DEPART NAME : GEOGRAPHY (MORNING)

NAME OF FACULTY: ALOKA MUKHOPADHYAY

PAPER NAME & CODE: HUMAN GEOGRAPHY & GEOG - MD-CC02-2-TH

	Planned				
				After Implementation	
Unit/Group/ Module/Article	Topics	Reference Books	No. of Lecture Planned	Content Delivery Technique	Remarks/ Comments
Unit I	SCOPE & APPROACHES	Introduction to Human Geography by Dorrel, D.Henderson	10	CHALK & TALK PPT PRESENTATION PRESENTATION WITH TEACHING AIDS	
Unit II	SOCIAL GEOGRAPHY	Key Methods in Geography by Clifford, N, Cope	14		
Unit III	POPULATION GEOGRAPHY	Geography of Population by R.C.Chandna	7		
Unit IV	SETTLEMENT GEOGRAPHY	An introduction to settlement Geography by S.Gosh	10		
Unit V	URBAN GEOGRAPHY	An introduction to settlement Geography by S.Gosh	4		

DEPART NAME : GEOGRAPHY (MORNING)

NAME OF FACULTY: ALOKA MUKHOPADHYAY

PAPER NAME & CODE: HUMAN GEOGRAPHY LAB & GEOG - MD-CC02-2 -P

	Planned					
				After Implementation		
Unit/Group/	Topics	Reference Books	No. of	Content Delivery	Remarks/	
Module/Article			Lecture	Technique	Comments	
			Planned			
1	Growth rate of	Practical	6	CHALK & TALK		
	population	Geography by A.		PPT PRESENTATION		
		Sarkar		PRESENTATION WITH		
				TEACHING AIDS		
		Elements of				
II	Representation &	Practical	8	TOPOGRAPHICAL MAPS		
	Interpretation of	Geography by				
	population density	Singh, R.L. Singh				
III	Identification of		8	CENSUS OF DIFFERENT		
	types of settlements	Maps & Diagrams		DISTRICTS		
	according to sites	by F.J.				
	from Survey of India	Monkhouse				
	1: 50K topographical					
	maps					
IV	Construction of		8			
	proportional squares					

DEPART NAME: GEOGRAPHY (MORNING)

NAME OF FACULTY: ALOKA MUKHOPADHYAY

PAPER NAME & CODE: METHODS IN GEOGRAPHY & GEOG-H-SEC01-2 TH

Planned			After Implementation		
Unit/Group/ Module/Article	Topics	Reference Books	No. of Lecture Planned	Content Delivery Technique	Remarks/ Comments
Unit I	FIELD DATA COLLECTION & COMPILATION	Geography of Fieldwork and Skills by Lenon B ,Cleves, P	24	CHALK & TALK PPT PRESENTATION PRESENTATION WITH TEACHING AIDS	
Unit II	METHODS IN PHYSICAL GEOGRAPHY	Key Methods in Geography by Clifford, N, Cope	18		
Unit III	METHODS IN HUMAN GEOGRAPHY	Fieldwork for Human Geography by Phillips, R, John J	18		

DEPART NAME : GEOGRAPHY (MORNING)

NAME OF FACULTY: ALOKA MUKHOPADHYAY

PAPER NAME & CODE: GEOMATICS & SPATIAL ANALYSIS & GEOG-IDC01-TH

Planned				
			After Implementation	
Topics	Reference Books	No. of	Content Delivery	Remarks/
		Lecture	Technique	Comments
		Planned		
CARTOGRAPHY	Fundamentals of	14	CHALK & TALK	
	Cartography by		PPT PRESENTATION	
	R.P. MISHRA		PRESENTATION WITH	
	Maps & Diagrams		TEACHING AIDS	
	by Monkhouse			
SURVEYING	Practical	12		
	Geography: A			
	Systematic			
	Approach by			
	Sarkar, A			
REMOTE SENSING	Fundamentals of	18		
AND	Remote Sensing			
GEOGRAPHICAL	by Joseph, G,			
INFORMATION	Jagannathan			
SYSTEM				

DEPART NAME : GEOGRAPHY (MORNING)

NAME OF FACULTY: ALOKA MUKHOPADHYAY

PAPER NAME & CODE: GEOMATICS & SPATIAL ANALYSIS LAB & GEOG-IDC02-P

Planned				
		After Implementation		
Topics	Reference Books	No. of	Content Delivery	Remarks/
		Lecture	Technique	Comments
		Planned		
CONSTRUCTION OF	Fundamentals of	5	CHALK & TALK	
SIMPLE CONICAL	Cartography by		PPT PRESENTATION	
PROJECTION WITH	R.P. MISHRA		PRESENTATION WITH	
ONE STD. PARALLEL			TEACHING AIDS	
TRAVERSE SURVEY	Maps & Diagrams	10		
USING PRISMATIC	by Monkhouse		SATELLITE IMAGERY	
COMPASS				
IDENTIFICATION OF	Practical	7		
LAND USE / LAND	Geography: A			
COVER FEATURES	Systematic			
FROM STANDARD	Approach by			
FCC &	Sarkar, A			
PREPARATION OF				
INVENTORIES	Fundamentals of			
CHAN & IMAGESGE	Remote Sensing	8		
DETECTION OF	by Joseph, G,			
RIVERBANK OR	Jagannathan			
COASTLINE SHIFT				
FROM MULTI-				
DATED MAPS				

DEPART NAME: GEOGRAPHY (MORNING)

NAME OF FACULTY: ALOKA MUKHOPADHYAY

PAPER NAME & CODE: CARTOGRAPHY & GEO-G-CC-4-04-TH

Planned				After Implementation	
Unit/Group/ Module/Article	Topics	Reference Books	No. of Lecture Planned	Content Delivery Technique	Remarks/ Comments
Unit I	Scale & Projections	Practical Geography: A Systematic Approach by A. Sarkar	14	CHALK & TALK PPT PRESENTATION PRESENTATION WITH TEACHING AIDS	
Unit II	Topographic & Thematic Maps	Practical Geography: A Systematic Approach by A. Sarkar	17		
Unit III	Remote Sensing & Geographical Information System	Remote Sensing & GIS BY B. Bhatta	21		
Unit IV	Surveying	Surveying & Levelling Part I BY T.P. Kanetkar	10		

DEPART NAME: GEOGRAPHY (MORNING)

NAME OF FACULTY: ALOKA MUKHOPADHYAY

PAPER NAME & CODE: CARTOGRAPHY LAB & GEO-G-CC-4-04-P

Planned				After Implementation	
Unit/Group/ Module/Article	Topics	Reference Books	No. of Lecture Planned	Content Delivery Technique	Remarks/ Comments
I	GRAPHICAL CONSTRUCTION OF SCALES	PRACTICAL GEOGRAPHY: A SYSTEMATIC	10	CHALK & TALK PPT PRESENTATION PRESENTATION WITH	
II	CONSTRUCTION OF PROJECTIONS	APPROACH BY A. SARKAR	20	TEACHING AIDS	
		Maps & Diagrams by Monkhouse		CENSUS OF INDIA	
III	CONSTRUCTION OF THEMATIC MAPS		20		
		STATISTICAL METHODS IN GEOGRAPHICAL			
IV	PREPARATION OF ANNOTED THEMATIC OVERLAYS FROM SATELLITE STANDARD FCC OF 1:50K	STUDIES BY A. MAHMOOD	10		

DEPART NAME : GEOGRAPHY (MORNING)

NAME OF FACULTY: ALOKA MUKHOPADHYAY

PAPER NAME & CODE: POPULATION GEOGRAPHY & GEO-G-DSE-B-6 04-TH

Planned			After Implementation		
Unit/Group/ Module/Article	Topics	Reference Books	No. of Lecture Planned	Content Delivery Technique	Remarks/ Comments
Unit I	POPULATION DYNAMICS	Population Geography by Hassan M.I.	20	CHALK & TALK PPT PRESENTATION PRESENTATION WITH TEACHING AIDS	
Unit II	POPULATION & DEVELOPMENT	Human Geography by Hussain .M. & Geography of Population by Chandna, R.C.	40		

DEPART NAME : GEOGRAPHY (MORNING)

NAME OF FACULTY: ALOKA MUKHOPADHYAY

PAPER NAME & CODE: POPULATION GEOGRAPHY LAB & GEO-G-DSE-B-6 04-P

Planned				After Implementation	
Unit/Group/ Module/Article	Topics	Reference Books	No. of Lecture Planned	Content Delivery Technique	Remarks/ Comments
I	POPULATION PROJECTION BY ARITHMETIC METHOD	POPULATION GEOGRAPHY BY M.I. HASSAN	15	CHALK & TALK PPT PRESENTATION PRESENTATION WITH TEACHING AIDS	
II	POPULATION DENSITY MAPPING		15		
		PRACTICAL GEOGRAPHY: A SYSTEMATIC APPROACH BY A.			
III	ANALYSIS OF WORK PARTICIPATION RATE	SARKAR	15		
IV	ANALYSIS OCCUPATION STRUCTURE BY DOMINANT & DISTINCTIVE FUNCTIONS		15		

DEPART NAME: GEOGRAPHY (MORNING)

NAME OF FACULTY: ALOKA MUKHOPADHYAY

PAPER NAME & CODE: SUSTAINABLE DEVELOPMENT & GEO-G-SEC-B-4/6 04-TH

Planned			After Implementation	
Topics	Reference Books	No. of Lecture Planned	Content Delivery Technique	Remarks/ Comments
 Sustainable development Challenges of Sustainable development Global Environmental issues Global goals for sustainable development 	An introduction to Sustainable development by Elliot. J. Sustainable development BY Baker, s.	30	CHALK & TALK PPT PRESENTATION PRESENTATION WITH TEACHING AIDS	

DEPARTMENT OF GEOGRAPHY VICTORIA INSTITUTION (COLLEGE)

LESSON PLAN

SEMESTER 2

HONOURS & GENERAL

(CCF SYLLABUS)

Department Name: Geography

Name of Faculty: Prakriti Das

Planned					
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Unit I: Scope and Approaches	1a. Elements of Human geography	Human Geography by Majid Hussain	1	Chalk and talk	
	1b. Nature of Human geography	Human Geography by Majid Hussain	1	Chalk and talk	
	1c. Scope of Human geography	Human Geography by Majid Hussain	1	Chalk and talk	
	1d. Recent trends in Human geography	Fundamentals of Human Geography by L.R Singh	1	Chalk and talk	
	2a. Human geography schools of thought based on Resource	Fundamentals of Human Geography by L.R Singh	2	Chalk and talk	
	2b. Human geography schools of thought based on locational approach	Fundamentals of Human Geography by L.R Singh	2	Chalk and talk	
	2c. Human geography	Fundamentals of Human Geography by L.R Singh	2	Chalk and talk	

Department Name: Geography

Name of Faculty: Prakriti Das

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	schools of thought based on landscape approach				
	2d. Human geography schools of thought based on environment approach	Fundamentals of Human Geography by L.R Singh	2	Chalk and talk	
Unit II: Social Geography	4a. Adaptation of Chenchu tribe to the environment	Human Geography by Goh Cheng Leong, Tribes of India by Ashok & Lakshmaiah	1	Chalk and talk	
	4b. Adaptation of Toda tribe to the environment	Human Geography by Goh Cheng Leong, Tribes of India by Ashok & Lakshmaiah	1	Chalk and talk	
	4c. Adaptation of Gond tribe to the environment	Human Geography by Goh Cheng Leong, Tribes of India by Ashok & Lakshmaiah	1	Chalk and talk	
	5a. Concept & evolution of post-industrial urban	Human Geography by Majid Hussain, Fundamentals of Human Geography by L.R	1	Chalk and talk	

Department Name: Geography

Name of Faculty: Prakriti Das

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	societies	Singh			
	5b.Characteristics of post-industrial urban societies	Human Geography by Majid Hussain, Human Geography, Fundamentals of Human Geography by L.R Singh	1	Chalk and talk	
		Total	17		

Department Name: Geography

Name of Faculty: Dr. Saswati Nayak

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Unit II: Social Geography	3a. Evolution of Hunting and food gathering society	Human Geography by Majid Hussain, Human Geography, Places and Regions in Global context by Knox & Marston	2	Chalk and talk	
	3b. Evolution of pastoral nomadism	Human Geography by Majid Hussain, Human Geography, Places and Regions in Global context by Knox & Marston	2	Chalk and talk	
	3c. Evolution of Subsistence farming society	Human Geography by Majid Hussain, Human Geography, Places and Regions in Global context by Knox & Marston	2	Chalk and talk	
	3d. Evolution of industrial society	Human Geography by Majid Hussain, Human Geography, Places and Regions in Global context by Knox & Marston	2	Chalk and talk	
Unit IV: Settlement Geography	8a.Characteristics of urban settlements	Geography of Settlements by R.Y Singh, Introduction to Settlement Geography by Sumita Ghosh	2	Chalk and talk	
	8b.Characteristics of rural	Geography of Settlements by R.Y Singh, Rural Settlement	2	Chalk and talk	

Department Name: Geography

Name of Faculty: Dr. Saswati Nayak

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	settlements	by R.B Mondal			
	9a. The concept of site and situation of rural settlements	Geography of Settlements by R.Y Singh, Rural Settlement by R.B Mondal	2	Chalk and talk	
	9b. Different types of rural settlements	Geography of Settlements by R.Y Singh, Rural Settlement by R.B Mondal	2	Chalk and talk	
	9c. Patterns of rural settlements	Geography of Settlements by R.Y Singh, Rural Settlement by R.B Mondal	2	Chalk and talk	
		Total	18		

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Paper Name & Code: GEOG-H-CC02/MD-CC02-2/4-TH-HUMAN GEOGRAPHY

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
UNIT 3 TOPIC 6	Concept of Demographic Transition	The Dictionary of Human Geography by Johnston, Pratt, Watts, Whatmore, Human Geography by Mercier, Norton.	1	Chalk and Talk	
UNIT 3 TOPIC 6	Concept of demographic dividend along with significance	The Dictionary of Human Geography by Johnston, Pratt, Watts, Whatmore, Human Geography by Mercier, Norton. Contemporary Human Geography by Rubenstein	2	Chalk and Talk	
UNIT 3 TOPIC 7	Discussion about distribution of population in India	Geography of population by R.C.Chandna, India's Demography: changing demographic scenario in India by P.K.Majumdar	2	Chalk and Talk	
UNIT 3 TOPIC 7	Discussion about density of population in India	Same as above	1	Chalk and Talk	
UNIT 3 TOPIC 7	Discussion about growth of population in India	Geography of population by R.C.Chandna, India's Demography: changing demographic scenario in India by P.K.Majumdar	1	Chalk and Talk	
UNIT 5 TOPIC 10	Discussion about Urban settlements	Geography of population by R.C.Chandna,	2	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Paper Name & Code: GEOG-H-CC02/MD-CC02-2/4-TH-HUMAN GEOGRAPHY

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	after Census of India	India's Demography: changing demographic scenario in India by P.K.Majumdar			
UNIT 5 TOPIC 10	Discussion about size —class classification of Urban settlements after Census of India	Geography of population by R.C.Chandna, India's Demography: changing demographic scenario in India by P.K.Majumdar, Census of India	2	Chalk and Talk	
		TOTAL	11		

This theory paper is shared among Smt. Pubali Ghosh, Associate Professor, Dr. Saswati Nayek, Associate Professor, Smt. Prakriti Das, Assistant Professor, Geography Dept. VIC

Department Name: Geography

Name of Faculty: Dr. Raj Kumar Bhattacharya

Paper Name & Code: Human Geography (GEOG-H-CC02/MD-CC02-2/4-P)

