VICTORIA INSTITUTION (COLLEGE)

GEOGRAPHY DEPARTMENT (2018 – 2019)

DR. KABERI BRAHMA (LESSON PLAN: 1+1+1 system)

YR.	PAPER	UNIT	ТОРІС	NO. OF	SESSION
				LECTURE	
	III	Ι	Definition and factors responsible for soil	02	
	MOD 6		formation.		
	IV (a)	IV	Definition and scope of Political Geography	05	July to
	MOD 7		(Landscape school, functional school and		Pre Puja
			Morphological school)		
	IV (b)		Longitudinal profile by Dumpy level.	06	
	MOD 8				
	III	Ι	Concept of Dokuchaev Concept of	10	
	MOD 6		Sibirtzer. Profile characteristics of Laterite,		Post
			Podzal and Chermozan.		Puja to
					Winter
II	IV (a)	IV	Political geography of India. Impact of	02	Vacation
(H)	MOD 7		partition on India.		
	IV (b)		Longitudinal profile by Dumpy level.	04	
	MOD 8				
	III	Ι	Physical and Chemical properties of Soil.	04	Post
	MOD 6				Winter
	IV (a)	1V	Impact of partition on India.	02	Vacation
	MOD 7				to Test
	IV (b)		Contouring by leveling along three radial		Exam
	MOD 8		lines.		

YR	PAPER	UNIT	TOPIC	NO. OF	SESSION
•				LECTURE	
	V	III	Meghalaya Plateau	03	
	Mod 10				
-					-
	V	III	Empiricism, Positivism	04	
III	Mod 11				July to
(H)					Pre Puja
	VI	II	Edaphic Hazards	03	
-					-
	VII		Preparation of Standard FCC from Landoat		
	Mod 14		and IRs data, Preparation of land use /		
-			Land cover map with interpretation		-
	VIII	Ι	Station Model. Ombrothermic Chart		
	Mod 16				
-					
	V	III	Environmental determination, Possibilism		Post
	Mod 11				puja to
-					Winter
	VI	Ι	1.1, 1.2, 1.3, 1.4	10	Vacation
	Mod 12		Concept of hazard, Seasonal climatic		
			hazard, Occasional climatic hazard, Biotic		
			hazard		
	VII	Ι	GIS 1.1, 1.2, 1.3, 1.4	10	
			Field Report		
	VI	II	2.1, 2.2, 2.3, 2.4		
	Mod 12		Edaphic hazard, geomorphic hazard,		
			tectonic hazard, water related hazard		Post
	VII	Ι	GIS		Winter
			Field Report		to Text
					Exam
	VIII	Ι	Rainfall dispersion diagram		
	Mod 16		• 5		

PUBALI GHOSH (LESSON PLAN: 1+1+1 system)

HONOURS PART – II

PAPER	UNIT	ΤΟΡΙΟ	NO OF LECTURES	SESSION
MODULE5	1	NATURE, COMPOSITION & LAYERED STRUCTURE	5	
		FACTORS CONTROLLING INSOLATION	2	JULY TO PRE PUJA
		HEAT BUDGET OF THE ATMOSPHERE	3	
		GREEN HOUSE EFFECT	3	
		IMPORTAMCE OF OZONE LAYER	02	
		GLOBAL ATMOSPHERIC PRESSURE BELTS & THEIR OSCILLATION	4	
		GENERAL WIND CIRCULATION	5	
MODULE5	1	JET STREAM & INDEX CYCLE	7	POST PUJA
		MONSOON MECHANISM WITH REFERENCE TO JET STREAM	8	WINTER VACATION
		PROCESSES & FORMS OF CONDENSATION	5	

PAPER	UNIT	TOPIC	NO OF	SESSION
			LECTURES	
MODULE8	1	ANALYSIS OF LAND FORMS AND CORELATION BETWEENPHYSICAL & CULTURAL ELEMENTS UNDER THE HEAD OF – DRAINAGE	10	POST WINTER VACATION TO TEST EXAMINATION

