

Department of geography
LessonPlan-2023-24

Semester One- Major & Minor

Semester	Paper	Unit	Topic	Teaching Hours	Name of Faculty
1 st semester	GEOG -H-CC 01/MD -CC 01-1/3- Th-Ph ysical Geogr aphy	I	1. Concept and applications of scales . Components and classification of maps 7.Factors of soil formation	5+4	Tumpa Hudut
1 st Semester		II,IV	2. Seismic waves and internal structure of the earth 5. Nature,composition,and layering of the atmosphere 6. Circulation in the atmosphere:Planetarywinds, jetstreams,and indexcycle	4+5+3	DR. Asrafal Alam
1 st Semester		III	3. Classification of weathering and agents of erosion 4. Fluvial processes and landforms	5+5	Priyanka Dey
1 st Semester		I,V	1. Projection , 8. Evolution of an ideal soil profile	4+4	Taniya Kar

1 st Semester		VI,VII	9. Plant adaptation and distribution in relation to water availability 10. Nature and classification of hazards and disasters in Indian context	5+5	Moumita kundu
1 st Semester	practical	1	Graphical construction of scales: Plain, comparative	5	Priyanka dey
		1	Graphical construction of scales : diagonal, and vernier	5	Tumpa Hudut
		2	Delineation of drainage basins on Survey of India 1:50k topographical maps. Determining stream ordering (Strahler), and bifurcation ratio in a drainage basin (c. 5' x 5')	10	Taniya Kar
		3	Identification Of Drainage And channel patterns from Survey of India 1:50k topographical maps	6	Moumita kundu
		4	Construction And Interpretation Of Windrose Diagram	4	Dr. Asrafal alam

SemesterOne

GEOG-H-SEC01/MD-SEC01-1/2/3-Th-MethodsinGeography-100Marks/4

Credits

Semester	Paper	Unit	TOPIC	Teaching Hours	Name of Faculty
1 st semester		I,II	1.Designing of primary survey based on diverse research problems. Relevance of pilot survey 3.Preparation of questionnaire and interview schedule 8.Textural Analysis of grains using sieves.	4+4	Tumpa Hudut
		I	2.Sampling types and strategy based on diverse research problems 4.Data compilation into master table 6.distometer, smart phone levelling applications	4+4+3	Priyanka dey
		I,II	5. Computer-assisted field data entry; tabulation data into frequency distribution tables 9 Mapping and extraction of flooded areas from satellite images and digital elevation models 10. Mapping areal and linear extent of river bank and coast line shift from Survey of India 1:50k maps and/or satellite images	4+5+5	Dr. Asrafal Alam
		I,II,III	6.Statistical analysis of data: measures of central tendency and dispersion 7. Use of minor surveying inst	4+1+5	Moumita kundu

			<p>uments: Brunton compass.</p> <p>14. Preparation of flowcharts using transportation data</p>		
		III	<p>11. Dominant and distinctive functions</p> <p>12 Ternary diagram showing occupational patterns (after Ashok Mitra)</p> <p>13. Preparation of accessibility map</p>	4+4+5	Taniya Kar

GEO-H-IDC01-1/2/3-Th-Geomatics and Spatial Analysis-50 Marks/2 Credits

Semester	Paper	Unit	TOPIC	Teaching Hours	Name of Faculty
1 st semester		I, II, III	<p>1. Concept and applications of scales and projections. Components And Classification Of maps</p> <p>5. sensors with reference to IRS and Landsat missions</p> <p>4. Dumpy level</p>	4+2+2	Tumpa hudut
		I	<p>2. Bearing: Magnetic and true, whole-circle and reduced. Concept of geoid and spheroid with special reference to WGS-84</p>	3	Moumita kundu
		I	<p>3. Map projections: Classification, properties and uses with special reference simple conical projection and Universal Transverse Mercator (UTM)</p> <p>7. GIS data types: Spatial And Non-spatial (attribute table and metadata), raster and vector</p>	5+2	Priyanka dey
		II	<p>4. Theodolite</p>	2	Taniya kar
		II	<p>4. Basic Concepts Of Surveying, survey equipment, and their capabilities: total station, and Global Navigation Satellite System (GNSS)</p> <p>5. Principles of remote sensing (RS). Types of RS satellites</p>	6+3+7+4	Dr. Asrafal Alam

			8.Principles Of Preparing Attributes Tables,data manipulation,query,andoverlay 6.Principlesof preparing standard false colour composites (FCCs)and supervised image classification		
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GEO-H-IDC01-1/2/3-P-GeomaticsandSpatialAnalysisLab

Semester	Paper	Unit	TOPIC	Teaching Hours	Name of Faculty
		1	Construction of simple conical projectionwithonestandardparallel	6	Priyanka Dey
		2,3,4	TraversesurveyandplottingUTMcoordinatesusingsmartphone GNSSapplication Identification Of Landuse/landcover features from standard FCCsand preparation of inventories Changedetectionofriverbankorcoastlineshiftfrommulti-dated mapsandimages	8+8+8	Dr. Asrafu l Alam

SEMESTERS–2/4(forH&MD)

GEOG-H-CC02/MD-CC02-2/4-Th–HumanGeography–

Semester	Paper	Unit	Topic	Teaching Hours	Name of Faculty
2nd semester	GEOG-H-CC02/MD-CC02-2/4-Th–Human Geography	III, IV	7.Distribution,density,and growth of population in India 9.Site,situation,types,and patterns of rural settlements	4+6	Tumpa Hudut
2nd semester		II,III,IV	5.Evolution and characteristics of post-industrial urban societies. 6.Demographic transition.Significance of demographic divide 8.Characteristics of settlements:Urban and rural	2+3+4	DR. Asrafal Alam
2nd semester		II	4.Human adaptation to the environment:Chenchu,Toda,and Gond.	6	Priyanka Dey
2nd semester		II, V	3.Evolution of human societies :Hunting and food gathering,pastoral nomadism, subsistence farming, and industrial society. 10.Size-class classification of urban settlements after Census of India	6+4	Taniya Kar
2nd semester		I	1.Elements Of Human Geography:Nature,scope,and recent trends 2.Human geography schools of thought:Resource,locational,landscape,environment	4+6	Moumita Kundu

Semester	Paper	Unit	Topic	Teaching Hours	Name of Faculty
2nd semester	GEOG-H-CC 02/MD-CC 02-2/4-Th-Human Geography Lab		3. Identification of types of settlements according to sites from Survey of India 1:50k topographical maps	8	Tumpa Hudut
			2. Representation and interpretation of population density of Indian states or West Bengal districts by choropleth method	8	Priyanka Dey
			1. Growth rate of population : Arithmetic Growth Comparing two decadal Datasets	6	Taniya Kar
			4. Construction of proportional squares depicting number of houses	8	Moumita Kundu