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	1a. Basic concept on population growth rate	Practical Geography: A Systematic Approach by A. Sarkar, Elements of Practical Geography by R.L Singh	2	Chalk and Talk	
	2b. Arithmetic growth comparing two decadal datasets	Census of India: https://xensusindia.gov.in/census.website/data/census-tables	4	Chalk and Talk followed by Practice	
	3a. Concept about different types of settlements according to sites	Advanced Practical Geography by P. Basu, Practical	2	Chalk and Talk	
	3b. Revision of the details in Indian Topographical Map		2	Chalk and Talk using Toposheets	
	3c.Identification		4	Chalk and	

Subject Name/Code:

Department Name: Geography

Name of Faculty: Dr. Raj Kumar Bhattacharya

Paper Name & Code: Human Geography (GEOG-H-CC02/MD-CC02-2/4-P)

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	of those settlements from Survey of India 1:50k topographical maps			Talk followed by Practice	
		Total	14		

Subject Name/Code:

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Paper Name & Code: GEOG-H-CC02/MD-CC02-2/4-P-HUMAN GEOGRAPHY LAB

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
2	Concept of Choropleth method	Practical Geography by Asis Sarkar, Elements of Practical Geography by R.L.Singh, Maps and Diagrams by Monkhouse, Advanced Practical Geography by P. Basu	1	Chalk and Talk	
2	Representation of population density of West Bengal districts-Calculation	Same as above	2	Chalk and Talk	
2	Representation of population density of West Bengal districts- Diagram	Same as above	3	Chalk and Talk	
2	Representation of population density of West Bengal districts-Interpretation	Practical Geography by Asis Sarkar, Elements of Practical Geography by R.L.Singh, Maps and Diagrams by	2	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Paper Name & Code: GEOG-H-CC02/MD-CC02-2/4-P-HUMAN GEOGRAPHY LAB

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
		Monkhouse, Advanced Practical Geography by P. Basu			
4	Concept of Proportional Squares	Practical Geography by Asis Sarkar, Elements of Practical Geography by R.L.Singh, Maps and Diagrams by Monkhouse, Advanced Practical Geography by P. Basu	1	Chalk and Talk	
	Construction of Proportional Squares- Calculation	Same as above	3	Chalk and Talk	
	Construction of Proportional Squares- Diagram	Same as above	2	Chalk and Talk	
	Construction of Proportional Squares- Interpretation	Practical Geography by Asis Sarkar, Elements of Practical Geography by R.L.Singh, Maps and Diagrams by Monkhouse,	2	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Paper Name & Code: GEOG-H-CC02/MD-CC02-2/4-P-HUMAN GEOGRAPHY LAB

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
		Advanced Practical Geography by P. Basu			
		TOTAL	16		

This practical paper is shared between Smt. Pubali Ghosh, Associate Professor and Dr. Raj Kumar Bhattacharya , Assistant Professor, Geography Dept. VIC

Department Name: GEOGRAPHY

Name of Faculty: Prakriti Das

	Planned			After Imple	mentation
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Unit I: Field Data Collection and Compilation	1a. Designing of primary survey based on diverse research problems	1. Research Methodology: Methods & Techniques by C.R Kothari 2. Geospatial Techniques and Research in Geography by Das & Mallick	2	Chalk and Talk	
	1b. Relevance of pilot survey	 Research Methodology: Methods & Techniques by C.R Kothari Geospatial Techniques and Research in Geography by Das & Mallick 	2	Chalk and Talk	
	2. Sampling types and strategy based on diverse research problems	1. Research Methodology: Methods & Techniques by C.R Kothari 2. Geospatial Techniques and Research in Geography by Das & Mallick	3	Chalk and Talk	
	3a. Preparation of questionnaire	1. Research Methodology: Methods & Techniques by C.R Kothari 2. Geospatial Techniques and Research in Geography by Das & Mallick	2	Chalk and Talk	
	3b. Preparation of interview	1. Research Methodology: Methods & Techniques by	2	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: Prakriti Das

		After Implementation			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	schedule	C.R Kothari 2. Geospatial Techniques and Research in Geography by Das & Mallick			
		Total	11		
		Total			

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

Paper Name and Code: Methods in Geography (GEOG-H-SEC01/MD-SEC1/2/3-TH)

		After Implementation			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Unit I: Field Data Collection and	4. Data Compilation into master table		2		
Compilation	4. Data matrix in master table	1.Statistical Methods by N.G.Das	2		
	5. Computer assisted field data entry- concept	2. An Insight into Statistics by Jaydeb Sarkhel and Santosh Kumar Dutta; Book Syndicate Private Limited	2	Chalk and Talk	
	5. Tabulation of data into frequency distribution tables		2		
	6. Statistical analysis of data: measures of central tendency: Mean		2		

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

Paper Name and Code: Methods in Geography (GEOG-H-SEC01/MD-SEC1/2/3-TH)

		After Impl	ementation		
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Unit I: Field Data Collection and Compilation	6. Statistical analysis of data: measures of central tendency: Median and mode	1.Statistical Methods by N.G.Das 2. An Insight into Statistics by Jaydeb Sarkhel and Santosh	2		
6. ar	6. Statistical analysis of data: dispersion	Kumar Dutta; Book Syndicate Private Limited	1	Chalk and Talk	
Unit II: Methods in Physical Geography	7.Use of minor survey Instruments: distometer	3. Statistical Methods in Geographical Studies by A. Mahmood	1	Distometer	
		Total	14		

Department Name: Geography

Name of Faculty: Dr. Raj Kumar Bhattacharya

Paper Name & Code: GEOG-H-SEC-01/MD-SEC01-1/2/3-TH-METHODS IN GEOGRAPHY

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Unit 2: Methods in Physical Geography	2a. Use of minor survey instruments: Brunton compass, distometer, smartphone levelling applkications	1.Manual guide book as provided by selling company	4	Practical work with field survey	
	2b.Textural analysis of grains using sieves	Manual guide book as provided by selling company	4	Practical work with field survey (sample number 50)	
	2c. Mapping and extraction of flooded areas from satellite images and digital elevation models	Practical geography: A Systematic Approach by A. Sarkar Advanced Practical Geography by P. Basu	5	Practical work with satellite images	
	2d. Mapping areal and linear extents of riverbank and coastline shift from Survey of India 1:50k maps and/or satellite images	Practical geography: A Systematic Approach by A. Sarkar	5	Practical work with satellite images and SOI 1:50k Toposheet Maps	
	Ü	Total	18		

Subject Name/Code:

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

	Pla	After Imple	mentation		
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	Extraction of flooded areas from Satellite Images	Elements of Practical Geography by R.L.Singh Practical Geography by	1	Chalk & Talk, Satellite Images	
	Mapping of flooded areas from Satellite Images	A. Sarkar Quantitative Geography	1	Chalk & Talk, Satellite Images	
UNIT 2 9	Extraction of flooded areas from Digital elevation model	by A. Sarkar Map work and Practical	1	Chalk & Talk, Digital elevation model	
	Mapping of flooded area from Digital elevation model	Geography by Gopal Singh Elements of Practical Geography	1	Chalk & Talk, Digital elevation model	
UNIT 3	Definition and discussion about Dominant function	Statistical Methods in Geographical Studies by A. Mahmood	1	Chalk & Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

	Pla	nned		After Imple	mentation
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
11	Finding out Dominant function with examples	Elements of Practical Geography by R.L.Singh	1	Chalk & Talk	
	Definition and discussion about Distinctive function	Practical Geography by A. Sarkar	1	Chalk & Talk	
	Finding out Distinctive function with examples	Quantitative Geography by A. Sarkar Map work and Practical Geography by Gopal Singh Elements of Practical Geography	1	Chalk & Talk	
UNIT 3	Definition and discussion about Occupational	SAME AS ABOVE	1	Chalk & Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

	Plan	After Imple	ementation		
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	pattern				
UNIT 3	Definition and discussion about Ternary Diagram	SAME AS ABOVE	1	Chalk & Talk	
12	Ternary Diagram showing occupational patterns (after Ashok Mitra)	SAME AS ABOVE	2	Chalk & Talk	
	Definition of Accessibility map	SAME AS ABOVE	1	Chalk & Talk	
UNIT 3 13	Discussion about Accessibility map	SAME AS ABOVE	1	Chalk & Talk	
	Preparation of Accessibility map	SAME AS ABOVE	3	Chalk & Talk	
UNIT 3	Definition of Flow Chart	SAME AS ABOVE	1	Chalk & Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Paper Name & Code: GEOG-H-SEC-01/MD-SEC01-1/2/3-TH-METHODS IN GEOGRAPHY

	Plai	After Implementation			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
14	Discussion about Flow Chart	SAME AS ABOVE	2	Chalk & Talk	
UNIT 3	Preparation of Flow chart using transportation data	SAME AS ABOVE	2	Chalk & Talk	
14		Total	22		

This theory paper is shared among Smt. Pubali Ghosh, Associate Professor, Dr. Saswati Nayek, Associate Professor, Smt. Prakriti Das, Assistant Professor and Dr. Raj Kumar Bhattacharya, Assistant Professor, Geography Dept. VIC

Department Name: Geography

Name of Faculty: Prakriti Das

Planned				TT		
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments	
Unit I: Scope and Approaches	1a. Elements of Human geography	Human Geography by Majid Hussain	1	Chalk and talk		
	1b. Nature of Human geography	Human Geography by Majid Hussain	1	Chalk and talk		
	1c. Scope of Human geography	Human Geography by Majid Hussain	1	Chalk and talk		
	1d. Recent trends in Human geography	Fundamentals of Human Geography by L.R Singh	1	Chalk and talk		
	2a. Human geography schools of thought based on Resource	Fundamentals of Human Geography by L.R Singh	2	Chalk and talk		
	2b. Human geography schools of thought based on locational approach	Fundamentals of Human Geography by L.R Singh	2	Chalk and talk		
	2c. Human geography	Fundamentals of Human Geography by L.R Singh	2	Chalk and talk		

Department Name: Geography

Name of Faculty: Prakriti Das

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	schools of thought based on landscape approach				
	2d. Human geography schools of thought based on environment approach	Fundamentals of Human Geography by L.R Singh	2	Chalk and talk	
Unit II: Social Geography	3a. Evolution of Hunting and food gathering society	Human Geography by Majid Hussain, Human Geography, Places and Regions in Global context by Knox & Marston	2	Chalk and talk	
	3b. Evolution of pastoral nomadism	Human Geography by Majid Hussain, Human Geography, Places and Regions in Global context by Knox & Marston	2	Chalk and talk	
	3c. Evolution of Subsistence farming society	Human Geography by Majid Hussain, Human Geography, Places and Regions in Global context by Knox & Marston	2	Chalk and talk	

Department Name: Geography

Name of Faculty: Prakriti Das

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	3d. Evolution of industrial society	Human Geography by Majid Hussain, Human Geography, Places and Regions in Global context by Knox & Marston	2	Chalk and talk	
	4a. Adaptation of Chenchu tribe to the environment	Human Geography by Goh Cheng Leong, Tribes of India by Ashok & Lakshmaiah	1	Chalk and talk	
	4b. Adaptation of Toda tribe to the environment	Human Geography by Goh Cheng Leong, Tribes of India by Ashok & Lakshmaiah	1	Chalk and talk	
	4c. Adaptation of Gond tribe to the environment	Human Geography by Goh Cheng Leong, Tribes of India by Ashok & Lakshmaiah	1	Chalk and talk	
	5a. Concept & evolution of post-industrial urban societies	Human Geography by Majid Hussain, Fundamentals of Human Geography by L.R Singh	1	Chalk and talk	
	5b.Characteristics of post-industrial urban societies	Human Geography by Majid Hussain, Human Geography, Fundamentals of Human Geography by L.R Singh	1	Chalk and talk	

Department Name: Geography

Name of Faculty: Prakriti Das

Paper Name & Code: Human Geography (GEOG-H-CC02/MD-CC02-2/4-Th)

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Unit III: Population Geography	6a. Concept and definition of Demographic transition	India's Demography by P.K Majumder, Population Geography by Chandna	2	Chalk and talk	
	6b. Significance of demographic dividend	India's Demography by P.K Majumder, Population Geography by Chandna	1	Chalk and talk	
	7a. Distribution of population in India	Population Geography by Chandna	1	Chalk and talk	
	7b. Density of population in India	Population Geography by Chandna	1	Chalk and talk	
	7c. Growth of population in India	Population Geography by Chandna	1	Chalk and talk	
Unit IV: Settlement Geography	8a.Characteristics of urban settlements	Geography of Settlements by R.Y Singh, Introduction to Settlement Geography by Sumita Ghosh	2	Chalk and talk	

Department Name: Geography

Name of Faculty: Prakriti Das

Paper Name & Code: Human Geography (GEOG-H-CC02/MD-CC02-2/4-Th)

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	8b.Characteristics of rural settlements	Geography of Settlements by R.Y Singh, Rural Settlement by R.B Mondal	2	Chalk and talk	
	9a. The concept of site and situation of rural settlements	Geography of Settlements by R.Y Singh, Rural Settlement by R.B Mondal	2	Chalk and talk	
	9b. Different types of rural settlements	Geography of Settlements by R.Y Singh, Rural Settlement by R.B Mondal	2	Chalk and talk	
	9c. Patterns of rural settlements	Geography of Settlements by R.Y Singh, Rural Settlement by R.B Mondal	2	Chalk and talk	
Unit V: Urban Geography	10a. Concept of size-class classification of urban settlements after Census of India	Geography of Settlements by R.Y Singh, Introduction to Settlement Geography by Sumita Ghosh	2	Chalk and talk	
	10b. Significance of size-class classification of	Geography of Settlements by R.Y Singh, Introduction to Settlement Geography by	2	Chalk and talk	

Department Name: Geography

Name of Faculty: Prakriti Das

Paper Name & Code: Human Geography (GEOG-H-CC02/MD-CC02-2/4-Th)

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	urban settlements after Census of India	Sumita Ghosh			
		Total	45		

This theory paper is fully taught by Smt. Prakriti Das, Assistant Professor, Geography Dept. VIC

Department Name: Geography

Name of Faculty: Prakriti Das

Paper Name & Code: Human Geography (GEOG-H-CC02/MD-CC02-2/4-P)

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	1a. Growth rate of population: Concept and definition		2	Chalk and Talk	
	1b. Calculation of Arithmetic growth comparing two decadal datasets	Advanced Practical Geography by P. Basu, Practical Geography: A Systematic Approach by A.	2	Chalk and Talk followed by Practice	
	1c.Representation of Arithmetic growth comparing two decadal datasets	Sarkar	2	Chalk and Talk	
	2a. Concept and definition of Population density	Practical Geography: A Systematic Approach by A.	2	Chalk and Talk	
	2b.Representation of population density of Indian states or West Bengal districts	Sarkar, Elements of Practical Geography by R.L Singh	2	Chalk and Talk followed by Practice	

Department Name: Geography

Name of Faculty: Prakriti Das

Paper Name & Code: Human Geography (GEOG-H-CC02/MD-CC02-2/4-P)

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	by choropleth method				
	2c. Interpretation of the result		2	Chalk and Talk	
	3a. Concept about different types of settlements according to sites		2	Chalk and Talk	
	3b. Revision of the details in Indian Topographical Map	Advanced Practical Geography by P. Basu, Practical Geography: A Systematic Approach by A.	2	Chalk and Talk using toposheets	
	3c.Identification of those settlements from Survey of India 1:50k topographical maps	Sarkar	4	Chalk and Talk followed by Practice	
	4a. Concept of Proportional	Practical Geography: A Systematic Approach by A.	1	Chalk and Talk	