<u>HONOURS</u> <u>PART – III</u>

PAPER	UNIT	ΤΟΡΙΟ	NO OF LECTURES	SESSION
MODULE9	IV	CENSUS DEFINITION & CATAGORIES IN INDIA	03	JULY TO PRE PUJA
		URBAN MORPHOLOGY CLASSICAL MODELS – BURGEES, HOMER HOYT,HARRIS AND ULLMAN	06	
		METROPOLITAN CONCEPT CITY – REGION & CONURBATION	06	
MODULE9	IV	FUNTIONAL CLASSIFICATIONOF CITIES : HARRIS NELSON & MCKENZIE	6	POST PUJA TO WINTER VACATION

PAPER	UNIT	TOPIC	NO OF LECTURES	SESSION
MODULE 10	п	STRUCTURE & PHYSIOGRAPHY	4 4	JULY TO PRE
		DRAINAGE : PENINSULAR ANDEXTRA PENINSULAR	3 3	PUJA
		CLIMATE REGIONS OF	3	
		INDIA EDAPHIC REGIONS	3	
		OF INDIABIOTIC REGIONS	3	
		OF INDIA		
MODULE 10	Π	AGRICULTURAL REGIONS(AS PER ICAR)	4	POST PUJA TO TEST EXAMINATIO N

PAPER	UNIT	TOPIC	NO OF	SESSION
			LECTURES	
MODULE 11	1	GEOGRAPHY & ITS RELATION WITH OTHERDISCIPLINES	03	ЛЛАТО
		ENCYCLOPAEDISM, GEOGRAPHICAL IDEAS DURING ANCIENT PERIOD	04	PRE PUJA
		DEVELOPMENT OF GEOGRAPHY DURINGMEDIEVAL PERIOD	05	
			06	
		EMERGENCY OF		
		SCIENTIFICIDEAS IN		
		MODERN GEOGRAPHY		
MODULE 11	Π	IDIOGRAPHIC AND NOMOTHETIC APPROACHES	3	POST PUJA TO TEST EXAMINATION
		MAN ENVIRONMENT RELATION	3	
			4	
		LUCATION TIME & SPACE	6	
		AREAL DIFFERENTIATION AND SPATIAL ORGANIZATION	6	

PAPER	UNIT	TOPIC	NO OF	SESSION
			LECTURES	
MODULE 12	1	CONCEPT OF HAZARDS & DISASTER	2 3	JULY TO
		NATURAL, QUASI NATURAL & MAN MADE HAZARDS	4	PREPUA
		SEAONAL CLIMATE HAZARDS:- FLOOD – MECHANISM ENVIRONMENTAL IMPACT & MANACEMENT	4	
		WANAGENIENI		
MODULE 12	п	OCCASSIONAL CLIMATE HAZARDS:- HAILSTORM- MECHANISM, ENVIRONMENTAL IMPACT &MANAGEMENT	4	POST PUJA TO TEST EXAMINATION
		OCCASSIONAL CLIMATE HAZARDS:- TORNADOES- MECHANISM, ENVIRONMENTAL IMPACT &MANAGEMENT	4	
		BIOTIC HAZARDS: DEFORESTATION & LOSS OFBIO DIVERSITY-IMPACT & CONSERVATION OF BIOTIC RESOURCES	5	

PAPER	UNIT	TOPIC	NO OF	SESSION
			LECTURES	
MODULE	III	CLIMATE CHART	3	JULY TO PRE
13				PUJA
	III	TERNARY DIAGRAM	3	POST PUJA TO
				TEST
		DIAGRAMS WITH	6	EXAMINATION
		DATA		
		ON SOIL PROFILE		

