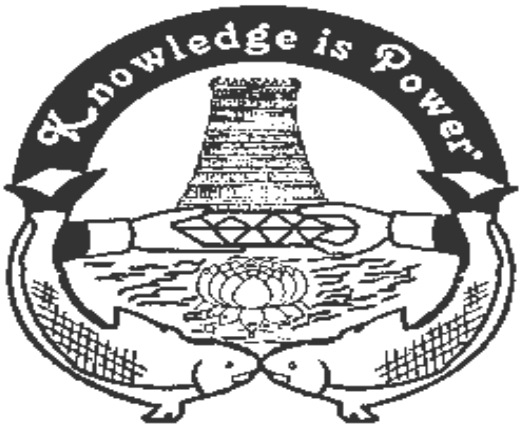
SRI MEENAKSHI GOVERNMENT ARTS COLLEGE FOR WOMEN (A), MADURAI – 625 002.

(Re-Accredited with "A" grade by NAAC)



DEPARTMENT OF GEOGRAPHY

Syllabus for B.SC Geography

CHOICE BASED CREDIT SYSTEM

2021-2022

SRI MEENAKSHI GOVT. COLLEGE (W) AUTONOMOUS, MADURAI-2

DEPARTMENT OF GEOGRAPHY

B.Sc. Syllabus – New Pattern – CBCS

For those who are admitted from July 2021 onwards

Semester	Part	Subject	Hours/ week	Exam Hours	Credit	Int. Marks	Ext. Marks	Total
1	I	Language	6	3	3	25	75	100
	II	Language	6	3	3	25	75	100
	III	Core Paper -1	4	3	4	25	75	100
		Core Paper -2	4	3	4	25	75	100
		Core Paper -3 Practical-I	2	-	-	-	-	-
		Allied -1 Theory -1	4	3	4	25	75	100
		Allied -1 Practical	3	-	-	-	-	-
	IV	Value education	1	-	-	-	-	-
		Total	**30**		**18**			
II	I	Language	6	3	3	25	75	100
	II	Language	6	3	3	25	75	100
		Core Paper -3 Practical-1	6	3	4	40	60	100
	III	Core Paper -4	4	3	4	25	75	100
		Allied -1 practical	3	3	3	40	60	100
		Allied -1 Theory-2	4	3	3	25	75	100
	IV	Value education	1	3	2	25	75	100
		Total	**30**		**22**			

III	I	Language	6	3	3	25	75	100
	II	Language	6	3	3	25	75	100
	III	Core Paper -5	4	3	4	25	75	100
		Core Paper -6	4	3	4	25	75	100
		Allied –II Statistics	6	3	5	25	75	100
	IV	Skill- Based Elective-1	2	3	2	25	75	100
		Skill- Based Elective-2	2	3	2	25	75	100
	V	Extensive Activity	-	-	1	-	-	-
		Total	**30**		**24**			
IV	I	Language	6	3	3	25	75	100
	II	Language	6	3	3	25	75	100
	III	Core Paper -7	4	3	4	25	75	100
		Core Paper -8 Practial-II	6	3	4	40	60	100
		Allied –II Statistics	6	3	5	25	75	100
	IV	Skill- Based Elective-3	2	3	2	25	75	100
		Total	**30**		**21**			
V	III	Core Paper -9	5	3	5	25	75	100
		Core Paper -10	5	3	5	25	75	100
		Core Paper -11 Practical -III	6	-	4	40	60	100
		Major Elective -1	5	3	5	25	75	100
		Major Elective -2	5	3	5	25	75	100
	IV	Skill Based Elective – 4	2	3	2	25	75	100

		Gk						
		Non-Major Elective -1	2	3	2	25	75	100
		Total	**30**		**28**			
VI	III	Core Paper -12	6	3	5	25	75	100
		Core Paper -13	5	3	5	25	75	100
		Core Paper -14 Practical –IV	6	3	4	40	60	100
		Major Elective -3	5	3	5	25	75	100
	IV	Non-Major Elective -2	2	3	2	25	75	100
		Skill Based Elective – 5	2	3	2	25	75	100
		Skill Based Elective – 6	2	3	2	25	75	100
		Environmental Studies	2	3	2	25	75	100
		Total	**30**		**27**			
		Grand Total	**180**		**140**			

SRI MEENAKSHI GOVT. COLLEGE FOR WOMEN (A),MADURAI - 2

DEPT.OF GEOGRAPHY

U.G. CBCS

Semester wise Paper List

For those who are joined from July 2021 onwards

Sl. No.	Semester	Code	Title of paper	Hours / week	Credit
1.	I	G11	Geomorphology- I	4	4
2		G12	Cartography	4	4
3.		PG1	Mapping Techniques and Representation of Geographical Data	2	-
	II	PG1	Mapping Techniques and Representation of Geographical Data	6	4
4.		G21	Geomorphology- II	4	4
5.	III	G31	Climatology	4	4
6.		G32	Geography of Resources	4	4
7.	IV	G41	Human Geography	4	4
8.		PG2	Representation of socio economic data and weather map interpretation	6	4
9.	V	G51	Oceanography	5	5
10.		G52	Geography of Asia	5	5
11.		PG 3	Map making and Interpretation.	6	4
12.	VI	G61	Basic Remote sensing & Geographical Information System.	6	5