Department Name: Geography

Name of Faculty: Prakriti Das

Paper Name & Code: Human Geography (GEOG-H-CC02/MD-CC02-2/4-P)

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	square	Sarkar, Elements of Practical Geography by			
	4b. Significance or uses of Proportional square	R.L Singh	1	Chalk and Talk	
	4c. Construction of proportional squares depicting number of houses		1	Chalk and Talk followed by Practice	
	4d. Brief interpretation of the result		1	Chalk and Talk	
		Total	24		

This practical paper is fully taught by Smt. Prakriti Das, Assistant Professor, Geography Dept. VIC

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

Paper Name and Code: Geomatics and Spatial Analysis (GEO-H-IDC01-1/2/3-TH)

		After Implementation			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	1. Concept of scales	1.Practical Geography: A Systematic Approach by A. Sarkar	1		
Unit: I	1. Scales: types, significance and classification	2. Elements of Practical Geography by R.L. Singh	1		
Cartography	1.Maps projections: Classification and types	3. Maps and Diagrams by F.J. Monkhouse 2 4. Surveying and Levelling by T. P. Kanetkar and S.V. Kulkarni 1	2	Chalk and Talk	
	2. Bearing: Magnetic and true		1		

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

Paper Name and Code: Geomatics and Spatial Analysis (GEO-H-IDC01-1/2/3-TH)

		After Imple	ementation		
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	2. Bearing: Whole circle and reduced	1.Practical Geography: A Systematic Approach by A. Sarkar	1		
Unit: I	2. Concept of Geoid and Spheroid	2. Elements of Practical Geography by R.L. Singh	1	Chalk and Talk	
Cartography	2. Geoid in special reference to WGS-84	3. Maps and Diagrams by F.J. Monkhouse 1	1	Chair and Tair	
	3. Map projection Classification	4. Surveying and Levelling by T. P. Kanetkar and S.V. Kulkarni	1		

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

Paper Name and Code: Geomatics and Spatial Analysis (GEO-H-IDC01-1/2/3-TH)

		After Imple	ementation		
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Unit I: Cartography	3. Map projection: properties and uses of Simple Conical Projection	1.Practical Geography: A	2		
	3. Concept and significance of UTM projection	Systematic Approach by A. Sarkar 2. Elements of Practical	2		
Unit II:	4. Basic concepts of Surveying	Geography by R.L. Singh 3. Maps and Diagrams by F.J. Monkhouse	1	Chalk and Talk	
Surveying	4. Survey equipment and its uses: Prismatic Compass	4. Surveying and Levelling by T. P. Kanetkar and S.V. Kulkarni	2		
	4. Survey equipment and its uses: Prismatic Compass		2		
		Total	18		

Department Name: Geography

Name of Faculty: Dr. Raj Kumar Bhattacharya

Paper Name & Code: Geomatics & Spatial Analysis (GEO-H-IDC01-1/2/3-Th)

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Unit 2	2a. Basic concepts of surveying, survey equipment, and their capabilities: Total Station		4	Practical work with field measurement	
	2a. Basic concepts of surveying, survey equipment, and their capabilities: Global Navigation Satellite System (GNSS)	Global Navigation Satellite Systems: Insights into GPS, GLONASS, Galileo, Compass and Others by B Bhatta (CRC Press)	2	Practical work with field measurement	
_		Total	6		

Subject Name/Code:

Department Name: GEOGRAPHY

Name of Faculty: Prakriti Das

Paper Name & Code: Geomatics & Spatial Analysis (GEO-H-IDC01-1/2/3-Th)

		Planned		After Imple	mentation
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	5a. Principles of remote sensing	1. Remote Sensing & GIS by Bhatta 2. Fundamentals of Remote Sensing by Canada Centre for Remote Sensing (e-book)	2	Chalk and Talk	
	5b. Types of RS satellites and sensors with reference to IRS and Landsat missions	1. Remote Sensing & GIS by Bhatta 2. Fundamentals of Remote Sensing by Canada Centre for Remote Sensing (e-book)	3	Chalk and Talk	
Unit III: Remote Sensing and Geographical Information System	6a. Principles of preparing standard false colour composites (FCCs)	https://theqgeo.com/ (website)	2	Chalk and Talk	
	6b. Principles of preparing Supervised image classification	https://theqgeo.com/ (website)	2	Chalk and Talk	
	7a.GIS data types: Spatial and non-spatial (attribute table	A Primer of GIS: Fundamental Geographic and Cartographic concepts by	1	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: Prakriti Das

Paper Name & Code: Geomatics & Spatial Analysis (GEO-H-IDC01-1/2/3-Th)

		Planned		After Imple	mentation
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	and metadata)	Harvey		•	
		2. GIS: Fundamentals,			
		Applications and			
		Implementations by Elangovan			
	7b. Raster and vector	1. A Primer of GIS: Fundamental Geographic and Cartographic concepts by Harvey 2. GIS: Fundamentals, Applications and Implementations by Elangovan	1	Chalk and Talk	
	8a. Principles of preparing attribute tables, data manipulation, query	1. A Primer of GIS: Fundamental Geographic and Cartographic concepts by Harvey 2. GIS: Fundamentals, Applications and Implementations by Elangovan	3	Chalk and Talk	
	8b. Principles of preparing of	Introduction to Buffer and Overlay Analysis by	2	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: Prakriti Das

Paper Name & Code: Geomatics & Spatial Analysis (GEO-H-IDC01-1/2/3-Th)

		After Imple	mentation		
Unit / Group / Module / Article Topics Refer		Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	overlay	Humboldt State University			
		Total	16		

This theory paper is shared among Dr. Saswati Nayek, Associate Professor, Smt. Prakriti Das, Assistant Professor and Dr. Raj Kumar Bhattacharya, Assistant Professor, Geography Dept. VIC

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

Paper Name and Code: Geomatics and Spatial Analysis (GEO-H-IDC01-1/2/3-P)

		After Imple	After Implementation		
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	1. Map projection: properties and uses of Simple Conical Projection	1.Practical Geography: A Systematic Approach by A.	2		
Practical	1.Calculation of Simple Conical Projection	Sarkar 2. Elements of Practical	2		
1. Drawing Simple Con	1. Drawing of Simple Conical Projection	Geography by R.L. Singh 3. Maps and Diagrams by F.J. Monkhouse	2	Chalk and Talk	
	2. Concept and significance of UTM projection	4. Surveying and Levelling by T. P. Kanetkar and S.V. Kulkarni	4		
	2.Traverse survey and plotting UTM coordinate using smartphone GNSS		4		
		Total	14		

Department Name: Geography

Name of Faculty: Dr. Raj Kumar Bhattacharya

Paper Name & Code: Geomatics & Spatial Analysis Lab (GEO-H-IDC01-1/2/3-P)

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	2.Traverse survey and plotting UTM coordinates using Smartphone GNSS application	Global Navigation Satellite Systems: Insights into GPS, GLONASS, Galileo, Compass and Others by B Bhatta (CRC Press)	8	Practical work with field survey	
	4.Change detection of riverbank or coastline shift from multi-dated maps and images	1. Practical geography: A Systematic Approach by A. Sarkar 2. Advanced Practical Geography by P. Basu 3. USGS Global Visualization Viewer: https://glovis.usgs.gov 4. USGS Landsat Missions: https://www.usgs.gov/landsat-missions 5. ISRO Bhuvan 2D and 3D Platforms: https://bhuvan-app1.nrsc.gov.in/globe/3d.php	8	Practical work with satellite images	
		Total	16		

Subject Name/Code:

Department Name: GEOGRAPHY

Name of Faculty: Prakriti Das

Paper Name & Code: Geomatics & Spatial Analysis Lab (GEO-H-IDC01-1/2/3-P)

		After Imple	mentation		
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	3. Identification of land use / land cover features from standard FCCs and preparation of inventories	Practical geography: A Systematic Approach by A. Sarkar Advanced Practical Geography by P. Basu	5	Practical work with satellite images	
		Total	5		

This practical paper is shared among Dr. Saswati Nayek, Associate Professor, Smt. Prakriti Das, Assistant Professor and Dr. Raj Kumar Bhattacharya, Assistant Professor, Geography Dept. VIC

DEPARTMENT OF GEOGRAPHY VICTORIA INSTITUTION (COLLEGE)

LESSON PLAN
SEMESTER 4
HONOURS & GENERAL
(CBCS SYLLABUS)

Department Name: Prakriti Das

Name of Faculty: Geography

Planned					
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Unit I: Concepts	1a.Definition and meaning of Economic geography	Economic Geography: A	1	Chalk and talk	
	1b. Approaches to Economic geography	study of resources by P.Roy	1	Chalk and talk	
	2a.Acquaintance with various cconcepts in Economic geography	Economic Geography by Dr. Y.I Singh Economic Geography by	1	Chalk and talk	
	2b. Concept of Goods and services	K. Siddhartha Economic Geography by H.M Saxena	2	Chalk and talk	
	2c. Concept of production and Exchange and consumption		2	Chalk and talk	

Department Name: Prakriti Das

Name of Faculty: Geography

Planned					
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	3a.Concept of economic man. choices	Advanced Economic Geography by Dr. Alka Gautam	1	Chalk and talk	
	3b. Theories of choices	International trade by Francis Cherunilam Geography of Transport Systems by Jean-Paul	2	Chalk and talk	
	4a. Concept of Economic distance		2	Chalk and talk	
	4b. Concept of transport costs	Rodrigue	2	Chalk and talk	
Economic economic Activities ac	5a. Concept of economic activities	Economic Geography: A study of resources by P. Roy	1	Chalk and talk	
	5b. Classification of economic activities		2	Chalk and talk	

Department Name: Prakriti Das

Name of Faculty: Geography

Planned Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	8a. Concept of Secondary activities		1	Chalk and talk	
	8b. Classification of manufacturing	Advanced Economic Geography by Dr. Alka Gautam International trade by Francis Cherunilam	1	Chalk and talk	
	8c. Concept of manufacturing regions		1	Chalk and talk	
	8d. Concept and types of special economic zones		1	Chalk and talk	
	8e. Concept of technology parks		1	Chalk and talk	
	9a. Concept and classification of Tertiary activities	Transport Geography by H.M Saxena	1	Chalk and talk	

Department Name: Prakriti Das

Name of Faculty: Geography

Planned					
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
		Advanced Economic Geography by Dr. Alka Gautam			
	9b. Transport	Geography of Transport Development in India by B.C Vaidya	2		
	9c. Trade and services	International trade by Francis Cherunilam	2	Chalk and talk	
	10a. Transnational sea-routes,	Geography of Transport	1	Chalk and talk	
	10b. Railways as a transport system with reference to India	Geography of Transport Development in India by B.C Vaidya	2	Chalk and talk	

Department Name: Prakriti Das

Name of Faculty: Geography

Planned Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	10c. Highways as a transport system with reference to India		2	Chalk and talk	
	11a. International trade		2	Chalk and talk	
	11b. Economic blocs	International trade by Francis Cherunilam	1	Chalk and talk	
	12a. WTO: Evolution, structure and functions	Advanced Economic Geography by Dr. Alka Gautam	2	Chalk and talk	
	12b. BRICS: Evolution, structure and functions		2	Chalk and talk	

Department Name: Prakriti Das

Name of Faculty: Geography

Planned					
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
		Total	39		

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

		After Imple	After Implementation		
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Unit: II	6. Factors affecting location of economic activity with special reference to agriculture Von Thunen	 Economic and Social geography by R. Knowles and J. Wareing. An Introduction to Regional Planning Concepts, Theory and Practice by John Glasson. 	3	Chalk and Talk	
	6. Factors affecting location of economic activity with special reference to Industry: Weber	 3. Regional Planning in India by M. Chand and V.K. Puri. 4. Contemporary Development Economics; From Adam Smith to Amartya Sen by Felix Raj, Sampat Mukherjee. 	3		
		Total	6		

Department Name: Pubali Ghosh

Name of Faculty: Geography

Planned					
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Unit II: Economic Activities	7a. Concept of primary activities		1	Chalk and talk	
	7b. Discussion about primary activities-agriculture	Economic Geography: A study of resources by P.Roy	2	Chalk and talk	
	7c. Discussion about primary activities-forestry	Economic Geography by Dr. Y.I Singh	1	Chalk and talk	
	7d. Discussion about primary activities-fishing	Economic Geography by K. Siddhartha	1	Chalk and talk	
	7e. Discussion about primary activities-mining	- Economic Geography by H.M Saxena	1	Chalk and talk	

Department Name: Pubali Ghosh

Name of Faculty: Geography

Paper Name & Code: Economic Geography & GEO-A-CC-4-08-TH

Planned					
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	Total	Total	6		

This theory paper is shared among Smt. Pubali Ghosh, Associate Professor, Dr. Saswati Nayek, Associate Professor, Smt. Prakriti Das, Assistant Professor and Dr. Raj Kumar Bhattacharya, Assistant Professor, Geography Dept , VIC

Department Name: Prakriti Das

Name of Faculty: Geography

Planned					
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	1a.Choropleth: Definition, concept and uses		2	Chalk and Talk	
	1b. Mapping of state-wise variation in GDP by choropleth method	Maps and Diagrams: Their Compilation and Construction by Monkhouse and Wilkinson	3	Chalk and Talk	
	1c.Interpretation		1	Chalk and Talk	
	2a. Proportional divided circles: Definition, concept and uses		1	Chalk and Talk	
	2b.Representation of state-wise variation in occupational structure by proportional divided circles	Practical Geography: A Systematic Approach by A. Sarkar	4	Chalk and Talk	
	2c. Interpretation		1	Chalk and Talk	

Department Name: Prakriti Das

Name of Faculty: Geography

Planned					
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	4a. Transport network analysis by detour index and interpretation		4	Chalk and Talk using toposheet	
	4b. Transport network analysis by shortest path analysis and interpretation	Transport Geography by H.M Saxena	4	Chalk and Talk using toposheet	
		Total	20		

Department Name: Dr. Saswati Nayek

Name of Faculty: Geography

Paper Name & Code: Economic Geography Lab & GEO-A-CC-4-08-P

Planned					
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	3a. Time Series analysis: Definition and concept		4	Chalk and talk	
	3b. Data collection for industrial production of India and WB, and calculation	Quantitative techniques: A systematic approach by Asish Sarkar	8	Chalk and talk	
	3c. Drawing of the graph and Interpretation		8	Chalk and talk	
		Total	20		

This practical paper is shared between Dr. Saswati Nayek, Associate Professor and Smt. Prakriti Das, Assis tant Professor, Geography Dept. VIC