PAPER	UNIT	TOPIC	NO OF	SESSION
			LECTURES	
MODULE 16	П	COMPUTATION OF HUMAN DEVELOPMENT INDEX & RANKING OF COUNTRIES / STATES / DISTRICT BASE ON HDI	5	JULY TO PRE PUJA
	Π	COMPUTATION OF GENDER DEVELOPMENT INDEX & RANKING OF COUNTRIES / STATES / DISTRICT BASE ON GDI	5	JULY TO PRE PUJA
	п	MEASURES OF SPATICAL & SIZE GLASS DISTRIBUTION: DOMINANT – DISTINCTIVE FUNTIONS	5	POST PUJA TO TEST
		MEASURES OF SPATICAL & SIZE GLASS DISRIBUTION: • RANK SIZE RULE	3	EXAMINATION
		MEASURES OF CONCENTRATION: • LORENZ CURVE	2	
		LOCATION QUOTIENT	2	

GENERAL PART-II

PAPER	UNIT	ΤΟΡΙΟ	NO. OF	SESSION
			LECTURES	
II	1.1	INSOLATION & HEAT		
MODULE		BUDGET	4+3=7	
III				JULY TO PRE
		HORIZONTAL & VERTICAL		PUJA
		DISTRIBUTION OF	4+4=8	
		TEMPARATURE &		
		PRESSURE		
		CDEEN HOUSE FFFFCT	04	
		GREEN HOUSE EFFECI	04	
II	1.2	MONSOON SYSTEM : ITS		
MODULE		ORIGIN & MECHANISM	3+3=06	POST PUJA
				ТО
III				WINTER
		TROPICAL DISTURBANCES	03	VACATION
		THUNDERSTORM &	2+2=04	
		CYCLONE		
		CICLORE		
		INDUSTRIAL REGIONS OF		
MODULE		INDIA	04	POST WINTER
IV			V •	VACATION TO
		HOOGHLY INDUSTRIAL	04	TEST
		BELT		EXAMINATION

PAPER	UNIT	TOPIC	NO OF LECTURES	SESSION
		CONCEPT OF SCALE	03	
III MODULE V	1.1	DRAWING OF LINEAR SCALE(METRIC SYSTEM)	06	JULY TO PRE PUJA
		DRAWING OF LINEAR SCALE(METRIC & CGS SYSTEM)	06	POST PUJA TOWINTER VACATION
		DRAWING OF LINEAR SCALE(CGS SYSTEM)	06	POST WINTER VACATION TO TEST EXAMINATION

		GENERAL (PART III)		-
PAPER	UNIT	ΤΟΡΙϹ	NO OF LECTURES	SESSION
IV MODULE VII	1.1	CONCEPT & ATTRIBITION OF LAND	08	
	1.2	OBJECTIVES OF LAND USE	09	JULY TO PRE PUJA
	1.2	PRINCIPLES OF LAND USE		
			09	
IV MODULE		FACTORS AFFECTING LANDUSE	04	POST PUJA TO
VII	1.3	FACTORS AFFECTING AGRICULTURAL LAND USE	07	EXAMINATIO N
		FACTORS AFFECTING	06	
		NONAGRICULTURAL		
		LAND USE		

SASWATI NAYAK (LESSON PLAN: 1+1+1 system)

Year	Paper	Unit	Торіс	No of	Session
Honours 2 nd Year	Paper: III	Module:6 Unit:III	Scope and content of Bio-Geography	2	
			Concept of Ecology,Ecosystem	3	July -Pre
			Major natural ecosystems	3	— Puja
			Trophic Structure, food chain and food web	4	
	Paper:IVA	Mod:7	Region as a social unit	2	
		Unit:II	Social elements	6	
	Paper:IVB	I	Morphometric	10	
	(Practical)		techniques: relativerelief, Road Density		

II Year (Honours)

Year	Paper	Unit	Торіс	No of	Session
				Lecture	
				S	
Honours:	Paper: III	III	Laws of	2	
2 nd Year			Thermodynamics		
			Energy flow in	3	Post Puja
			ecosystem		–Winter
			Bio-geo-Chemical cycle	6	Recess
	Paper:IVA	II	Social area analysis	2	
			Social ecology	2	
	Paper:IVB(Practical)	Ι	Slope analysis	4	
		II	Close Traverse Survey	6	