13		G62	Geography of India	5	5
14.		PG 4	Map Projection and Surveying	6	4
Total					**60**
			Allied I		
1.	I	ABI	Eco Biology & Eco system & Ecology	4	4
2.		BPA	Practical	3	-
	II	BPA	Practical	3	3
3.		AB2	Environmental related occupational Hazards	4	3
			Allied II		
1.	III	AX1	Statistics	6	5
2.	IV	AX2	Statistics	6	5
			Total		**20**

			Part – IV		
1.	I	AV1	Value Education	1	-
	II	AV1	Value Education	1	2
2.	VI	ENS6	Environmental Studies	2	2
			Total		**4**
			Skill Based Elective		
1.	III	SG31	Tour and Travel	2	2
2.	III	SG32	Disaster Management	2	2
3.	IV	SG43	Rural Development in India	2	2
4.	V	SGK4	General Knowledge (Common paper)	2	2
5.	VI	SG65	Water Resource Management	2	2
6.	VI	SG66	Geography of Health	2	2

			Total		**12**
			Major Elective		
1.	V	EG51	World Regional Geography	5	5
2.	V	EG52	Settlement Geography	5	5
3.	VI	EG63	Geography of Tamil Nadu	5	5
			Total		**15**
			Non Major Elective		
1.	V	NMG1	Fundamentals of Physical Geography	2	2
2.	VI	NMG2	Social Cultural Geography	2	2
			Total		**4**
			PART V		
	III		Extension activities	-	1
			VALUE ADDED		
			Value Added Course(Major) Computer Assisted Cartography	2 OUT OF REGULAR	
			Value Added Course(Non-Major) Mapping Techniques	2 OUT OF REGULAR Hours	
			Total	132	Credit 116

SRI MEENAKSHI GOVERNMENT ARTS COLLEGE FOR WOMEN (A), MADURAI-2.

DEPARTMENT NAME GEOGRAPHY

INTRODUCTION

The Department of Geography was established in the year **1968** with UG course and in the year in **1971** with PG course. At present department has **6** Regular staff members and **2** Guest Lecturers and **1** PTA Guest Lecture and 259 UG and 29 PG students among its various academic ventures. It produce so many scholars and create more professionals in various fields. It is one of the centres for Tamil Nadu Open University for B.Sc., Geography Course. The department specializes in Geographical structure in relation to Geomorphology, Bio Geography, Advanced Cartography, Remote Sensing, Geo – Statistical Techniques and Morphogenetic Regions. The department regularly conducts conference and seminars as well as interdisciplinary seminars in collaboration with other departments and association meetings.

COURSE OFFERED

UG COURSE B.Sc., Geography - Both Tamil Medium & English Medium

VISION OF THE DEPARTMENT

- To enlight and enrich the geographic information to the outreached

MISSION OF THE DEPARTMENT

- Extending geographic knowledge at school level
- Make geography an interesting and inspiring subject to other discipline
- Make maps an indispensible tool to geographers as well as others
- Acquire technological development in global positioning system
- Provide geographical base to regional planning such as rural urban areas etc
- Provide economical development
- Provide necessary geographical information for the stratergy
- Use geographical positioning system for Navigations
- Apply geographical knowledge in the field of survey

- Apply geographical knowledge in civil services
- Make the student with a strong geographical information technological base

PROGRAMME OUTCOME OF B.SC GEOGRAPHY

At the end of the degree programme the students will be able to:

PO1: EFFECTIVE COMMUNICATION

All forms of communication occur in space. It produced theories of spatial production of maps, spatial experience, visions and material conditions.

PO2: SOCIAL INTERACTION

New practices are emerging that evoke innovative ways of relating among people and between individuals and places. .

PO3: CRITICAL THINKING

The quality of information, opinions and arguments are exposed to daily basis.

PO4: EFFECTIVE CITIZENSHIP

The knowledge, skills and attitudes required to accomplish the students must participated in education activities.

PO5: ETHICS

The conceptual and practical relationship between the ethics, are examine the significance of place, location, proximity and distance.

PO6: ECO-SENSITIZATION

The evolving spatial organization and material character of earth surface is the great relevance to decision making.

PO7: SELF-DIRECTED AND LIFE LONG LEARNING

All students are effective self directed learners and make use of this learning tool to achieve learning objectives.