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
UNIT 1 TOPIC 1	Concept of Regions	Contemporary issues in Regional Planning by Glasson, Regional Planning and Development by R.C.Chandana.	1	Chalk and Talk	
UNIT 1 TOPIC 1	Types of Regions	Same as above	1	Chalk and Talk	
UNIT 1 TOPIC 1	Delineation of Regions	Contemporary issues in Regional Planning by Glasson, Regional Planning and Development by R.C.Chandana.	2	Chalk and Talk	
UNIT 1 TOPIC 2	Concept of Regional Planning	Contemporary issues in Regional Planning by Glasson, Regional Planning and Development by R.C.Chandana.	1	Chalk and Talk	
	Types of Regional Planning	Same as above	1	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
UNIT 1 TOPIC 2	Principles of Regional Planning	Same as above	1	Chalk and Talk	
	Objectives of Regional Planning	Same as above	1	Chalk and Talk	
UNIT 1 TOPIC 2	Tools of Regional Planning	Contemporary issues in Regional Planning by Glasson, Regional Planning and Development by R.C.Chandana.	1	Chalk and Talk	
	Techniques of Regional Planning	Contemporary issues in Regional Planning by Glasson, Regional Planning and Development by R.C.Chandana	1	Chalk and Talk	
UNIT 1 TOPIC 3	Regional Planning in India- detailed	Contemporary issues in Regional Planning by Glasson, Regional Planning and	3	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	discussion	Development by R.C.Chandana, Regional Planning in India by Chand and Puri			
UNIT 1 TOPIC 3	Multi -level planning in India- detailed discussion	Same as above	3	Chalk and Talk	
UNIT 1 TOPIC 4	Concept of Metropolitan Area	Contemporary issues in Regional Planning by Glasson, Regional Planning and Development by R.C.Chandana, Regional Planning in India by Chand and Puri	2	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
UNIT 1 TOPIC 4	Concept of Urban Agglomeration	Contemporary issues in Regional Planning by Glasson, Regional Planning and Development by R.C.Chandana, Regional Planning in India by Chand and Puri	2	Chalk and Talk	
UNIT 2 TOPIC 5	Concept of Growth	Contemporary issues in Regional Planning by Glasson, Regional Planning and Development by R.C.Chandana, Regional Planning in India by Chand and Puri	1	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
UNIT 2 TOPIC 5	Concept of Development	Same as above	2	Chalk and Talk	
UNIT 2 TOPIC 5	Growth VS. Development	Contemporary issues in Regional Planning by Glasson, Regional Planning and Development by R.C.Chandana, Regional Planning in India by Chand and Puri	3	Chalk and Talk	
UNIT 2 TOPIC 6	Economic indicators of Development	The Dictionary of Human Geography by Johnston, Pratt, Watts, Whatmore, Contemporary issues in Regional Planning by Glasson, Regional Planning and Development by	2	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
		R.C.Chandana, Regional Planning in India by Chand and Puri			
UNIT 2 TOPIC 6	Demographic indicators of Development	The Dictionary of Human Geography by Johnston, Pratt, Watts, Whatmore, Contemporary issues in Regional Planning by Glasson, Regional Planning and Development by R.C.Chandana, Regional Planning in India by Chand and Puri	2	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
UNIT 2 TOPIC 6	Environmental indicators of Development	The Dictionary of Human Geography by Johnston, Pratt, Watts, Whatmore, Contemporary issues in Regional Planning by Glasson, Regional Planning and Development by R.C.Chandana, Regional Planning in India by Chand and Puri	2	Chalk and Talk	
UNIT 2 TOPIC 8	Theories and models of regional development-discussion	The Dictionary of Human Geography by Johnston, Pratt, Watts, Whatmore, Contemporary issues in Regional Planning by	1	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
		Glasson, Regional Planning and Development by R.C.Chandana, Regional Planning in India by Chand and Puri			
UNIT 2 TOPIC 8	Cumulative causation model by Myrdal – detailed discussion with model	The Dictionary of Human Geography by Johnston, Pratt, Watts, Whatmore, Contemporary issues in Regional Planning by Glasson, Regional Planning and Development by R.C.Chandana, Regional Planning in India by	3	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Planned					
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
UNIT 2 TOPIC 9	Theories and models of regional development-Discussion about stages of development by Rostow	Chand and Puri The Dictionary of Human Geography by Johnston, Pratt, Watts, Whatmore, Contemporary issues in Regional Planning by Glasson, Regional Planning and Development by R.C.Chandana, Regional Planning in India by Chand and Puri	3	Chalk and Talk	
UNIT 2 TOPIC 9	Theories and models of regional	Same as above	3	Chalk and Talk	
	development-				

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	Discussion about Growth pole model by Perroux				
UNIT 2 TOPIC 11	Discussion about regional development in India	Urban and Regional Planning in India by Kulshetra, Regional Planning and Development by R.C.Chandana, Regional Planning in India by Chand and Puri	2	Chalk and Talk	
UNIT 2 TOPIC 11	Discussion about disparity and diversity	Urban and Regional Planning in India by Kulshetra, Regional Planning and Development by R.C.Chandana,	3	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Planned					
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
		Regional Planning in India by Chand and Puri			
UNIT 2 TOPIC 12	Concept of balanced development	Urban and Regional Planning in India by Kulshetra, Regional Planning and Development by R.C.Chandana, Regional Planning in India by Chand and Puri	1	Chalk and Talk	
	Need of balanced development in India	Same as above	2	Chalk and Talk	
	Measures of balanced development in	Urban and Regional Planning in India by Kulshetra, Regional Planning and	2	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	India	Development by R.C.Chandana, Regional Planning in India by Chand and Puri			
		Total	52		

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

Paper Name and Code: Regional Planning and Development (GEO-A-CC-04-09-TH)

		After Imple	ementation		
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Unit: II	7. Human Development: Concept. 7. Human Development: measurement.	Readings in Human Development; Edited by Sakiko Fukuda Parr and A.K.Shiva Kumar. Contemporary	2	Chalk and Talk	
	10.Underdevelopment: Concept 10.Underdevelopment: Causes	Development Economics; From Adam Smith to Amartya Sen by Felix Raj, Sampat Mukherjee.	2 2		
		Total	8		

This theory paper is shared between Smt. Pubali Ghosh, Associate Professor and Dr. Saswati Nayek, Associate Professor, Geography Dept. VIC

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
1	Concept of Formal Region	Statistical Methods in Geographical Studies by A. Mahmood, Maps and Diagrams by Monkhouse, Contemporary Issues in Regional Planning by Glasson	1	Chalk and Talk	
	Concept of Weighted Index Method	Same as above	1	Chalk and Talk	
	Delineation of formal regions by weighted index method-calculation	Same as above	5	Chalk and Talk	
	Delineation of formal regions by weighted index method- drawing	Same as above	5	Chalk and Talk	
	Delineation of formal regions by weighted index method- Interpretation	Same as above	3	Chalk and Talk	
3	Concept of Location Quotient	Statistical Methods in Geographical Studies by A.	2	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
		Mahmood, Maps and Diagrams by Monkhouse, Contemporary Issues in Regional Planning by Glasson			
3	Location Quotient- Calculation	Same as above	5	Chalk and Talk	
3	Location Quotient- Diagram	Same as above	5	Chalk and Talk	
	Location Quotient- Interpretation	Same as above	3	Chalk and Talk	
4	Concept of regional disparity	Statistical Methods in Geographical Studies by A. Mahmood, Maps and Diagrams by Monkhouse, Contemporary Issues in Regional Planning by Glasson	1	Chalk and Talk	
	Concept of Sopher Index	Statistical Methods in Geographical Studies by A. Mahmood,	1	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Planned					
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
		Maps and Diagrams by Monkhouse, Contemporary Issues in Regional Planning by Glasson, Economic and Social Geography by Knowles and Wareing			
	Concept of Sopher Index- Calculation	Same as above	5	Chalk and Talk	
	Concept of Sopher Index- Diagram	Same as above	5	Chalk and Talk	
	Sopher Index- Interpretation	Statistical Methods in Geographical Studies by A. Mahmood, Maps and Diagrams by Monkhouse, Contemporary Issues in Regional Planning by	3	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Planned					
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
		Glasson, Economic and Social Geography by Knowles and Wareing			
		TOTAL	45		

Department Name: Geography

Name of Faculty: Prakriti Das

Paper Name & Code: Regional Planning and Development Lab & GEO-A-CC-4-09-P

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	2a. Functional region: Definition, concept and significance	Statistical Methods in Geography by A. Mahmood	1	Chalk and talk	
	2b. Calculation of Breaking Point by formula	Maps and Diagrams: Their	1	Chalk and talk	
	2c. Delineation of functional regions by breaking point analysis	Compilation and Construction by Monkhouse and Wilkinson	2	Chalk and talk	
	2d. Interpretation		1	Chalk and talk	
		Total	5		

This practical paper is shared between Smt. Pubali Ghosh, Associate Professor and Smt. Prakriti Das, Assistant Professor, Geography Dept. VIC

Department Name: Geography

Name of Faculty: Dr. Raj Kumar Bhattacharya

Paper Name & Code: Soil and Bio Geography& GEO-A-CC-4-10-TH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Unit I: Soil Geography	1a. Factors of soil formation		3	Chalk and talk	
	1b. Processes of soil formation	The Nature and Properties of	2	Chalk and talk	
	2a. Definition and significance of soil properties: Texture and structure	R. Well Fundamentals of Soil by V.N.Sahai India: A Study in Soil Geography by N, K, Dey & P Ghosh Sribhumi Publishing Company	3	Chalk and talk	
	2b. Definition and significance of soil properties: Moisture		2	Chalk and talk	
	3a. Definition and significance of soil properties: pH and organic matter		3	Chalk and talk	
	3b. Definition and significance of soil properties: NPK		2	Chalk and talk	
	4a. Basic concept of Soil profile		1	Chalk and talk	

Department Name: Geography

Name of Faculty: Dr. Raj Kumar Bhattacharya

Paper Name & Code: Soil and Bio Geography& GEO-A-CC-4-10-TH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	4b. Origin and profile characteristics of lateritic		2	Chalk and talk	
	4c. Origin and profile characteristics of podsol	The Nature and Properties of Soil by Nyle C brady and Ray R. Well Fundamentals of Soil by V.N.Sahai	2	Chalk and talk	
	4d. Origin and profile characteristics of chernozem soils		1	Chalk and talk	
	5a. Soil erosion and degradation: Factors, processes and management measures		3	Chalk and talk	
	5b. Humans as active agents of soil transformation		2	Chalk and talk	

Department Name: Geography

Name of Faculty: Dr. Raj Kumar Bhattacharya

Paper Name & Code: Soil and Bio Geography& GEO-A-CC-4-10-TH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	6a. Principles of soil classification: Genetic		2	Chalk and talk	
	6b. Principles of soil classification: USDA	The Nature and Properties of Soil by Nyle C brady and Ray R. Well	2	Chalk and talk	
	6c. Concept of land capability and its classification		2	Chalk and talk	
		Total	32		

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

		ementation		
Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
7. Concept of biosphere and ecosystem	1.Ecology: Principle and	2		
7. Concept of Applications by J.L. Chapman	1			
7. Concept of ecotone	2. Fundamentals of Ecology by M.C. Das	1	Chalk and Talk	
7. Concept of community and ecology	3.Ecology and Environment by P.D. Sharma 4.Fundamentals of ecology by E.P Odum	1		
	7. Concept of biosphere and ecosystem 7. Concept of biome. 7. Concept of ecotone 7. Concept of ecotone	Topics Reference Books 7. Concept of biosphere and ecosystem 1. Ecology: Principle and Applications by J.L. Chapman and M.J Reiz 7. Concept of ecotone 7. Concept of ecotone 3. Ecology and Environment by P.D. Sharma ecology 4. Fundamentals of ecology by	Topics Reference Books No of Lecture Planned 7. Concept of biosphere and ecosystem 1. Ecology: Principle and Applications by J.L. Chapman and M.J Reiz 1. Concept of ecotone 2. Fundamentals of Ecology by M.C. Das 7. Concept of community and ecology 3. Ecology and Environment by P.D. Sharma 4. Fundamentals of ecology by 4. Fundamentals of ecology by	Topics Reference Books No of Lecture Planned 7. Concept of biosphere and ecosystem 1. Ecology: Principle and Applications by J.L. Chapman and M.J Reiz 7. Concept of ecotone 2. Fundamentals of Ecology by ecotone 3. Ecology and Environment by community and ecology 4. Fundamentals of ecology by 7. Contept of community and ecology by 4. Fundamentals of ecology by 8. Fundamentals of ecology by 1. Content Delivery Technique 2. Chalk and Talk 1. Chalk and Talk

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

	raper Name and	(0201200013	After Imple	ementation	
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	8. Concept of Trophic Structure	1.Ecology: Principle and Applications by J.L. Chapman and M.J Reiz	2		
Unit: II	8.Concept of food chain and food	2. Fundamentals of Ecology by M.C. Das	2	Chalk and Talk	
	web 8.Energy flow in Ecosystem	3.Ecology and Environment by P.D. Sharma	1		
		4.Fundamentals of ecology by E.P Odum			
	9. Classification		1	Chalk and Talk	
	of world Biomes (Whittaker) 9.Geographical extent and characteristics of	1.Fundamentals of ecology by E.P Odum	1		
	tropical rain forest 9. Geographical extent and characteristics of tropical savanna	2.Ecology and Environment by P.D. Sharma	2		
	9. Geographical extent and		2		

		After Imple	ementation		
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	characteristics of tropical hot desert 9. Geographical extent and characteristics of taiga 9. Geographical extent and characteristics of coral reef biomes.		1	Chalk and Talk	

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

	•	After Implementation			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Unit: II	10. Biogeochemical cycles with special reference to carbon dioxide 10. Biogeochemical cycles with special reference to nitrogen	1.Ecology: Principle and Applications by J.L. Chapman and M.J Reiz 2. Fundamentals of Ecology by M.C. Das 3.Ecology and Environment by P.D. Sharma 4.Fundamentals of ecology by E.P Odum	2	Chalk and Talk	

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

	Taper Name and		ementation		
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Unit: II	11. Deforestation: Causes and consequences 11. Deforestation: management	1.Ecology: Principle and Applications by J.L. Chapman and M.J Reiz 2. Fundamentals of Ecology by M.C. Das 3.Ecology and Environment by P.D. Sharma 4.Fundamentals of ecology by E.P Odum	2	Chalk and Talk	

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

Paper Name and Code: Soil and Biogeography (GEO-A-CC-04-10-TH)

	•	Planned		After Imple	ementation
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Unit: II	12. Biodiversity: definition, types. 11. Biodiversity: threats and conservation measures	1.Ecology: Principle and Applications by J.L. Chapman and M.J Reiz 2. Fundamentals of Ecology by M.C. Das 3.Ecology and Environment by P.D. Sharma 4.Fundamentals of ecology by E.P Odum	2	Chalk and Talk	
		Total	30		

This theory paper is shared between Dr. Saswati Nayek, Associate Professor and Dr. Raj Kumar Bhattacharya, Assistant Professor, Geography Dept. VIC

Department Name: Geography

Name of Faculty: Dr. Raj Kumar Bhattacharya

Paper Name & Code: Soil and Biogeography Lab GEO-A-CC-4-10-P

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	1a. Basic concept of soil reaction		1	Chalk and Talk	
	1b. Determination of soil reaction (pH) using field kit	Advanced Practical Geography by P. Basu	4	Practical work with soil sample	
	Ic. Interpretation of soil reaction (pH) results		3	Practical work with soil sample	
	1d. Determination of salinity using field kit		4	Practical work with soil sample	
	1e. Interpretation of soil reaction (salinity)		3	Practical work with soil sample	
		Manual guide book as provided by selling company https://openjicareport.jica.go.jp/pdf/1000025769_01.pdf			
	2b.Manual		2	PPT presentation	

Department Name: Geography

Name of Faculty: Dr. Raj Kumar Bhattacharya

Paper Name & Code: Soil and Biogeography Lab GEO-A-CC-4-10-P

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	operating of Sieve analysis				
	2c. Determination of soil type by ternary diagram textural plotting		8	Practical work with soil sample	
	2d.Interpretation of result		4	Practical work with soil sample	
		Total	30		

Department Name: Geography

Name of the Faculty: Dr. Saswati Navak

Paper Name and Code: Soil and Biogeography (GEO-A-CC-04-10-P)