Year	Paper	Unit	Торіс	No of	Session
				Lecture	
				S	
Honours	Paper: III	III	Concept of biomes	3	
2 nd Year			Ecotone and	2	
			community		Post Winter
			Deforestation: causes	2	Recess to
			& consequences		Test
			Significance of	5	Examination
			Biodiversity		
	Paper:IVA	II	Social groups: Tribal,	5	
			traditional and Modern		
	Paper:IVB(Practical)	Ι	Interpretation of topo-	8	
			map: Morphometric analysis		
		II	Prismatic Compass	14	
			Survey		

III YEAR (HONOURS

Year	Paper	Unit	Торіс	No of	Session
				Lectures	
Honours 3 rd Year	Paper: V	Module:9 Unit:II	Definition and characteristics of rural settlement	2	July – Pre
			Site and situation of rural settlement	2	Puja
		Module:10	Nature and types of region	3	
		Unit: I	Regionalization: scale and dimension	4	
	Paper:VI	Module:12 Unit:III	Basic indicators of development	3	
			Economic disparity as constraint of development	4	
	Paper: VII	Module:13 Unit:I	Map projection: Concept, Classification and Use	2	
	(Practical)		Simple Conical projection with one Standard parallel	2	
			Polar Zenithal Stereographic Projection	2	
			Cylindrical Equal AreaProjection	2	
			Bonne's projection	2	7
	Paper: VIIIA	Module:15 Unit:I	Significance of Statistical techniques in Geography	1	

	Sampling techniques	2	
	Frequency distribution	6	
	Measures of central	12	
	tendency		

Year	Paper	Unit	Торіс	No of Lectures	Session
Honours 3 rd Year	Paper: V	Module:9 Unit:II	Rural house types with reference to India	2	
			Social segregation in rural India	2	Post- Puja to Winter
		Module:10 Unit: I	Physical regional division in India	3	Recess
			Regional socio-economic division of India	4	
	Paper:VI	Module:12	Poverty	4	
	_	Unit:III	Impact of Globalisation	2	
	Paper:	Module:13	Sinusoidal projection	2	
	VII	Unit:I	Poly Conic projection	2	
	(Practical)		Mercator"s projection	2	
		Module: 14, Unit:II	Preparation of land use and land cover map using aerial photographs	12	
	Paper:	Module:15	Measures of dispersion	8	
	VIIIA	Unit:I	Bi-variate scatter diagram	6	
			Co-efficient of correlation	6	

Year	Paper	Unit	Торіс	No of	Session
				Lectures	
Honours 3 rd Year	Paper:VII	Module:13 Unit:I	Checking and preparing the laboratory note book	8	
					Post Winter
	Paper:VIII A	Module:	Practicing the land use	4	Recess to
	Paper:II (Practical)	14, Unit:II	map from aerial photo		Test Examination
		Module:15	Time series analysis	8	

PRAKRITI DAS (LESSON PLAN: 1+1+1 system)

Year	Paper	Unit	Торіс	No. of lectures	Session
2	3	Mod5	Weather disturbances &	3+3+3+4 = 13	July to Pre-Puja
Hons		UnitIV	climate		and
			classification (tropical		
			& Mid latitude cyclone,		
			Anticyclone, World		post-Puja to
			Climate Classification		Winter vacation.
			after Koppen &		
			Thornthwaite		
		Mod8	Topographical sheet(Practical class	post-Winter
	4B	Unit I	Introduction,	30	Vacation to Test
			Vegetation)		examination
	4A	Mod 7	Social Geography	2+3+3+4 =12	July to Pre-Puja
		Unit I	(Definition, Evolution,		
			Approaches, Structure,		
			Process Pattern, Space,		
			Well being)		
		Unit	Cultural Geog (Concept,	2+3+3+4 = 12	post-Puja to
			Region, Landscape,		Winter vacation.
		Unit	Assimilation, Integration,		
		IV	Diffusion, Mackinder		
			and Spykman		
<u> </u>	·	·	Tonographical sheet	Practical class	post Wintor
	4 B	Linit I	(Settlement Transport)		Vacation to Test
	UF	Unit		50	examination

