Lesson Plan &Work-done Diary for AY: 2024-25, ODD Semester

Course with Code: Engineering Geology – BCV303					**Faculty: NAMITHA .A.P**		**Semester & Section: 3rd A**	
Module	**Class No.**	**Date planned (DD/MM)**	**Topics to be covered**	**TLP Planned**	**Date of Conduction (DD/MM)**	**Topics Covered**	**TLP Executed**	**Remarks if any deviation**
MODULE-1	1		**Introduction, the scope of earth science in Engineering.** Earths internal dynamics			**Introduction, the scope of earth science in Engineering.** Earths internal dynamics		
	2		Plate tectonics,			Plate tectonics,		
	3		Earth quakes types, causes iso-seismal line			Earth quakes types, causes iso-seismal line		
	4		seismic zonation map, seismic proof structures			seismic zonation map, seismic proof structures		
	5		Numerical problems on location of epicenter			Numerical problems on location of epicenter		
	6		Volcanic eruption, types, causes			Volcanic eruption, types, causes		
	7		landslides, causes types, preventive measures;			landslides, causes types, preventive measures;		
	8		Tsunamis causes consequences, mitigation			Tsunamis causes consequences, mitigation		
	9		cyclones, causes management			cyclones, causes management		
	10		**Earth Materials in Construction** Minerals -Industrial, rock forming			**Earth Materials in Construction** Minerals -Industrial, rock forming		

			and ore minerals.			and ore minerals.		
MODULE-2	11		Minerals -Industrial, rock forming and ore minerals.			Minerals -Industrial, rock forming and ore minerals.		
	12		Minerals -Industrial, rock forming and ore minerals.			Minerals -Industrial, rock forming and ore minerals.		
	13		Physical properties, composition and uses Rocks as a construction materials			Physical properties, composition and uses Rocks as a construction materials		
	14		physical properties, texture, composition, applications for aggregate, decorative			physical properties, texture, composition, applications for aggregate, decorative		
	15		railway ballast, rocks for masonry work, monumental/architecture, rocks as aquifers,			railway ballast, rocks for masonry work, monumental/architecture, rocks as aquifers,		
	16		water bearing properties igneous, sedimentary			water bearing properties igneous, sedimentary		
MODULE-3	17		**Earth Surface process and Resources** Weathering type, causes, soil insitu, drifted soil			**Earth Surface process and Resources** Weathering type, causes, soil insitu, drifted soil		
	18		Soil profile, soil mineralogy			Soil profile, soil mineralogy		
	19		structure, types of soil, Black cotton soil v/s Lateritic soil			structure, types of soil, Black cotton soil v/s Lateritic soil		
	20		Effects of weathering on monumental rocks			Effects of weathering on monumental rocks		

Course with Code:					Faculty:		Semester & Section:4	
Module	**Class No.**	**Date planned (DD/MM)**	**Topics to be covered**	**TLP Planned**	**Date of Conduction (DD/MM)**	**Topics Covered**	**TLP Executed**	**Remarks if any deviation**
	21		River morphology			River morphology		
	22		River morphology and basin investigation for engineering Projects like earthen dam, gravity dam, arch dam.			River morphology and basin investigation for engineering Projects like earthen dam, gravity dam, arch dam.		
	23		Features of river erosion, deposition and their influences on river valley projects.			Features of river erosion, deposition and their influences on river valley projects.		
	24		morphometric analysis of river basin, selection of site for artificial recharge			morphometric analysis of river basin, selection of site for artificial recharge		
	25		Interlinking of river basins, coastal process and landforms, sedimentation /siltation, erosion.			Interlinking of river basins, coastal process and landforms, sedimentation /siltation, erosion.		
MODULE-4	26		**Surface and Subsurface investigation for deep foundation**			**Surface and Subsurface investigation for deep foundation**		
	27		Borehole data(and problems)			Borehole data(and problems)		
	28		Dip and strike,			Dip and strike,		
	29		outcrop problems(numerical problem geometrical/ simple trigonometry based)			outcrop problems(numerical problem geometrical/ simple trigonometry based)		

	30		Electrical Resistivity meter, depth of water table, (numerical problems).			Electrical Resistivity meter, depth of water table, (numerical problems).		
	31		seismic studies, faults, folds, unconformity, joints types			seismic studies, faults, folds, unconformity, joints types		
	32		faults, folds, unconformity, joints types, recognition and their significance in Civil engineering projects like tunnel project, dam project			faults, folds, unconformity, joints types, recognition and their significance in Civil engineering projects like tunnel project, dam project		
	33		Ground improvements like rock bolting, rock jointing, grouting.			Ground improvements like rock bolting, rock jointing, grouting.		
MODULE-5	34		**Modern Tools and geophysical methods**			**Modern Tools and geophysical methods**		
	35		Rocks as aquifers,			Rocks as aquifers,		
	36		water-bearing properties igneous rocks			water-bearing properties igneous rocks		
	37		water-bearing properties sedimentary and metamorphic rocks			water-bearing properties sedimentary and metamorphic rocks		
	38		coefficient of permeability, factors affecting permeability			coefficient of permeability, factors affecting permeability		
	39		Electrical Resistivity meter			Electrical Resistivity meter		
	40		depth of water table, (numerical problems),			depth of water table, (numerical problems),		
	41		Revision			Revision		
	42		Unit Test					
	43		Revision					

	Activity	Planned	Actual	Remarks
1	Theory Classes	45	40	
2	Assignments/Quizzes/ Self study	3/4	3	
3	Tutorials/ Extra classes	-	5	
4	Internal Assessments	3	3	
5	ICT based Teaching (% of usage in Curriculum)	80%	80%	
Planning			**Execution**	
Faculty Signature:			**Faculty Signature:**	
HoD Signature:			**HoD Signature:**	