	*	Planned	`	After Imple	ementation
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	3. Plant species diversity determination by Simpson's method	1.Ecology: Principle and Applications by J.L. Chapman and M.J Reiz	5		
Laboratory Notebook Practical	3. Plant species diversity determination by Shannon Weiner's method.	2. Maps and Diagrams: Their Compilation and construction by F.J. Monkhouse and H. R. Wilkinson	5	Chalk and Talk	
	4. Time series analysis of biogeography data	3.Ecology and Environment by P.D. Sharma 4.Fundamentals of ecology by E.P Odum	20		
		Total	30		

This practical paper is shared between Dr. Saswati Nayek, Associate Professor and Dr. Raj Kumar Bhattacharya , Assistant Professor, Geography Dept. VIC

Department Name: Geography

Name of Faculty: Prakriti Das

Paper Name & Code: RURAL DEVELOPMENT & GEO-A-SEC-B-4-TH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	1a. Concept of Rural Development		1	Chalk and Talk	
	1b. Basic elements of Rural development	https://egyankosh.ac.in/bitstream/123456789/59475/1/Unit1.pdf https://aipublications.com/uploads/issue_files/4-IJREH-AUG- 2018-2-AConceptualModel.pdf	2	Chalk and Talk	
	1c. Measures of level of rural development		2	Chalk and Talk	
		Total	5		

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

Paper Name and Code: Rural Development (GEO-A-SEC-B-4-03-TH)

		Planned		After Imple	ementation
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Unit: II	2. Paradigm of rural development: Gandhian approach to rural development 2. Lewis model of economic development 2. 'Big Push'' theory of development 2. Myrdal's model of spread and backwash effects.	1. Economic and Social geography by R. Knowles and J. Wareing. 2. An Introduction to Regional Planning Concepts, Theory and Practice by John Glasson. 3. Regional Planning in India by M. Chand and V.K. Puri. 4.Contemporary Development Economics; From Adam Smith to Amartya Sen by Felix Raj, Sampat Mukherjee.	2 2 3 3	Chalk and Talk	
		Total	10		

Department Name: Geography

Name of Faculty: Dr. Raj Kumar Bhattacharya

Paper Name & Code: GEO-A-SEC-B-4-03-TH – Rural Development

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Rural Development	3a. Area based approach to rural development: Drought prone area programmes, PMGSY	Regional Planning in India by M. Chand and V.K. Puri Geography of India by R.C. Tiwari Website:	4	Chalk and Talk	
	3b. SJSY, MNREGA, Jan Dhan Yojana	https://pmjdy.gov.in/	6	Chalk and Talk	
		Total	10		

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Paper Name & Code: GEO-A-SEC-B-4-TH-RURAL DEVELOPMENT

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
4	Concept of Rural Governance	Rural Development Principles, Policies and Management by Singh and Shishodia, Rural Development: Problems and Prospects by Krishnamurthy, Studies in Village India by Yugandhar and Mukherjee.	1	Chalk and Talk	
4	Discussion about Panchayati Raj System	Same as above	1	Chalk and Talk	
4	Discussion about Rural development policies in India	Same as above	1	Chalk and Talk	
4	Discussion about Rural development programmes in India	Rural Development Principles, Policies and Management by Singh and Shishodia, Rural Development: Problems and Prospects by Krishnamurthy, Studies in Village India by Yugandhar and Mukherjee.	2	Chalk and Talk	
		TOTAL	5		

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

		After Implementation			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	1.Maps: Classification and types	1.Practical Geography: A Systematic Approach by A. Sarkar 2. Elements of Practical	by A. 1		
Unit: I Scales and Projection	2. Scales: types, significance and classification	Geography by R.L. Singh 3. Maps and Diagrams by F.J.	2	Chalk and Talk	
	2. Coordinate systems: Polar and rectangular	Monkhouse 4. Surveying and Levelling by T. P. Kanetkar and S.V. Kulkarni	1		
	2. Bearing: Magnetic and true	5. Remote Sensing and GIS by B. Bhatt	1		

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

		Planned		After Imple	ementation
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	2. Bearing: Whole circle and reduced	1.Practical Geography: A Systematic Approach by A. Sarkar	1		
Unit: I Scales	3. Map projection: classification	Elements of Practical Geography by R.L. Singh Maps and Diagrams by F.J. Monkhouse 4 Surveying and Levelling by T.	2		
and Projection	3. Map projection: properties and uses		3	Chalk and Talk	
	3. Concept and significance of UTM projection	4. Surveying and Levelling by T.P. Kanetkar and S.V. Kulkarni5. Remote Sensing and GIS by B.Bhatt	3		

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

	Planned				After Implementation	
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments	
	4.Survey of topographical maps: reference scheme of old series	1.Practical Geography: A Systematic Approach by A. Sarkar	2			
Unit II: Topographic and Thematic	4.Survey of topographical maps: reference scheme of open series	 Elements of Practical Geography by R.L. Singh Maps and Diagrams by F.J. Monkhouse 	1	Chalk and Talk		
Maps -	4. Information on the margins of maps	4. Surveying and Levelling by T. P. Kanetkar and S.V. Kulkarni	1			
	5. Representation of data by dots and proportional circles	5. Remote Sensing and GIS by B. Bhatt	4			

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

		Planned		After Impl	ementation
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	6. Representation of data by Isopleth	1. Practical Geography: A Systematic Approach by A.	2		
Hait H	6. Representation of data by Choropleth	Sarkar 2. Elements of Practical Geography by R.L. Singh	2		
Unit II: Topographic and Thematic Maps	7. Principal national agencies producing Thematic maps in India: GSI	3. Maps and Diagrams by F.J. Monkhouse4. Surveying and Levelling by T.	1	Chalk and Talk	
	7. Principal national agencies producing Thematic maps in India: NATMO	P. Kanetkar and S.V. Kulkarni 5. Remote Sensing and GIS by B. Bhatt	1		

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

		Planned		After Impl	ementation
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	7. Principal national agencies producing Thematic maps in India: NBSSLUP	1.Practical Geography: A Systematic Approach by A. Sarkar	1		
Unit: I Scales and Projection	7. Principal national agencies producing Thematic maps in India: NHO and NRSC	 Elements of Practical Geography by R.L. Singh Maps and Diagrams by F.J. Monkhouse 	1	Chalk and Talk	
	7. Principal national agencies producing Thematic maps in India and acquaintance with Bhuban Platform	4. Surveying and Levelling by T.P. Kanetkar and S.V. Kulkarni5. Remote Sensing and GIS by B.Bhatt	1		

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

		Planned		After Impl	ementation
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	8.Basics of Remote Sensing	1.Practical Geography: A Systematic Approach by A. Sarkar	2		
Unit III:	8. Types of Satellites	2. Elements of Practical Geography by R.L. Singh	2		
Remote Sensing and GIS	8. Types of Sensors and bands	3. Maps and Diagrams by F.J. Monkhouse	2	Chalk and Talk	
	8. Satellite resolution	4. Surveying and Levelling by T. P. Kanetkar and S.V. Kulkarni	2		
	8. Satellites with special reference to ISRO mission	5. Remote Sensing and GIS by B. Bhatt	2		

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

		After Implementation			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	9. Principals of preparing standard FCCs	1.Practical Geography: A Systematic Approach by A. Sarkar	3		
Unit III:	9. Classification of raster images	2. Elements of Practical Geography by R.L. Singh	2		
Remote Sensing and GIS	10. Principles of GIS: concepts of vector types	B. Maps and Diagrams by F.J. Monkhouse	2	Chalk and Talk	
	10. Attribute tables and buffers	4. Surveying and Levelling by T. P. Kanetkar and S.V. Kulkarni	2		
	10. Overlay analysis	5. Remote Sensing and GIS by B. Bhatt	2		

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

Paper Name and Code: Cartography (GEO-G-CC-4-04-TH)

		Planned		After Imple	ementation
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	11.Basic concepts of surveying	1.Practical Geography: A Systematic Approach by A. Sarkar	3		
Unit IV:	11.Basic concepts of surveying and survey equipment: Prismatic Compass	2. Elements of Practical Geography by R.L. Singh	3		
Surveying	12.Basic concepts of surveying	3. Maps and Diagrams by F.J. Monkhouse4. Surveying and Levelling by T.	3	Chalk and Talk	
	12.Basic concepts of surveying and survey equipment: Prismatic Compass	P. Kanetkar and S.V. Kulkarni 5. Remote Sensing and GIS by B. Bhatt	3		
		Total	64		

This theory paper is fully taught by Dr. Saswati Nayek, Associate Professor, Geography Dept. VIC

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

	Planned				ementation
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	1. Graphical construction of scales: Plain	1 Dun atical Cooperative A	4		
	1.Graphical Construction of scales: comparative	1.Practical Geography: A Systematic Approach by A. Sarkar	3		
Cartography	1. Correction and Checking worksheets	2. Elements of Practical Geography by R.L. Singh	4		
Lab 2. Coproduction of the production of the pr	2. Construction of projections: Simple Conical Projection with one standard parallel-Calculation	3. Maps and Diagrams by F.J. — Monkhouse 4. Surveying and Levelling by T. P. Kanetkar and S.V. Kulkarni 5. Remote Sensing and GIS by B. Bhatt	2	Chalk and Talk	
	2.Construction of projections: Simple Conical Projection with one standard parallel- Drawing		2		

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

Paper Name and Code: Cartography Lab (GEO-G-CC-4-04-P)

]	After Impl	ementation		
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	2.Construction of projections: Cylindrical Equal Area Projection - calculation	1.Practical Geography: A	2		
	2.Construction of projections: Cylindrical Equal Area Projection - drawing	Systematic Approach by A. Sarkar 2. Elements of Practical Geography by R.L. Singh	2		
Cartography Lab	2.Construction of projections: Polar Zenithal Stereographic Projection - calculation	3. Maps and Diagrams by F.J. Monkhouse4. Surveying and Levelling by T.	2	Chalk and Talk	
	2. Construction of projections: Polar Zenithal Stereographic Projection - drawing	P. Kanetkar and S.V. Kulkarni 5. Remote Sensing and GIS by B. Bhatt	2		
	2. Checking work sheets		8		

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

Paper Name and Code: Cartography Lab (GEO-G-CC-4-04-P)

		Planned		After Impl	ementation
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	3. Construction of Thematic maps: proportional squares: Calculation	1. Practical Geography: A	1		
	3. Construction of Thematic maps: proportional squares: drawing	Systematic Approach by A. Sarkar 2. Elements of Practical Geography by R.L. Singh	1	Chalk and Talk	
Cartography Lab	3. Construction of Thematic maps: proportional squares checking	3. Maps and Diagrams by F.J. Monkhouse	3		
	3. Construction of Thematic maps: proportional circles: Calculation	4. Surveying and Levelling by T. P. Kanetkar and S.V. Kulkarni	1		
	3. Construction of Thematic maps: proportional circles: drawing on maps	5. Remote Sensing and GIS by B. Bhatt	1		

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

Paper Name and Code: Cartography Lab (GEO-G-CC-4-04-P)

		After Impl	ementation		
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	3. Construction of Thematic maps: proportional circles: drawing on maps & checking	1.Practical Geography: A Systematic Approach by A. Sarkar	3		
Cartography	3. Construction of Thematic maps: choropleth calculation	2. Elements of Practical Geography by R.L. Singh	1		
Lab	3. Construction of Thematic maps: choropleth drawing	3. Maps and Diagrams by F.J. Monkhouse	1	Chalk and Talk	
	3. Construction of Thematic maps: choropleth drawing and checking	4. Surveying and Levelling by T.P. Kanetkar and S.V. Kulkarni5. Remote Sensing and GIS by B.Bhatt	3		
	3. Construction of Thematic maps: isopleth calculation		1		

This practical paper is fully taught by Dr. Saswati Nayek, Associate Professor and Dr. Raj Kumar Bhattacharya, Assistant Professor, Geography Dept. VIC

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

Paper Name and Code: Cartography (GEO-G-CC-4-04-TH)

		After Implementation			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	3. Construction of Thematic maps: isopleth drawing	1.Practical Geography: A Systematic Approach by A.	1		
	3. Construction of Thematic maps: isopleth drawing & checking	Sarkar 2. Elements of Practical Geography by R.L. Singh	2		
Cartography Lab	4. Preparation of annotated thematic overlays from satellite standard FCC 1: 50K	3. Maps and Diagrams by F.J. Monkhouse4. Surveying and Levelling by T.	5	Chalk and Talk	
	4. Preparation of annotated thematic overlays from satellite & checking	P. Kanetkar and S.V. Kulkarni 5. Remote Sensing and GIS by B. Bhatt	5		
	_	Total	60		

This theory paper is fully taught by Dr. Saswati Nayek, Associate Professor, Geography Dept. VIC

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
1	Concept of Sustainable development	Sustainable development by Baker, Understanding Sustainable development by Blewitt, An introduction to Sustainable development by Elliott.	1	Chalk and Talk	
1	Discussion on the historical background of Sustainable development	Same as above	2	Chalk and Talk	
1	Components of Sustainable development	Same as above	1	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
1	Limitations of Sustainable development	Sustainable development by Baker, Understanding Sustainable development by Blewitt, An introduction to Sustainable development by Elliott.	1	Chalk and Talk	
4	Discussion about global goals for Sustainable development	Sustainable development by Baker, Understanding Sustainable development by Blewitt, An introduction to Sustainable development by Elliott, An introduction to	2		

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
		Sustainable development by Rogers, Jalal, Boyd.			
4	Discussion about global goals for Sustainable development with special reference to Domain	Same as above	2		

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
4	Discussion about global goals for Sustainable development with special reference to conflict	Same as above	1		

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
4	Discussion about global goals for Sustainable development with special reference to crisis	Sustainable development by Baker, Understanding Sustainable development by Blewitt, An introduction to Sustainable development by Elliott, An introduction to Sustainable development by Rogers, Jalal,Boyd.	1		
	Discussion	Sustainable	1		

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	about global goals for Sustainable development with special reference to compromise	development by Baker, Understanding Sustainable development by Blewitt, An introduction to Sustainable development by Elliott, An introduction to Sustainable development by Rogers, Jalal, Boyd.			
		TOTAL	12		

Department Name: Geography

Name of Faculty: Prakriti Das

Paper Name & Code: Sustainable Development GEO-G-SEC-B-4/6-04-TH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	2a. Challenges of sustainable development	https://journals.lww.com/ijph/fulltext/2016/60040/sustainable_development_goals_challenges_and.1.aspx	1	Chalk and talk	
	2b.Determinants of sustainable development	https://bhattadevuniversity.ac.in/docs/studyMaterial/ Jyotismoy_Bora_Geography/Dr.%20Jyotishmoy%20Bora_ Geography_VI%20Sem%20(M)_Sustainable%20 Development%20Definitions,%20Measures.pdf	1	Chalk and talk	
	2c. Linkage among sustainable development, environment and poverty	https://www.adb.org/sites/default/files/ publication/28124/op007.pdf	4	Chalk and talk	
		Total	6		

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

Paper Name and Code: Sustainable Development (GEO-G-SEC-B-04/6-04-TH)

		After Imple	ementation		
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
growth and its impact on resources and	3.Population: growth and its impact on resources and environment	1. Resource Studies by A. Mitra	2		
Topic: 3 Global Environmental Issues	3. Income and urbanization: growth and its impact on resources and environment	2. The Use and Abuse of Nature: An ecological History of India and Ecology and Equity by M. Gadgil and R. Guha	2	Chalk and Talk	
155465	3. Health care	3.Contemporary Development Economics; From Adam Smith to Amartya Sen by Felix Raj, Sampat Mukherjee	2		
	3.Sustainabl use of forest 3.Sustainable use of water resource	- Sampar Makinerjee	2		
		Total	08		