Year	Paper	Unit	Торіс	No. of lectures	Session
3	5	Mod 9	Demographic attributes(5+4+2+2 = 13	July to Pre-Puja
Hons		Unit II	fertility, mortality,		
			morbidity, migration)		
		Mod	Malthus, Marx,	2+3+3+3 = 11	post-Puja to Test
		10	Demographic Transition		examination
		Unit I	Model, Population		
		& II	resource region.		
			Region, Gujarat, Kerala.		
	6	Mod II	Structuralism,	2+4+3+4 = 13	July to Pre-Puja
		Unit IV	Quantitative Revolution,		
			Radicalism, Humanistic &		
			Behaviouralism		
		Mod	Human development in	2+3+4+3 = 12	post-Puja to Test
		12	3 rd world (Human &		examination
		Unit	Gender development,		and
		IV	social inequality: caste &		
			religion fundamentalism		

		Gender bias, Demographic constraint, Sustainable development		July to Pre-Puja
7	Mod	Cartograms (choropleth	Practical class	post-Puja to Test
	13,	square, dots & sphere,	15	examination
	Unit II	age sex pyramid		
8A	Mod	Statistics (scatter	Practical class	July to Pre-Puja
	15	diagram, regression,	15	
	Unitll	coefficient correlation,		
		time series)		
	Mod	Rating curve,	Practical class	post-Puja to Test
	16	hydrograph, unit	15	examination
	Unit I	hydrograph		
	& II	&questionnaire survey		

Year	Paper	Unit	Торіс	No. of lectures	Session
General 2	2	Mod III Unit- 4.3	Climatic Classification After koppen.	2	July to Pre-Puja
		Mod IV Unit 5.2	Broad physiographic regions With reference to western Himalayas	2	post-Puja to Winter vacation.
		5.4	Regions of India: Planning Regions of India - DVC	2	post-Winter Vacation to Test examination
	3	Mod VI 6.2	Cartograms: Bar graph, Simple & Compound, Proportional Divided circles & choropleth	Practical class 15	July to Pre-Puja
					post-Puja to Winter vacation.
					post-Winter Vacation to Test examination

Year	Paper	Unit	Торіс	No. of lectures	Session
General 3	eral 4 Mod Urban settlement: VII definition Unit – Morphology & 7.4 functions		4	July to Pre-Puja	
7.4 Mod IX Unit – 9.2		Mod IX Unit – 9.2	Detours index, flow map, Accessibility Maps.	10	post-Puja to Test examination

LESSON PLAN FOR CBCS SYSTEM

Semester	Programme	Course and	Topic	Teacher	No. Of
		Name of the			hours
		Paper			
First	Hons	CC – 1	Earth's tectonic and	PG	3
		Geotectonics	structural evolution with		
		and	reference to geological		
		Geomorphology	time scale.		
		(Theory)	Earth's interior with	PG	3
			special reference to		
			seismology. Isostasy:		
			Models of Airy, Pratt, and		
			their applicability.		
			Plate Tectonics as a	PG	10
			unified theory of global		
			tectonics: process and		
			landfroms at plate		
			margins and hotspots.		
			Folds and Faults- origin	PG	4
			and types.		
			Degradational processes:	SN	2.5
			Weathering and resultant		
			landforms.		
			Degradational processes:	KB	2.5
			mass wasting, and		
			resultant landforms.		
			Processes of entrainment,	KB	4
			transportation, and		
			deposition by different		
			geomorphic agents. Role		

