoholic fermentation from Grape Juice by Saccharomyces cerevisiae			
7	03/08/2025	<ul> <li>✓ Sterilization, Media Preparation and Isolation of Pure Culture</li> <li>✓ Determination of Gram Staining of Bacterial Sample</li> </ul>			
8	04/08/2025	<ul> <li>✓ Isolation and Characterization of Bacteria from Soil Samples</li> <li>✓ Isolation and Characterization of Actinomycetes from Soil Samples</li> </ul>			
9	05/08/2025	✓ Isolation of Pure Culture by Streak Plate Method, Pour Plate Method and Spread Plate Method			
10	06/08/2025	✓ Isolation and Characterization of Fungi from Soil Samples			
11	07/08/2025	✓ Determination of Metabolic Activities of Bacteria through Biochemical Tests			
12	08/08/2025	✓ Determination of Biological Activity of Soil by Dehydrogenase Assay			
13	09/08/2025	✓ Isolation of Bio-Surfactant Producing Bacteria from Environmental Samples			
14	10/08/2025	✓ Detection of Coliform in Water Samples by Membrane Filter Technique			