Department Name: Geography

Name of Faculty: Dr. Raj Kumar Bhattacharya

Paper Name & Code: GEO-G-SEC-B-4/6-04-TH-Sustainable Development

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Sustainable Development	4a. Global goals for sustainable development: Domain, conflict,	UNO Sustainable Development Knowledge Platform: sustainabledevelopment.un.org Sustainable Development	4	Chalk and talk	
	4b.Crisis and compromise	Goals https://sdgs.un.org/goal	3	Chalk and talk	
		Total	7		

This theory paper is shared among Smt. Pubali Ghosh, Associate Professor, Dr. Saswati Nayek, Associate Professor, Smt. Prakriti Das, Assistant Professor and Dr. Raj Kumar Bhattacharya, Assistant Professor, Geography Dept. VIC

DEPARTMENT OF GEOGRAPHY VICTORIA INSTITUTION (COLLEGE)

LESSON PLAN

SEMESTER 6

HONOURS & GENERAL

(CBCS SYLLABUS)

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Planned					
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
1 Nature of Pre Modern Geography	Development of pre- modern Geography- Basic concept	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain, Geographical Thought by Dikshit.	1	Chalk and Talk	
	Development of pre- modern Geography- Contributions of Greek geographers	Same as above	1	Chalk and Talk	
	Development of pre- modern Geography- Contributions of Chinese geographers	Same as above	1	Chalk and Talk	
	Development of pre- modern Geography- Contributions of Indian geographers	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain, Geographical Thought by Dikshit.	2	Chalk and Talk	
1 Nature of Pre Modern	Discussion about 'Dark Age' in Geography	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain,	1	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Planned					
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Geography		Geographical Thought by Dikshit, A Student's introduction to Geographical Thought by P. Couper.			
	Discussion about impact of 'Dark Age' in Geography	Same as above	2	Chalk and Talk	
1 Nature of Pre Modern Geography	Discussion about Arab contributions in the 'Dark Age' of Geography	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain, Geographical Thought by Dikshit, A Student's introduction to Geographical Thought by P. Couper.	2	Chalk and Talk	
1 Nature of Pre Modern Geography	Discussion about the age of 'Discovery' and 'Explorations'	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain, Geographical Thought by Dikshit, A Student's introduction to Geographical Thought by P. Couper.	1	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Planned					
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	Discussion about the age of 'Discovery' and 'Explorations'- Contributions of Portuguese voyages	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain, Geographical Thought by Dikshit, A Student's introduction to Geographical Thought by P. Couper	1	Chalk and Talk	
	Discussion about the age of 'Discovery' and 'Explorations'- Role of Columbus	Same as above	1	Chalk and Talk	
	Discussion about the age of 'Discovery' and 'Explorations'- Role of Vasco da Gama	Same as above	1	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	Discussion about the age of 'Discovery' and 'Explorations'- Role of Magellan	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain, Geographical Thought by Dikshit, A Student's introduction to Geographical Thought by P. Couper.	1	Chalk and Talk	
	Discussion about the age of 'Discovery' and 'Explorations'- Role of Cook	Same as above	1	Chalk and Talk	
1 Nature of Pre Modern Geography	Discussion about Cosmography and Scientific Geography and its transition from Cosmography to Scientific Geography	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain, Geographical Thought by Dikshit, A Student's introduction to Geographical Thought by P. Couper.	1	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
		Key Concepts in Geography by Clifford, Rice, & Valentine.			
1 Nature of Pre Modern Geography	Transition from Cosmography to Scientific Geography - Contributions of Bernard Varenius	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain, Geographical Thought by Dikshit, A Student's introduction to Geographical Thought by P. Couper. Key Concepts in Geography by Clifford, Rice, & Valentine.	1	Chalk and Talk	
	Transition from Cosmography to Scientific Geography -	Same as above	1	Chalk and Talk	
	Contributions of				

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	Immanuel Kant				
	Concept of Dualism and Dichotomies	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain , Geographical Thought by Dikshit, A Student's introduction to Geographical Thought by P. Couper. Key Concepts in Geography by Clifford, Rice, & Valentine	1	Chalk and Talk	
	Discussion about General vs. Particular	Same as above	1	Chalk and Talk	
	Discussion about Physical vs. Human	Same as above	1	Chalk and Talk	
	Discussion about Regional vs.	Same as above	1	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	Systematic				
	Discussion about Determinism vs. Possibilism	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain , Geographical Thought by Dikshit, A Student's introduction to Geographical Thought by P. Couper. Key Concepts in Geography by Clifford, Rice, & Valentine	1	Chalk and Talk	
	Discussion about Ideographic vs. Nomothetic	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain, Geographical Thought by Dikshit, A Student's introduction to Geographical Thought by P. Couper. Key Concepts in Geography by	1	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
2 Foundations of Modern Geography and Recent Trends	Evolution of Geographical thoughts in Germany	Clifford, Rice, & Valentine Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain, Geographical Thought by Dikshit, A Student's introduction to Geographical Thought by P. Couper. Key Concepts in Geography by Clifford, Rice, & Valentine, The Dictionary of Human Geography by Johnston, Pratt, Watts, Whatmore	1	Chalk and Talk	
	Evolution of Geographical thoughts in France	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain, Geographical Thought by Dikshit, A Student's introduction to Geographical Thought by P.	1	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
		Couper. Key Concepts in Geography by Clifford, Rice, & Valentine, The Dictionary of Human Geography by Johnston, Pratt, Watts, Whatmore.			
Foundations of Modern Geography and Recent Trends	Evolution of Geographical thoughts in Britain	Same as above	1	Chalk and Talk	
	Evolution of Geographical thoughts in U S.A.	Same as above	1	Chalk and Talk	
2 Foundations of	Contributions of Humboldt	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain,	1	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Modern Geography and Recent Trends		Geographical Thought by Dikshit, A Student's introduction to Geographical Thought by P. Couper.			
	Contributions of Ritter	Same as above	1	Chalk and Talk	
Foundations of Modern Geography and Recent Trends	Contributions of Richthofen	Same as above	1	Chalk and Talk	
	Contributions of Hartshorne- Schaeffer	Same as above	2	Chalk and Talk	
	Contributions of Ratzel	Same as above	1	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Foundations of Modern Geography and Recent Trends	Contributions of Vidal de La Blache	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain, Geographical Thought by Dikshit, A Student's introduction to Geographical Thought by P. Couper.	2	Chalk and Talk	
Foundations of Modern Geography and Recent Trends	Trends of Geography in the post-World War II period	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain, Geographical Thought by Dikshit, A Student's introduction to Geographical Thought by P. Couper. Key Concepts in Geography by Clifford, Rice, & Valentine, The Dictionary of Human	1	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
		Geography by Johnston, Pratt, Watts, Whatmore			
	Discussion on Quantitative revolution	Same as above	3	Chalk and Talk	
	Discussion on System Approach	Same as above	3	Chalk and Talk	
Foundations of Modern Geography and Recent Trends	Discussion on Structuralism	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain , Geographical Thought by Dikshit, A Student's introduction to Geographical Thought by P. Couper. Key Concepts in Geography by Clifford, Rice, & Valentine, The Dictionary of Human Geography by Johnston, Pratt,	1	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
		Watts, Whatmore			
	Discussion on Historical Materialism	Same as above	2	Chalk and Talk	
2 Foundations of Modern Geography and Recent Trends	Basic concept of Space	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain, Geographical Thought by Dikshit, A Student's introduction to Geographical Thought by P. Couper, Modern Geographical Thought by Pete.	1	Chalk and Talk	
	Changing concept of Space	Same as above	2	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
2 Foundations of Modern Geography and Recent Trends	Changing concept of Space with special reference to Harvey	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain, Geographical Thought by Dikshit, A Student's introduction to Geographical Thought by P. Couper, Modern Geographical Thought by Pete.	2	Chalk and Talk	
2 Foundations of Modern Geography and Recent Trends	Concept of Critical Geography	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain, Geographical Thought by Dikshit, A Student's introduction to Geographical Thought by P. Couper,	1	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
		Modern Geographical Thought by Pete.			
	Evolution of Critical Geography	Same as above	1	Chalk and Talk	
	Discussion about Behavioural Geography	Same as above	1	Chalk and Talk	
	Discussion about Humanistic Geography	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain, Geographical Thought by Dikshit, A Student's introduction to Geographical Thought by P. Couper, Modern Geographical Thought	1	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	Discussion about Radical Geography	by Pete. Same as above	1	Chalk and Talk	
2 Foundations of Modern Geography and Recent Trends	Concept of Post modernism in Geography	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain, Geographical Thought by Dikshit, A Student's introduction to Geographical Thought by P. Couper, Modern Geographical Thought by Pete.	1	Chalk and Talk	
2	Characteristic features of	Same as above	2	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Foundations of	Post-modern				
Modern	period in				
Geography and	Geography				
Recent Trends					
2 Foundations of Modern Geography and Recent Trends	Discussion about Geography in 21 st Century	Fundamentals of Geographical Thought by S. Adhikari, Evolution of Geographical Thought by M. Husain, Geographical Thought by Dikshit, A Student's introduction to Geographical Thought by P. Couper, Modern Geographical Thought 2 Foundations of Modern Geography and Recent Trends by Pete.	2	Chalk and Talk	
		TOTAL	62		

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Paper Name & Code: GEO-A-CC-6-13-P -EVOLUTION OF GEOGRAPHICAL THOUGHT LAB

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
1	Discussion about changing perception of maps of the world	Visions of the World: A History of Maps by Mitchell Beazley, J. Black	3	Chalk and Talk	
1	Discussion about changing perception of maps of the world- after Ptolemy	Same as above	5	Chalk and Talk	
1	Discussion about changing perception of maps of the world- after Mercator	Visions of the World: A History of Maps by Mitchell Beazley, J. Black	5	Chalk and Talk	
2	Discussion about history of mapping voyages	Charting the oceans by P. Whitfield, Visions of the World: A History of Maps by Mitchell Beazley, J. Black, Visions of the world: A History of Maps by J. Black	3	Chalk and Talk	
2	Detailed discussion about mapping voyages- voyage of Columbus	Same as above	5	Chalk and Talk	
2	Detailed discussion about mapping voyages- voyage of	Charting the oceans by P. Whitfield, Visions of the World: A History	5	Chalk and Talk	

Subject Name/Code: GEOGRAPHY/ GEOA

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Paper Name & Code: GEO-A-CC-6-13-P -EVOLUTION OF GEOGRAPHICAL THOUGHT LAB

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	Magellan	of Maps by Mitchell Beazley, J. Black, Visions of the world: A History of Maps by J. Black			
2	Detailed discussion about mapping voyages- voyage of Captain Cook	Charting the oceans by P. Whitfield, Visions of the World: A History of Maps by Mitchell Beazley, J. Black, Visions of the world: A History of Maps by J. Black	5	Chalk and Talk	
3	Group Presentation of five to ten students on any selected school of geographical thought	A student's introduction to Geographical Thought by P. Couper	30	Chalk and Talk, Poster preparation and presentation.	
		TOTAL	61		

Department Name: Geography

Name of Faculty: Dr. Raj Kumar Bhattacharya

Paper Name & Code: Hazard Management (GEO-A- CC-14-TH)

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Unit I: Concepts	1a. Classification of hazards and disasters		2	Chalk and talk	
	1b. Hazard continuum	Environmental Hazards: Assessing Risk and Reducing Disaster by K. Smith	2	Chalk and talk	
	2a. Approaches to hazard study: Risk perception	Disaster Management by Savindra Singh	2	Chalk and talk	
	2b. Approaches to hazard study: vulnerability assessment	Disaster News Network: secure.disasternews.net	2	Chalk and talk	
	2c. Hazard paradigms		2	Chalk and talk	
	3a. Responses to hazards: Preparedness, trauma, and aftermath		3	Chalk and talk	

Department Name: Geography

Name of Faculty: Dr. Raj Kumar Bhattacharya

Paper Name & Code: Hazard Management (GEO-A- CC-14-TH)

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	3b. Resilience, capacity building		2	Chalk and talk	
	4a. Basic concept of Hazards mapping: Data and geospatial techniques	Environmental Hazards: Assessing Risk and Reducing Disaster by K. Smith Disaster Management by Savindra Singh	1	Chalk and talk	
	4b. Earthquake Hazards mapping	Environmental Hazards: Assessing Risk and Reducing Disaster by K. Smith	2	Practical work with secondary database	
	4c. Landslide Hazards mapping		2	Practical work with secondary database	
		Total	20		

Department Name: Geography

Name of Faculty: Dr. Raj Kumar Bhattacharya

Paper Name & Code: Hazard Management (GEO-A- CC-14-TH)

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Unit II: Hazard- specific Study with Focus on West Bengal and India	1. Earthquake: Factors, vulnerability, consequences, and management	USGS Earthquake Hazards Programme: www.earthquake.usgs.gov	5	Chalk and talk & Practical work with secondary database	
	2. Landslide: Factors, vulnerability, consequences, and management	AGU landslide Blog: blogs.agu.org/landslide blog	5	Chalk and talk & Practical work with secondary database	
	3. Land subsidence: Factors, vulnerability, consequences, and		5	Chalk and talk & Practical work with secondary database	

Department Name: Geography

Name of Faculty: Dr. Raj Kumar Bhattacharya

Paper Name & Code: Hazard Management (GEO-A- CC-14-TH)

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	management				
	4. Tropical cyclone: Factors, vulnerability, consequences, and management		5	Chalk and talk & Practical work with secondary database	
	5. Flood: Factors, vulnerability, consequences, and management	Dartmouth Flood Observatory: floodobservatory.colorado.edu India Meteorological Department Cyclone Page: www.rsmcnewdelhi.imd.gov.in/index.php?lang=en	5	Chalk and talk & Practical work with secondary database	
	6. Riverbank erosion: Factors, vulnerability, consequences,		5	Chalk and talk & Practical work with secondary database	

Subject Name/Code:

Department Name: Geography

Name of Faculty: Dr. Raj Kumar Bhattacharya

Paper Name & Code: Hazard Management (GEO-A- CC-14-TH)

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	and management				
	7. Fire: Factors, vulnerability, consequences, and management		5	Chalk and talk & Practical work with secondary database	
	8. Biohazard: Classification, vulnerability, consequences, and management		5	Chalk and talk & Practical work with secondary database	
		Total	40		

Subject Name/Code:

Department Name: Geography

Name of Faculty: Dr.Raj Kumar Bhattacharya

Paper Name & Code: Hazard Management Lab (GEO-A-CC-6-14-P)

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Group-A	Landslide susceptibility mapping	AGU landslide Blog: blogs.agu.org/landslide blog	10	Practical work with secondary database	
Group-B	River bank erosion	River bank erosion news: https://www.newsclick.in/river- bank-erosion-break-havoc- bengal-maldaha-murshidabad	10	Practical work with secondary database	
Group-C	Flood susceptibility mapping	Dartmouth Flood Observatory: floodobservatory.colorado.edu	10	Practical work with secondary database	
		Total	30		

Subject Name/Code:

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak Paper Name and Code: Resource Geography (GEO-A-DSE-06-04-TH)

		Planned		After Imple	ementation
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	1.Nature of resource: concept and classification 2. Approaches to resource	1.Economic and Social geography by R. Knowles and J.	4	-	
Unit: I	utilization: utilitarian and conservational 2. Approaches to	Wareing. 2. Resource Studies by A. Mitra	3		
Resource and Development	resource utilization: community based adaptive	3. The Use and Abuse of Nature: An ecological History of India and Ecology and Equity by M. Gadgil and R. Guha	3	Chalk and Talk	
	3. Significance of Resource Backbone of economic growth and development	4.Contemporary Development Economics; From Adam Smith to Amartya Sen by Felix Raj, Sampat Mukherjee.	2		
		Total			