		of humans in landfrom		
		development.	VD	7
		Development of river	KB	/
		network and landforms on		
		uniclinal and folded		
		structures. Surface		
		expression of faults.		
		Development of river	KB	4
		network and landforms on		
		granites, basalts and		
		limestones.		
		Coastal processes and	SN	4
		landfroms.		
		Glacial and glacio-fluyial	KB	4
		processes and landfroms		•
		Aeolian and fluvio-	KB	Δ
		applian processes and	КD	-
		landfroms		
		Dala af time in	DD	0
			PD	8
		geomorphology: Schumn		
		and Lichty's model.		
		Models on landscape		
		evolution: Views of		
		Davis, Penk, and Hack.		
		Significance of systems		
		approach.		
	CC - 1	Measurement of dip and	KB	6
	Geotectonics	strike using clinometer.		
	and	Megascopic identification	PG	14
	Geomorphology	of (a) mineral		
	Lab	samples:Bauxite, calcite,		
	(Practical)	chalcopyrite,		
		feldspar,galena,gypsum,		
		hematite, magnetite, mica,		
		quartz, talc.tourmaline:		
		and (b) rock samples:		
		Granite basalt dolerite		
		laterite limestone shale		
		sandstone conglomerate		
		slate phyllite schist gneiss		
		quartzita marbla		
		Extraction and	DD	15
		Extraction of	rD	15
		acomombic information		
		geomorphic information		
		1:50K topographical maps		
		of plateau region:		
		Delineation of drainage		
		basins. Construction of		
		relative relief map,		

	drainage density map		
	(c.5'*5').		
	Construction of relief	PG	5
	profiles (superimposed,		
	projected, composite).		
	Construction of slope map	SN	15
	(Wentworth's method),		
	stream ordering (Strahler),		
	and bifurcation ratio on a		
	drainage basin (c.5'*5').		
	Construction of	KB	5
	hypsometric curve and		
	derivation of hypsometric		
	integer of a drainage basin		
	(c.5'*5')from survey of		
	India 1:50K		
	Topographical maps of		
	plateau region.		

Semester	Programme	Course and	Topic	Teacher	No. Of
		Name of the			hours
		Paper			
First	Hons	CC – 2	Maps: Components	PG	4
		Cartographic	and classification.		
		Techniques	Concept and	PD	8
		(Theory)	application of scales:		
			Plain,		
			comparative, diagonal,		
			and vernier.		
			Coordinate systems:	SN	6
			Polar and rectangular.		
			Concept of generating	SN	2
			globe.		
			Grids: Angular and	SN	5
			linear systems of		
			measurement.		
			Bearing: Magneting	PD	5
			and true, whole-circle		
			and reduced.		
			Concept of geoid and	SN	4
			spheroid with special		
			reference to Everest		
			and WGS-84.		
			Map projections:	SN	8
			Classification,		
			properties and uses.		

		Concept and	SN	2
		significance of UTM		
		projection.		
		Representation of	KB	5
		data using dots,		
		spheres and divided		
		proportional circles.		
		Representation of	PG	5
		data using isopleth,		
		choropleth, and		
		chorochromatic maps.		
		Survey of India	PG	6
		topographical maps:		
		Reference scheme of		
		open and old series.		
		Information on the		
		margin of maps.		
	CC – 2	Graphical	PD	16
	Cartographic	construction of		
	Techniques	scales: Plain,		
	Lab	comparative,		
	(Practical)	diagonal, and vernier.		
		Construction of	SN	12
		projections : Polar		
		Zenithal		
		Stereographic, Simple		
		conic with one		
		standard parallel,		
		Bonne's.		
		Construction of	KB	8
		projections :		
		Cylindrical Equal		
		Area, and Mercator's.		
		Thematic maps;	KB	12
		Proportional squares,		
		Pie diagrams with		
		proportional circles,		
		dots and sphere.		
		Thematic maps:	PG	12
		Choropleth, isopleth,		
		and chorochromatic		
		maps.		

