

No.: UHF/EVS/3-63/2023/-
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: 17/07/2023

Sub: Regarding practical schedule of MSc Environmental Science programme of IGNOU-submission thereof.

Sir,

In reference to your Letter No. IG/Reg. Centre 11/Aca 1100/2023 dated 4th July, 2023 kindly find enclosed herewith the schedule of practical of three courses namely Lab course-1 (MEVL 011) and Lab course-2 (MEVL 012) and Lab course-3 (MEVL 011) of MSc Environmental Science programme. The practical of these two lab courses will be conducted in two batches of 22 each of 8 hours in two labs of this department. This is for kind perusal and further necessary action, please.

Thanking you.

Yours sincerely,

Professor and Head

Proposed schedule for conducting practical Examination for the course MEVL 012, Lab course-2, Environmental Science w.e.f 20th July, 2023 to 02nd August 2023

Venue: Department of Environmental Science, Dr YSP UHF, Nauni-173230, Solan

Day	Date	Practical Exercise	Theory	Hand on Exercises/ Lab Practical
1	20/07/2023	✓ Determination of Electrical Conductance of a Water Sample	Morning Session (9:30 am -1:30 pm)	Evening Session (2:00 -6:00 pm)
2	21/07/2023	✓ Determination of pH of a Water Sample		
3	22/07/2023	✓ Determination of Turbidity in Water		
4	23/07/2023	✓ Determination of Total Solids and Total Dissolved Solids in Water ✓ Determination of Hardness in Water Sample		
5	24/07/2023	✓ Determination of Biological Oxygen Demand in Water		
6	25/07/2023	✓ Determination of Dissolved Oxygen in Water		
7	26/07/2023	✓ Determination of Chemical Oxygen Demand in Water		
8	27/07/2023	✓ Determination of Chloride in Water Samples ✓ Determination of Residual Chlorine in Water		
9	28/07/2023	✓ Determination of Sulphates in Water		
10	29/07/2023	✓ Determination of Phosphate in Water		
11	30/07/2023	✓ Determination of Nitrate Nitrogen in water sample		
12	31/07/2023	✓ Determination of Nitrite Nitrogen in water sample		
13	01/08/2023	✓ Determination of Fluoride in Water		
14	02/08/2023	✓ Determination of Oil and Grease in Water		

Proposed schedule for conducting practical Examination for the course MEVL 011, Lab course-1, Environmental Science w.e.f 03rd August, 2023 to 16th August 2023

Venue: Department of Environmental Science, Dr YSP UHF, Nauni-173230, Solan

Day	Date	Practical exercise	Theory	Hand on Exercises/ Lab Practical
1	03/08/2023	✓ Determination of minimum size of the quadrat by 'species-area-curve' method	Morning Session (9:30 am -1:30 pm)	Evening Session (2:00 -6:00 pm)
2	04/08/2023	✓ Determination of frequency of species by line transect method and point frame method ✓ Determination of Relative Density, Frequency and Abundance of different species present in community and calculation of IVI		
3	05/08/2023	✓ Measures of central tendency, dispersion, skewness and kurtosis ✓ Correlation and regression analysis; analysis of variance		
4	06/08/2023	✓ Determination of standing crop and biomass in Terrestrial ecosystem		
5	07/08/2023	✓ Study on the abiotic and biotic components of an aquatic ecosystem		
6	08/08/2023	✓ Estimation of net primary productivity by harvest method in grassland ecosystem		
7	09/08/2023	✓ Estimation of net primary productivity using light and dark bottle method in aquatic ecosystem		
8	10/08/2023	✓ Estimation of biodiversity indices ✓ Weather monitoring and data analysis		
9	11/08/2023	✓ Study on soil profile and physical characteristics of soil		
10	12/08/2023	✓ Determination of soil organic carbon		
11	13/08/2023	✓ Determination of available Nitrogen in soil		
12	14/08/2023	✓ Preparation of climatic maps and diagram ✓ Identification of Igneous, Sedimentary and Metamorphic rocks		
13	15/08/2023	✓ Determination of soil moisture content ✓ Determination of soil pH and electrical conductivity		
14	16/08/2023	✓ Preparation of station based wind rose ✓ Arial photographs interpretations		

Proposed schedule for conducting practical Examination for the course MEVL 013, Lab course-3, Environmental Science w.e.f 17th August, 2023 to 30th August 2023

Venue: Department of Environmental Science, Dr YSP UHF, Nauni-173230, Solan

Day	Date	Practical exercise	Theory	Hand on Exercises/ Lab Practical
1	17/08/2023	<ul style="list-style-type: none"> ✓ Determination of Suspended Particulate Matter (SPM) in Ambient Air Using High Air Sampler (HVS) ✓ Isolation and Enumeration of Air Borne Microorganisms by All Glass Impinger Technique 	Morning Session (9:30 am -1:30 pm)	Evening Session (2:00 -6:00 pm)
2	18/08/2023	<ul style="list-style-type: none"> ✓ Determination of Sodium and Potassium in Water Using Flame Photometer 		
3	19/08/2023	<ul style="list-style-type: none"> ✓ Determination of Trace Metals in Environmental Samples using Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES) 		
4	20/08/2023	<ul style="list-style-type: none"> ✓ Composting of Biodegradable Waste and determination of compost quality ✓ Determination of Biogas Production from Organic Waste by Liquid Displacement Method 		
5	21/08/2023	<ul style="list-style-type: none"> ✓ Determination of Pesticides in Environmental Samples Using Gas Chromatography ✓ Separation of Amino Acids by Thin Liquid Chromatography 		
6	22/08/2023	<ul style="list-style-type: none"> ✓ Determination of Effect of Industrial Effluents on Seed Germination and Seedling Growth of Rice and Wheat ✓ Determination of Alcoholic fermentation from Grape Juice by <i>Saccharomyces cerevisiae</i> 		
7	23/08/2023	<ul style="list-style-type: none"> ✓ Sterilization, Media Preparation and Isolation of Pure Culture ✓ Determination of Gram Staining of Bacterial Sample 		
8	24/08/2023	<ul style="list-style-type: none"> ✓ Isolation and Characterization of Bacteria from Soil Samples ✓ Isolation and Characterization of Actinomycetes from Soil Samples 		
9	25/08/2023	<ul style="list-style-type: none"> ✓ Isolation of Pure Culture by Streak Plate Method, Pour Plate Method and Spread Plate Method 		
10	26/08/2023	<ul style="list-style-type: none"> ✓ Isolation and Characterization of Fungi from Soil Samples 		
11	27/08/2023	<ul style="list-style-type: none"> ✓ Determination of Metabolic Activities of Bacteria through Biochemical Tests 		
12	28/08/2023	<ul style="list-style-type: none"> ✓ Determination of Biological Activity of Soil by Dehydrogenase Assay 		
13	29/08/2023	<ul style="list-style-type: none"> ✓ Isolation of Bio-Surfactant Producing Bacteria from Environmental Samples 		
14	30/08/2023	<ul style="list-style-type: none"> ✓ Detection of Coliform in Water Samples by Membrane Filter Technique 		