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

		Planned		After Imple	ementation
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	3. Significance of Resource Backbone of economic growth and development	1.Economic and Social geography by R. Knowles and J. Wareing.	3		
	4. Pressure on resource: Appraisal	2. Resource Studies by A. Mitra	2		
Unit: I	4. Conservation of natural resource	3. The Use and Abuse of Nature: An ecological History of India and Ecology and Equity by M. Gadgil and R. Guha		Chalk and Talk	
	5. Problems of resource depletion: Global Scenario:	4.Contemporary Development Economics; From Adam Smith	3		
	forest	to Amartya Sen by Felix Raj, Sampat Mukherjee.	2		
		Total			

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak Paper Name and Code: Resource Geography (GEO-A-DSE-06-04-TH)

	•	After Impl	ementation		
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	5. Problems of resource depletion: Global Scenario: water	1.Economic and Social geography by R. Knowles and J.	2		
	5. Problems of resource depletion: Global Scenario: fossil fuel	Wareing. 2. Resource Studies by A. Mitra	3		
Unit: I	6. Sustainable resource development	3. The Use and Abuse of Nature: An ecological History of India and Ecology and Equity by M. Gadgil and R. Guha	3	Chalk and Talk	
		4.Exploitation, Conservation and Preservation: A Geographical Perspective on Natural Resource use by S.N. Cutter			

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

		After Imple	ementation		
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Unit II: Resource Conflict and Management	7.Distribution, utilization, problems, and management of metallic mineral resource: Iron ore 7.Distribution, utilization, problems and management of metallic mineral resource: bauxite 7.Distribution, utilization, problems and management of metallic mineral resource: copper	1.Geography of Resources: Exploitation, Conservation and Management by A. Gautam. 2.Environmental Science: A Global Concern pub: The McGraw-Hill edited by Kevin.T. Kane. 3.Resource Studies by A. Mitra 4.Contemporary Development Economics; From Adam Smith to Amartya Sen by Felix Raj, Sampat Mukherjee.	2 2	Chalk and Talk	

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

		After Imple	mentation		
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	8.Distribution, utilization, problems and management of non-metallic mineral resources: Limestone	1.Geography of Resources: Exploitation, Conservation and Management by A. Gautam.	2		
Unit II: Resource Conflict and Management	8.Distribution, utilization, problems and management of non-metallic mineral resources: Mica	2.Environmental Science: A Global Concern pub: The McGraw-Hill edited by Kevin.T. Kane.	2	Chalk and Talk	
Management	8.Distribution, utilization, problems and management of non-metallic mineral resources: Gypsum	3.Resource Studies by A. Mitra 4.Contemporary Development Economics; From Adam Smith to Amartya Sen by Felix Raj, Sampat Mukherjee.	2		

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

		Planned		After Imple	ementation
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	9.Distribution, utilization, problems and management of energy resources: conventional	1.Geography of Resources: Exploitation, Conservation and Management by A. Gautam.	3		
Unit II: Resource Conflict and Management	9.Distribution, utilization, problems and management of energy resources:	2.Environmental Science: A Global Concern pub: The McGraw-Hill edited by Kevin.T. Kane.	3	Chalk and Talk	
	non-conventional. 10. Contemporary energy crisis.	3.Resource Studies by A. Mitra 4.Contemporary Development Economics; From Adam Smith to	2		
	10. Future scenario of energy resources	Amartya Sen by Felix Raj, Sampat Mukherjee.	2		

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

Paper Name and Code: Resource Geography (GEO-A-DSE-06-04-TH)

	Planned			After Imple	ementation
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	11. Politics of power	1.Geography of Resources: Exploitation, Conservation and Management by A. Gautam.	3		
Unit II: Resource	resources 12. Limits to growth	2.Environmental Science: A Global Concern pub: The McGraw-Hill edited by Kevin.T.	1		
Conflict and Management	12. Sustainable use of resources	Kane.	2	Chalk and Talk	
	12. Concept of resource sharing	3.Resource Studies by A. Mitra4.Contemporary Development Economics; From Adam Smith to Amartya Sen by Felix Raj, Sampat Mukherjee.	2		
		Total	60		

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Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

	Pl	After Imple	ementation		
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Resource Geography Lab	1.Mapping and area estimate of changes in forest or vegetation cover from topo-maps 1.Mapping and area estimate of changes in forest or vegetation cover from satellite images 1. Comparative Study of area estimated from Topo-map and satellite Imagery and interpretation 2.Mapping and number estimate water bodies in Topo-map	1.Topo-sheet and Satellite imageries of 2012 1nd 2019 2. Remote Sensing and Image Interpretation by T.M. Lillesand and R. W. Kiefer 3. Remote Sensing by B. Bhatta	5 5 2	Chalk and Talk	

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

Commer C		Planned				
Resource Geography Lab 2. Comparative study and changes from Topomap and satellite imageries 2. Remote Sensing and Image Interpretation by T.M. Lillesand and R. W. Kiefer Chalk and Talk	Module /	Topics	Reference Books	Lecture	Delivery	Remarks / Comments
2. Interpretation 2. Checking the work sheets 4		estimation of water bodies in satellite imageries of 2012 and 2019 2. Comparative study and changes from Topomap and satellite imageries 2. Interpretation 2. Checking the work	imageries of 2012 1nd 2019 2. Remote Sensing and Image Interpretation by T.M. Lillesand	2	Chalk and Talk	

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

	Pl	After Impl	ementation		
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	3. Decadal Changes in state-wise production of Coal: calculation and drawing		3		
	3. Checking the rough sheet		2		
	3. Interpretation of changes in Coal production	1.Coal Production Data from Coal India Ltd Report	3		
Resource Geography Lab	3. Decadal Changes in state-wise production of Iron-ore: calculation and drawing	2. Maps and Diagrams: Their Compilation and Construction by F.J. Monkhouse and H. R. Wilkinson	3	Chalk and Talk	
	3. Checking the rough sheet	3. Data Platform: data.gov.in	3		
	3. Interpretation of changes in Iron-ore production		1		

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

Paper Name and Code: Resource Geography (GEO-A-DSE-06-04-P)

	Pl	anned		After Impl	ementation
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	4. Collection of decadal Human Development indices data and introduction.		2		
	4. Calculation od Hunman Development Index state wise	Human Development Report 2017	3		
Resource Geography Lab	4.Representation on map of India	2. Human Development Report India 2011	3	Chalk and Talk	
	4. Interpretation of Comparative analysis of Human Development index.	3. Readings in Human Development by s. Fukuda-Parr & S.A.K. Kumar	3		
	4. Checking the work sheets.		3		
		Total	59		

This practical paper is fully taught by Dr. Saswati Nayek, Associate Professor, Geography Dept. VIC

Department Name: Geography

Name of Faculty: Prakriti Das

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Unit I: Geography of India	1a.Physiographic divisions of India	Advanced Geography of India by Alka Gautam	1	Chalk and Talk	
	1b.Tectonic provinces of India	https://iasscore.in/topical-analysis/what-are-the- tectonic-divisions-of-india	2	Chalk and Talk	
	2a.Climate of India and its classification		2	Chalk and Talk	
	2b. Soil of India and its classification	Advanced Geography of India by Alka Gautam	1	Chalk and Talk	
	2c. Vegetation of India and its classification	India: A Comprehensive Geography by Khullar	1	Chalk and Talk	
	2d. Interrelation between climate, soil and vegetation of		1	Chalk and Talk	

Department Name: Geography

Name of Faculty: Prakriti Das

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	India				
	3a. Population distribution of India		1	Chalk and Talk	
	3b. Population growth of India		1	Chalk and Talk	
	3c. Structure of India's population	Population Geography by S.D Maurya Geography of Population by R.C Chandna	1	Chalk and Talk	
	3d. India's population policies		1	Chalk and Talk	
	4a. Tribes of India: definition and characteristics	Social Geography by A. Ahmed	1	Chalk and Talk	

Department Name: Geography

Name of Faculty: Prakriti Das

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	4b. Gaddi tribe and their socio- economic and cultural lifestyle	Social Geography by Jyotirmoy Sen Geography of India by R.C Tiwari Fundamentals of Human Geography by L.R Singh	1	Chalk and Talk	
	4c. Toda tribe and their socio- economic and cultural lifestyle		1	Chalk and Talk	
	4d. Santal tribe and their socio- economic and cultural lifestyle		1	Chalk and Talk	
	4e. Jarwa tribe and their socio- economic and cultural lifestyle		1	Chalk and Talk	

Department Name: Geography

Name of Faculty: Prakriti Das

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	5a. Agricultural regions of India (ICAR 1972).	Geography of India by R.C Tiwari	1	Chalk and Talk	
	5b. Green revolution in India (Phases 1 and 2) and its consequences	Advanced Geography of India by Alka Gautam	3	Chalk and Talk	
	6a. Mineral and power resources in India: Introduction, problems and prospects	Advanced Geography of India by Alka Gautam	1	Chalk and Talk	
	6b. Distribution and utilisation of iron ore in India	Economic Geography by Prithwish Roy	1	Chalk and Talk	

Department Name: Geography

Name of Faculty: Prakriti Das

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	6c. Distribution and utilisation of coal in India		1	Chalk and Talk	
	6d. Distribution and utilisation of petroleum		1	Chalk and Talk	
	6e. Distribution and utilisation of natural gas		1	Chalk and Talk	
	7a. Industrial development in India: Innovations and challenges	Advanced Geography of India by Alka Gautam Geography of India by R.C Tiwari	1	Chalk and Talk	
	7b. Automobile industry in India		1	Chalk and Talk	

Department Name: Geography

Name of Faculty: Prakriti Das

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	7c. Information technology in India		1	Chalk and Talk	
	8a.Physiographic Regionalisation of India after R.L. Singh	India: A Regional Geography by R.L Singh	2	Chalk and Talk	
	8b. Economic Regionalisation of India after P. Sengupta	http://www.rnlkwc.ac.in	2	Chalk and Talk	
Unit II: Geography of West Bengal	9a. Physiographic divisions of West Bengal,		1	Chalk and Talk	

Department Name: Geography

Name of Faculty: Prakriti Das

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	9b. Forest resources of West Bengal		1	Chalk and Talk	
	9c. Water resources of West Bengal		1	Chalk and Talk	
	10a. Agriculture of West Bengal with reference to tea & jute	Samajik, Sanskritik o Bharater Anchalik Bhugol by Dr. Sanjib Majumder	2	Chalk and Talk	
	10b. Mining in West Bengal with reference to coal		1	Chalk and Talk	
	10c. Industry in West Bengal		4	Chalk and Talk	

Department Name: Geography

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		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	with reference to iron and steel, petrochemicals, tourism, IT				
	11a. Population growth in West Bengal		1	Chalk and Talk	
	11b.Population distribution in West Bengal		1	Chalk and Talk	
	11c. Human development in West Bengal		1	Chalk and Talk	
	12a. Regional issues in	https://www.ijhssi.org/papers/v3(7) /Version-2/H0372042047.pdf	2	Chalk and Talk	

Department Name: Geography

Name of Faculty: Prakriti Das

Paper Name & Code: Geography of India & GEO-A-DSE-B-6-08-TH

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	Darjeeling Hills				
	12b. Regional issues in Sundarban	https://www.academia.edu/12524744/Environmental_Scenario_of_Sunderbans_Planning_and_Management	2	Chalk and Talk	
		Total	50		

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Department Name: Geography

Name of Faculty: Prakriti Das

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	1a.Understanding the concept of monthly temperature and rainfall graphs and their significance		1	Chalk and talk	
	1b. Collection of data for drawing monthly temperature and rainfall graphs of five selected stations from different physiographic regions of India		3	Chalk and talk	

Department Name: Geography

Name of Faculty: Prakriti Das

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	1c. Drawing of the graphs and interpretation	BOOKS Statistical Methods in Geographical Studies by A. Mahmood	4	Chalk and talk	
	2a. Definition, theoretical concept and usefulness of Crop combination	Practical Geography: A Systematic Approach by A. Sarkar	1	Chalk and talk	
	2b. Calculation of Crop combination for comparing any two contrasting districts from West Bengal	Fundamentals of Practical Geography by L.R Singh	3	Chalk and talk	
	2c.Representation of Crop combination and		2	Chalk and talk	

Department Name: Geography

Name of Faculty: Prakriti Das

	Planned						
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments		
	interpretation						
	3a. What is meant by annual trends of production of mineral resources and manufacturing goods?	WEBSITES India Meteorological Department: www.imd.gov.in	1	Chalk and talk			
	3b. Calculation for drawing the graphs and linear trend lines of production of a selected mineral resources and manufacturing goods	Trending Economics (India's industrial production): tradingeconomics.com/india/industrial-production Planning Commission	4	Chalk and talk			

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		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	3c. Drawing of the linear trend lines, representation and interpretation	(West Bengal Development Report 2010): planningcommission.nic.in/plans/stateplan/sdr/sdr_wb1909.pdf	3	Chalk and talk	
	4a. Definition, concept and significance of Composite Index	Government of West Bengal: District Statistical Handbooks (e.g. bardhaman.nic.in/dshb05.pdf)	1	Chalk and talk	
	4b. Data collection and calculation of Composite Index showing comparison of selected developed and backward states		2	Chalk and talk	

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Name of Faculty: Prakriti Das

Paper Name & Code: Geography of India Lab & GEO-A-DSE-B-6-08-P

	Planned				
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	of India				
	4c.Representation and Interpretation		2	Chalk and talk	
		Total	27		

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Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
UNIT 1	Population	Population Geography by M.I.Hassan, Human Geography by M.	1	Chalk and Talk	
POPULATION DYNAMICS		Hussain.			
211111111111111111111111111111111111111	Relation between population geography and	Demography by Bhatt and Desai, Population Geography by H.R. Jones	1	Chalk and Talk	
	Sources of population data	Population Geography by M.I.Hassan, Human Geography by M. Hussain, Census of India.	1	Chalk and Talk	
	of such data	Population Geography by M.I.Hassan, Human Geography by M. Hussain, Census of India.	1	Chalk and Talk	
	mapping	Population Geography by H. R. Jones, Population Geography by H. R. Barret.	2	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

UNIT	TOPICS	REFERENCE BOOKS	NO. OF LECTURE PLANNED	CONTENT DELIVERY TECHNIQUE	REMARKS
UNIT 1 POPULATION DYNAMICS	distribution	Population Geography by M.I.Hassan, Human Geography by M. Hussain. Population Geography by H. R. Jones, Population Geography by H. R. Barret.	1	Chalk and Talk	
	Population density and growth	Same as above	1	Chalk and Talk	
	Classical theories on population growth	Same as above	2	Chalk and Talk	
	Modern theories on population growth	Same as above	2	Chalk and Talk	
	Demographic transition model	Population Geography by M.I.Hassan, Population Geography by H. R. Jones,	1	Chalk and Talk	

