## Department of Environmental Science University of Kashmir

Practical allotment

## ALLOTMENT OF PRACTICALS OF PG PROGRAMME

Name of the Faculty	Practicals allotted			
	Semester-I	Semester-II	Semester-III	
Dr. Sami Ullah Bhat	Determination of pH, conductivity, alkalinity, free carbon dioxide and chloride of water samples; Collection and identification of the fish fauna of different aquatic habitats; Chemical analysis of rain water; Study of dose — response relationships in important toxicants/pollutants	Estimation of dissolved oxygen, BOD and COD in different waters; Qualitative and quantitative estimation of periphyton community in different aquatic habitats	Working and design of sewage treatment plants and Jar test; Spring and stream order classification; Field trip to National park/wildlife sanctuary/industrial area /Hydropower project	
Dr. Arshid Jehangir	Determination of the soil texture in different terrestrial habitats; Estimation of meteorological parameters (temperature, precipitation, humidity, wind); Determination of latitude, longitude and altitude of a place; Field visit to IMD for meteorological instrumentation and weather data recording	Determination of rate of soil erosion in different ecosystems; Determination of SOx, NOx and particulate matter (PM) in ambient Air; Study of ambient noise levels in different zones	Computation of standard deviation, standard error and coefficient of variation; Computation of correlation and regression; One way and two way classification of ANOVA	
Dr. M. Muslim	Standardization of reagents – titrants (acids, bases); Determination of primary productivity aquatic and terrestrial habitats	Estimation of nitrogen (NH <sub>3</sub> , NO <sub>2</sub> and NO <sub>3</sub> ) in different water samples; Estimation of dust accumulated on plant parts and its effect on morphology and anatomy; Visit to a National park/ wild life sanctuary	Land use / land cover classification from satellite data; Delineation of drainage of a given area from satellite data; Delineation of point, line and polygon themes; Morphometric and bathymetric survey of a lake or pond	
Dr. Gazala Qazi	Estimation of volume of a water body: Pond, pool, lake; Estimation of chloride content in different soil samples; Estimation of cations (calcium, magnesium) in soil samples; Visit and demonstration of GC-MS and HPLC facility	Estimation of organic carbon and organic matter in different soil samples; Estimation of phosphorus and nitrogen content in different soil Samples; Estimation of dust accumulated on plant parts and its effect on morphology and anatomy	EIA – Leopold Matrix method and case studies; Socio-economic studies-preparing of questionnaire and case studies; Study of insect fauna in different environments	



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Dr. Javaid Miandad	Estimation of cations (calcium, magnesium, sodium, potassium) in water samples	Estimation of phosphorus (ortho and total) in different water samples; Application of diversity indices in aquatic and terrestrial ecosystems; Phytosociological analysis of plant community in the field	Waste auditing of any institution/ organization; Collection and identification of common aquatic macrophytes; Study of morphogenetic response of explants on media
Dr. Shamsul Haq	Experimental verification of Beer-Lambert's law; Study of leaf pigment by paper chromatography and TLC methods; Estimation of protein and carbohydrate content in biological samples; Study of dose – response relationships in important toxicants/pollutants	Biochemical tests for different enzymes; Preparation of bacterial smears and gram staining; Estimation of bacterial population in different water samples by culture technique; Estimation of fungal population in different habitats through culture techniques	Collection and demonstration of the pharmacognostic characters of important medicinal plants; Comparative anatomical study of mesophytes, hydrophytes and xerophytes
Dr. M. Sharjeel Sofi	Collection and identification of major rock types; Determination of light intensity in different habitats; Estimation of pH, conductivity and alkalinity content in different soil samples; Estimation of cations (sodium, potassium) in soil samples	Estimation of rate of flow of water and determination of silt load of a stream / river; Estimation of total dissolved and suspended solids in water; Estimation of dissolved silica and sulfate in different water bodies; Qualitative and quantitative estimation of phytoplankton community in different aquatic habitats	Survey of different residential areas for determining the prevalence of different air, water, soil and food borne diseases; Study of colonization potential of periphyton on artificial substrates; Study of morphogenetic response of explants on media

Coordinator 20/4/25