Semester	Programme	Course and	Topic	Teacher	No. Of
	110810000	Name of the	ropro		hours
		Paper			110 01 0
Second	Hons	CC - 3	Nature, scope and	PG	4
Second	nons	Human	recent trends Elements	10	
		Geography	of human geography		
		(Theory)	Approaches to	PG	6
		(Theory)	Human Geography:	10	0
			racourco locational		
			lendecene		
			ianuscape,		
			environment.	DD	<u>г</u>
			Concept and	PD	5
			classification of race.		
			Ethnicity.		
			Space, society and	PD	5
			cultural regions		
			(language and		
			religion).		
			Evolution of human	KB	6
			societies: Hunting		
			and food gathering,		
			pastoral nomadism,		
			subsistence farming		
			and industrial		
			society.		
			Human adaptation to	KB	4
			environment: Case		
			studies of Eskimos,		
			Masai and Maori.		
			Population growth	PD	5
			and distribution.		
			composition,		
			demographic		
			transition.		
			Populaion-resource	PD	5
			regions(Akerman).		_
			Development-	PG	5
			environment conflict.		-
			Types and patterns of	SN	5
			rural settlements.	211	C
			Rural house types in	SN	5
			India.	511	5
			Morphology and	PG	5
			hierarchy of urban	10	5
			settlements		
		CC_{3}	Spatial variations in	DC	12
		Uumon	opatian variations in	ΓU	12
		Geography	level religious		
		Geography	compositions by		
	1		compositions by		

	Lab	divided proportional		
	(Practical)	circles.		
		Measuring arithmetic	PG	15
		growth rate of		
		population		
		comparing two		
		decadal datasets.		
		Types of Age-Sex	PD	20
		pyramids		
		(progressive,		
		regressive,		
		intermediate and		
		stationary): Graphical		
		representation and		
		analysis.		
		Nearest neighbor	PG	13
		analysis from survey		
		of India 1:50k		
		topographical		
		maps(5'x5').		

Semester	Programme	Course	Topic	Teacher	No. Of
		and Name	_		hours
		of the			
		Paper			
Second	Hons	CC – 4	Concepts of rounding,	SN	4
		Thematic	scientific notation.		
		Mapping	Logarithm and anti		
		and	logarithm. Natural and		
		Surveying	log scales.		
		(Theory)	Concept of	PG	2
			diagrammatic		
			representation of data.		
			Preparation and	PD	5
			interpretation of		
			geological maps.		
			Preparation and	PG	5
			interpretation of		
			weather maps.		
			Preparation and	KB	5
			interpretation of land		
			use land cover maps.		
			Preparation and	PG	5
			interpretation of socio-		
			economic maps.		
			Principle national	PD	5
			agencies producing		
			thematic maps in India:		

	NATMO ,GSI, NBSSLUP, NHO,NRSC/ Bhuvan , etc.		
	Basic concepts of surveying and survey equipments: Prismatic compass.	SN	5
	Basic concepts of surveying and survey equipments: Dumpy level.	SN	7
	Basic concepts of surveying and survey equipments: Theodolite	KB	7
	Basic concepts of surveying and survey equipments: Abney level.	KB	5
	Basic concepts of surveying and survey equipments: Laser distance measurer.	KB	5
CC - 4 Thematic	Traverse survey using prismatic compass.	SN	10
Mapping and	Profile survey using dumpy level.	SN	12
Surveying (Practical)	Height determination of base accessible and inaccessible (same vertical plane method) objects by theodolite .	KB	18
	Interpretation of geological maps with uniclinal structure, folds, unconformity and intrusions	PD	20

Semester	Programme	Course and	Topic	Teacher	No. Of
		Name of the			hours
		Paper			
First	General	CC 1/GE 1	Earth's interior with	PG	3
		Physical	special reference to		
		Geography	seismology		
		(Theory)	Plate Tectonics as a	PG	7
			unified theory of		