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		Population Geography by H. R. Barret.			
UNIT 1 POPULATION DYNAMICS	World patterns of population distribution and growth	Geography of population by Chandna, Population Geography by M.I.Hassan, Human Geography by M. Hussain, Population Geography by H. R. Barret	2	Chalk and Talk	
	World determinants of population distribution and growth	Geography of population by Chandna, Population Geography by M.I.Hassan, Human Geography by M. Hussain, Population Geography by H. R. Barret	1	Chalk and Talk	
	Concept of Optimum population	Population Geography by M.I.Hassan, Population Geography by H. R. Jones, Population Geography by H.	1	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		R. Barret			
UNIT 1 POPULATION DYNAMICS	Population distribution in India	Geography of population by Chandna, Population Geography by M.I.Hassan, Human Geography by M. Hussain, Population Geography by H. R. Barret	2	Chalk and Talk	
	Population density in India	Geography of population by Chandna, Population Geography by M.I.Hassan, Human Geography by M. Hussain, Population Geography by H. R. Barret	1	Chalk and Talk	
	Population growth in India	Population Geography by M.I.Hassan, Population Geography by H. R. Jones, Population Geography by H. R. Barret	1	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

UNIT 2 POPULATION AND DEVELOPMENT	Discussion on Population composition and its types	Geography of population by Chandna, Population Geography by M.I.Hassan, Human Geography by M. Hussain, Population Geography by H. R. Barret	2	Chalk and Talk
	Discussion on the concept of Age-sex and its types	Geography of population by Chandna, Population Geography by M.I.Hassan, Human Geography by M. Hussain, Population Geography by H. R. Barret	1	Chalk and Talk
	urban Population composition.	Geography of population by Chandna, Population Geography by M.I.Hassan, Human Geography by M. Hussain, Population Geography by H. R. Barret	1	Chalk and Talk

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

	Discussion on the concept of literacy and education.	Geography of population by Chandna, Population Geography by M.I.Hassan, Human Geography by M. Hussain, Population Geography by H. R. Barret	1	Chalk and Talk	
UNIT 2 POPULATION AND DEVELOPMENT	Concept of fertility, Measurements of fertility	Geography of population by Chandna, Population Geography by M.I.Hassan, Human Geography by M. Hussain, Population Geography by H. R. Barret	2	Chalk and Talk	
	Concept of Mortality, Measurements of Mortality	Geography of population by Chandna, Population Geography by M.I.Hassan, Human Geography by M. Hussain, Population Geography by H.	2	Chalk and Talk	

Department Name: GEOGRAPHY

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		R. Barret			
	and life table	The Dictionary of Human Geography by Johnston, Pratt, Watts, Whatmore, Population Geography by H. R. Jones, Population Geography by H. R. Barret.	1	Chalk and Talk	
UNIT 2 POPULATION AND DEVELOPMENT	India	Geography of population by Chandna, Population Geography by M.I.Hassan, Human Geography by M. Hussain, Population Geography by H. R. Barret	2	Chalk and Talk	
	of Urbanization in India focusing on its future	Geography of population by Chandna, Population Geography by M.I.Hassan, Human Geography by M. Hussain, Population Geography by H.	3	Chalk and Talk	

Department Name: GEOGRAPHY

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		R. Barret		
	Discussion about the occupational structure of India	Geography of population by Chandna, Population Geography by M.I.Hassan, Human Geography by M. Hussain, Population Geography by H. R. Barret	2	Chalk and Talk
UNIT 2 POPULATION AND DEVELOPMENT	Discussion about the concept of Migration	Key concepts in migration by Bartram, Poros, Monfort, The Principles of population studies by Kanitkar.	1	Chalk and Talk
	Discussion about the causes of Migration	Key concepts in migration by Bartram, Poros, Monfort, The Principles of population studies by Kanitkar	1	Chalk and Talk
	Discussion about the types of Migration	Key concepts in migration by Bartram, Poros, Monfort, The Principles of population studies by Kanitkar	1	Chalk and Talk
UNIT 2 POPULATION AND DEVELOPMENT	Discussion about National pattern of Migration	Key concepts in migration by Bartram, Poros, Monfort, The Principles of population	2	Chalk and Talk

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		studies by Kanitkar			
	International pattern of Migration	Key concepts in migration by Bartram, Poros, Monfort, The Principles of population studies by Kanitkar	1	Chalk and Talk	
	National pattern of Migration with	Key concepts in migration by Bartram, Poros, Monfort, The Principles of population studies by Kanitkar	1	Chalk and Talk	
	International pattern of Migration with	Key concepts in migration by Bartram, Poros, Monfort, The Principles of population studies by Kanitkar	1	Chalk and Talk	
UNIT 2 POPULATION AND DEVELOPMENT	Discussion about Population and Development	Population and Development by Dyson, Geography of population by Chandna, Population Geography by M.I.Hassan, Human Geography by M. Hussain, Population Geography by H. R. Barret	1	Chalk and Talk	

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Populat	ion — Ceregions P H H R F b	Geography of population by Chandna, Population Geography by M.I.Hassan, Human Geography by M. Hussain, Population Geography by H. R. Barret, Population and Development by Dyson	2	Chalk and Talk	
	oment Index C F F R F	The Dictionary of Human Geography by Johnston, Pratt, Watts, Whatmore, Population Geography by H. R. Jones, Population Geography by H. R. Barret.	1	Chalk and Talk	
Human Develop	oment Index P F R P F	The Dictionary of Human Geography by Johnston, Pratt, Watts, Whatmore, Population Geography by H. R. Jones, Population Geography by H.R. Barret.	1	Chalk and Talk	
UNIT 2 Populat POPULATION in Deve		Population Geography by	1	Chalk and Talk	

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Name of Faculty: PUBALI GHOSH

AND DEVELOPMENT	countries	M.I.Hassan, Human Geography by M. Hussain. Population Geography by H. R. Jones, Population Geography by H. R. Barret.			
	Population policies in Less developed countries	Population Geography by M.I.Hassan, Human Geography by M. Hussain. Population Geography by H. R. Jones, Population Geography by H. R. Barret. Geography of population by Chandna	1	Chalk and Talk	
	Population policies of India	Same as above	1	Chalk and Talk	
	Relationship between Population and Environment	Same as above	1	Chalk and Talk	

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	Relationship between Population and Environment focusing the future implications	Same as above	1	Chalk and Talk	
UNIT 2 POPULATION AND DEVELOPMENT		The Dictionary of Human Geography by Johnston, Pratt, Watts, Whatmore, Population Geography by H. R. Jones, Population Geography by H.R. Barret	1	Chalk and Talk	
	Ageing of population	The Dictionary of Human Geography by Johnston, Pratt, Watts, Whatmore, Population Geography by H. R. Jones, Population Geography by H.R. Barret	1	Chalk and Talk	
	Declining sex ratio	The Dictionary of Human Geography by Johnston, Pratt, Watts, Whatmore, Population Geography by H. R. Jones, Population Geography by H.R. Barret	1	Chalk and Talk	

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Paper Name & Code: GEO-G-DSE-B-6-04-TH-POPULATION GEOGRAPHY

POPULATION	Population and environment dichotomy	The Dictionary of Human Geography by Johnston, Pratt, Watts, Whatmore, Population Geography by H. R. Jones, Population Geography by H.R. Barret	1	Chalk and Talk	
= '	Discussion about impact of HIV/ AIDS	The Dictionary of Human Geography by Johnston, Pratt, Watts, Whatmore, Population Geography by H. R. Jones, Population Geography by H.R. Barret	1	Chalk and Talk	
		TOTAL	61		

This theory paper is shared between Smt. Pubali Ghosh, Associate Professor and Dr. Raj Kumar Bhattacharya, Assistant Professor, VIC

Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
1	Discussion on the concept of Population projection	Statistical methods in Geographical Studies by A. Mahmood, Practical Geography by A. Sarkar, Maps and diagrams by Monkhouse.	1	Chalk and Talk	
1	Discussion about Arithmetic method	Statistical methods in Geographical Studies by A. Mahmood, Practical Geography by A. Sarkar, Maps and diagrams by Monkhouse.	2	Chalk and Talk	
1	Calculation	Same as above	5	Chalk and Talk	
1	Drawing	Same as above	4	Chalk and Talk	

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	Applicability	Same as above	1	Chalk and Talk	
	Interpretation	Same as above	2	Chalk and Talk	
2	Concept of Population Density	Statistical methods in Geographical Studies by A. Mahmood, Practical Geography by A. Sarkar, Maps and diagrams by Monkhouse, Population Geography by M. Hassan.	1	Chalk and Talk	
2	Discussion about population density mapping	Statistical methods in Geographical Studies by A. Mahmood, Practical Geography by A. Sarkar, Maps and diagrams by Monkhouse	1	Chalk and Talk	
	Necessity of such mapping	Same as above	1	Chalk and Talk	

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2	Data collection	Statistical methods in Geographical Studies by A. Mahmood, Practical Geography by A. Sarkar, Maps and diagrams by Monkhouse	2	Chalk and Talk	
2	Calculation	Same as above	4	Chalk and Talk	
2	Mapping	Same as above	3	Chalk and Talk	
2	Applicability	Same as above	1	Chalk and Talk	
2	Interpretation	Statistical methods in Geographical Studies by A. Mahmood, Practical Geography by A. Sarkar, Maps and diagrams by Monkhouse	2	Chalk and Talk	
3	Discussion on	Statistical methods in	1	Chalk and Talk	

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	Work Participation Rate	Geographical Studies by A. Mahmood, Practical Geography by A. Sarkar, Maps and diagrams by Monkhouse			
3	Necessity of such analysis	Statistical methods in Geographical Studies by A. Mahmood, Practical Geography by A. Sarkar, Maps and diagrams by Monkhouse, Population Geography by M. Hassan	1	Chalk and Talk	
3	Data collection	Statistical methods in Geographical Studies by A. Mahmood, Practical Geography by A. Sarkar, Maps and diagrams by	2	Chalk and Talk	

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		Monkhouse			
3	Analysis of Total work participation rate- Calculation	Same as above	2	Chalk and Talk	
3	Analysis of gender- wise work participation rate-Calculation	Same as above	2	Chalk and Talk	
3	Total work participation rate- diagram	Same as above	2	Chalk and Talk	
3	Gender- wise work	Same as above	2	Chalk and Talk	

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	participation rate- diagram				
3	Applicability	Statistical methods in Geographical Studies by A. Mahmood, Practical Geography by A. Sarkar, Maps and diagrams by Monkhouse, Population Geography by M. Hassan	1	Chalk and Talk	
3	Interpretation	Statistical methods in Geographical Studies by A. Mahmood, Practical Geography by A. Sarkar, Maps and diagrams by Monkhouse, Population Geography by M. Hassan	2	Chalk and Talk	

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4	Concept of occupation structure	Statistical methods in Geographical Studies by A. Mahmood, Practical Geography by A. Sarkar, Maps and diagrams by Monkhouse, Population Geography by M. Hassan	1	Chalk and Talk	
4	Concept of Dominant and Distinctive function	Same as above	1	Chalk and Talk	
4	Necessity of such analysis	Same as above	1	Chalk and Talk	
4	Data collection	Same as above	2	Chalk and Talk	
4	Calculation	Statistical methods in Geographical Studies	4	Chalk and Talk	

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		by A. Mahmood, Practical Geography by A. Sarkar, Maps and diagrams by Monkhouse			
4	Diagram	Statistical methods in Geographical Studies by A. Mahmood, Practical Geography by A. Sarkar, Maps and diagrams by Monkhouse.	3	Chalk and Talk	
4	Applicability	Statistical methods in Geographical Studies by A. Mahmood, Practical Geography by A. Sarkar, Maps and diagrams by Monkhouse, Population Geography	1	Chalk and Talk	

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Paper Name & Code: GEO-G-DSE-B-6-04-P-POPULATION GEOGRAPHY LAB

		by M. Hassan			
4	Interpretation	Statistical methods in Geographical Studies by A. Mahmood, Practical Geography by A. Sarkar, Maps and diagrams by Monkhouse.	2	Chalk and Talk	
		TOTAL	60		

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Department Name: GEOGRAPHY

Name of Faculty: PUBALI GHOSH

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
1	Concept of Sustainable development	Sustainable development by Baker, Understanding Sustainable development by Blewitt, An introduction to Sustainable development by Elliott.	1	Chalk and Talk	
1	Discussion on the historical background of Sustainable development	Same as above	2	Chalk and Talk	
1	Components of Sustainable development	Same as above	1	Chalk and Talk	

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Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
1	Limitations of Sustainable development	Sustainable development by Baker, Understanding Sustainable development by Blewitt, An introduction to Sustainable development by Elliott.	1	Chalk and Talk	
4	Discussion about global goals for Sustainable development	Sustainable development by Baker, Understanding Sustainable development by Blewitt, An introduction to Sustainable development by Elliott, An introduction to	2		

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Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
		Sustainable development by Rogers, Jalal, Boyd.			
4	Discussion about global goals for Sustainable development with special reference to Domain	Same as above	2		

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Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
4	Discussion about global goals for Sustainable development with special reference to conflict	Same as above	1		

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Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
4	Discussion about global goals for Sustainable development with special reference to crisis	Sustainable development by Baker, Understanding Sustainable development by Blewitt, An introduction to Sustainable development by Elliott, An introduction to Sustainable development by Rogers, Jalal,Boyd.	1		
	Discussion	Sustainable	1		

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		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	about global goals for Sustainable development with special reference to compromise	development by Baker, Understanding Sustainable development by Blewitt, An introduction to Sustainable development by Elliott, An introduction to Sustainable development by Rogers, Jalal, Boyd.			
		TOTAL	12		

Department Name: Geography

Name of Faculty: Prakriti Das

Paper Name & Code: Sustainable Development GEO-G-SEC-B-4/6-04-TH

		Planned			
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	2a. Challenges of sustainable development	https://journals.lww.com/ijph/fulltext/2016/60040/ sustainable_development_goalschallenges_and.1.aspx	1	Chalk and talk	
	2b.Determinants of sustainable development	https://bhattadevuniversity.ac.in/docs/studyMaterial/ Jyotismoy_Bora_Geography/Dr.%20Jyotishmoy%20Bora_ Geography_VI%20Sem%20(M)_Sustainable%20 Development%20Definitions,%20Measures.pdf	1	Chalk and talk	
	2c. Linkage among sustainable development, environment and poverty	https://www.adb.org/sites/default/files/ publication/28124/op007.pdf	4	Chalk and talk	
		Total	6		

Department Name: Geography

Name of the Faculty: Dr. Saswati Nayak

Paper Name and Code: Sustainable Development (GEO-G-SEC-B-04/6-04-TH)

		After Imple	ementation		
Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
	3.Population: growth and its impact on resources and environment	1. Resource Studies by A. Mitra 2. The Use and Abuse of Nature: An ecological History of India and Ecology and Equity by M. Gadgil and R. Guha 3. Contemporary Development Economics; From Adam Smith to Amartya Sen by Felix Raj, Sampat Mukherjee	2	Chalk and Talk	
Topic: 3 Global Environmental Issues	3. Income and urbanization: growth and its impact on resources and environment		2		
issues	3. Health care		2		
	3.Sustainabl use of forest 3.Sustainable use of water resource		2		
		Total	08		

Department Name: Geography

Name of Faculty: Dr. Raj Kumar Bhattacharya

Paper Name & Code: GEO-G-SEC-B-4/6-04-TH-Sustainable Development

Unit / Group / Module / Article	Topics	Reference Books	No of Lecture Planned	Content Delivery Technique	Remarks / Comments
Sustainable Development	4a. Global goals for sustainable development: Domain, conflict,	e Development Knowledge Platform:	4	Chalk and talk	
	4b.Crisis and compromise	Goals https://sdgs.un.org/goal	3	Chalk and talk	
		Total	7		

This theory paper is shared among Smt. Pubali Ghosh, Associate Professor, Dr. Saswati Nayek, Associate Professor, Smt. Prakriti Das, Assistant Professor and Dr. Raj Kumar Bhattacharya, Assistant Professor, Geography Dept, VIC