	1 1 1 4 4 4		
	global tectonics.		
	Formation of major		
	relief features of the		
	ocean floor and		
	continents according		
	to Plate Tectonics		
	Folds and faults:	PG	6
	Classification and		
	surface expressions		
	Degradational	KB	4
	processes:		
	Weathering, mass		
	wasting, and		
	resultant landforms		
	Principal	KB	12
	geomorphic agents.		
	Classification and		
	evolution of fluvial,		
	coastal, aeolian, and		
	glacial landforms		
	Basic models of	PD	6
	slope evolution:		
	Decline,		
	replacement, and		
	retreat. Systems		
	approach and its		
	significance in		
	geomorphology		
	Global hydrological	SN	2
	cycle: Its physical		
	and biological role		
	Run off: Controlling	SN	3
	factors. Concept of		
	ecological flow		
	Drainage basin as a	KB	3
	hydrological unit.		
	Principles of		
	watershed		
	management		
	Physical and	PD	4
	chemical properties		
	of ocean water.		
	Distribution and		
	determinants of		
	temperature and		
	salinity		
	Overview of air-sea	SN	7
	interactions. Ocean		
	circulation, wave,		
	and tide		

Classification and sustainable	5
utilisation	
CC 1/GE 1MegascopicPGPhysicalidentification of	8
Geography mineral samples:	
Lab Bauxite, calcite,	
(Practical) chalcopyrite,	
feldspar, galena,	
hematite, mica,	
quartz, talc,	
tourmaline	
Megascopic PG	12
identification of rock	
samples: Granite,	
basalt, laterite,	
influence, shale,	
conglomerate slate	
phyllite schist	
gneiss, quartzite	
Extraction of SS	20
physiographic	
information from	
Survey of India	
1:50k topographical	
maps of plateau	
region: Construction	
and interpretation of	
relief profiles	
(superimposed,	
projected and composite)	
Construction and	
interpretation of	
relative relief map	
$(c. 5' \times 5')$	
Extraction of SS	20
drainage information	
from Survey of India	
topographical maps	
of plateau region:	
Extraction and	
interpretation of	
draina go pattorna	
Construction of	
channel profiles	

Semester	Programme	Course and	Торіс	Teacher	No. Of
		Name of the			hours
		Paper	T 1.4 1TT .	DC	
Second	General	CC 2/GE 2	Insolation and Heat	PG	5
		Environmental	Budget. Horizontal		
		(Theory)	distribution of		
		(Theory)	atmospheric		
			tomporature and		
			prossure		
			Overview of	DC	6
			planatary wind	ru	0
			systems Indian		
			Monsoons:		
			Mechanisms and		
			controls		
			Atmospheric	PD	7
			disturbances		,
			Tropical and		
			temperate cyclones		
			Thunderstorms		
			Overview of global	PG	5
			climatic change:	10	5
			Greenhouse effect		
			Ozone depletion		
			Scheme of world	PD	2
			climatic		
			classification by		
			Köppen		
			Factors of soil	KB	4
			formation		
			Soil profile	KB	6
			development under		
			different climatic		
			conditions: Laterite,		
			Podsol, and		
			Chernozem		
			Physical and	KB	6
			chemical properties		
			of soils: Texture,		
			structure, pH,		
			salinity, and NPK		
			status		
			USDA classification	PD	4
			of soils. Soil erosion		
			and its management		
			Ecosystem and	SN	6
			Biomes.		
			Distribution and		

		characteristics of		
		tropical rainforest;		
		Savannah, and hot		
		desert biomes		
		Plant types,	SN	5
		occurrence and		
		ecological		
		adaptations:		
		Halophytes,		
		xerophytes,		
		hydrophytes, and		
		mesophytes		
		Biodiversity: Types.	SN	4
		threats and		
		management with		
		special reference to		
		India		
	CC 2/GE 2	Interpretation of	SS	20
	Environmental	daily weather map		
	Geography	of India (any one):		
	Lab	Pre-Monsoon or		
	(Practical)	Monsoon or Post-		
		Monsoon		
		Construction and	SS	20
		interpretation of		
		hythergraph,		
		climograph (G.		
		Taylor) and wind		
		rose (seasonal)		
		Determination of	SS	10
		soil type by ternary		
		diagram textural		
		plotting		
		Preparation of	PD	10
		peoples'		
		biodiversity register		