PROGRAMME SPECIFIC OUTCOME

PSO1: Understand the relationship of man and environment

PSO2 : Acquiring knowledge of physical and human geography

PSO3: Analysis the problems of physical and cultural environment

PSO4 : Utilize and apply the the skill in securing employment

PSO5: Application of GIS and modern geographical map making techniques

PSO6: Development of observation and interaction power

PSO7: Development of communication skill and lifelong learning

UG QUESTION PAPER PATTERN

CORE AND ELECTIVE PAPERS

Title of the paper		
SUB CODE	TIME: 3 HOURS	MAX.MARKS :75
	SECTION-A Question no.1 to 5 (one question from each unit) Answer any **ALL** questions. All questions carry equal marks. Answer not exceeding two sentences	**5x 2 = 10**
	SECTION-B Question no.6 to10 (two question from each unit) Answer any **ALL** questions. (either or pattern) All questions carry equal marks. Answer not exceeding two pages	**7x 5 = 35**
	SECTION-C Question no.11 to15 (one question from each unit) Answer any **THREE** questions. Questions out of five. Answer not exceeding four pages	**3x10 = 30**

BLUE PRINT

UNIT	SECTION			TOTAL QUESTIONS AND MARKS
	A 2 MARKS EACH 5 QUESTIONS ANSWER ALL QUESTIONS	B 7MARKS EACH 5 QUESTIONS EITHER OR PATTERN	C 3 OUT OF 5 OPEN CHOICE	
I	1	2	1	4
II	1	2	1	4
III	1	2	1	4

IV	1	2	1	4
V	1	2	1	4
TOTAL MARKS	5/10	10/35	5/30	20/75

PATTERNS FOR EVALUATION

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

UG QUESTION PAPER PATTERN

SKILL BASED ELECTIVE AND NON MAJOR ELECTIVE

Title of the paper		
SUB CODE	TIME: 3 HOURS	MAX.MARKS :75
SECTION-A		**6x 5 = 30**
Question no.1 to 10 (two question from each unit) Answer any **SIX** questions. All questions carry equal marks. Answer not exceeding two pages		
SECTION-B		**3x15 = 45**
Question no.11 to15 (one question from each unit) Answer any **THREE** questions. Questions out of five. Answer not exceeding four pages		

BLUE PRINT

PATTERNS FOR EVALUATION

UNIT	SECTION		TOTAL QUESTIONS AND MARKS
	A 6 OUT OF10 OPEN CHOICE	B 3 OUT OF 5 OPEN CHOICE	
I	2	1	4
II	2	1	4
III	2	1	4
IV	2	1	4
V	2	1	4
TOTAL MARKS	10/30	5/45	20/75

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Programme : B.SC GEOGRAPHY (UG) **Part III: MAJOR**
Core/Allied/Elective: CORE
Semester : I **Hours : 4 P/W 60 Hrs P/S**
Sub. Code : G11 **Credits :4**

TITLE OF THE PAPER: GEOMORPHOLOGY –I

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT
	4	2	-	1	1

PREAMBLE:

The Paper on Geomorphology indented to acquaint to the students with the knowledge and concept of the Earth, Theories of the Earth, Movements of the Earth, Relief Features, Types and Distribution of Rocks and Weathering and soil formation

COURSE OUTCOME At the end of the Semester, the Students will be able to	Unit	Hrs P/S
UNIT 1 CO1: Understand the origin of the earth and different theories	1	12
UNIT 2 CO2: Develop History Of Different Geographic Ideas	2	12
UNIT 3 CO3: Gain the knowledge about structure of the earth internal and external movements of the earth	3	12
UNIT 4 CO4: Acquire knowledge about different types of landforms	4	12
UNIT 5 CO5:Deleveop an idea about types of rock , weathering and formation of soils	5	12

SYLLABUS

SEMESTER-1

PAPER – I

CODE: G11 - GEOMORPHOLOGY –I

UNIT I:

Origin of the Earth – Theories – Nebular Hypothesis (Laplace) – Binary Star Theory (Lyttleton) – Rotational and Tidal Theory (Rossgunn) – Land and Sea Distribution – Tedra hedral theory- Recent View : Big Bang Theory .

UNIT II:

Wegner's Continental Drift Theory – Plate Tectonics – Isostasy.

UNIT III:

The Earth Structure : Interior of the Earth – Movements of the Earth – Fold – Fault – Earth Quakes – Volcanoes – Types and Distribution.

UNIT IV:

Major Relief Features - Mountains : Fold – Block – Dome –Cordillera; Plateaus : Intermontane – Piedmont – Continental; Plains : Coastal – Peneplains – Alluvialplains.

UNIT V:

Rocks :Types and Distribution – Weathering – Physical, Chemical and Biological – Mass Wasting – Formation of Soil – Types.

REFERENCES:

1. Das Gupta – Principles of Physical Geography - Chand and Company, New Delhi.1999
2. Kellaway P. George: A Background of Physical Geography - Macmillan Company – 1966.
3. Monkhouse: Principles of Physical Geography – University of London – 1975.
4. Phillip Lake: Physical Geography – Macmillan & Company – 1966.

5. Strahler H. Alan: Modern Physical Geography – John Wiley & Sons 1992.
6. Strahler H. Alan: Principles of physical Geograpyhy - John Wiley & sons1992.
7. Thornbury : Principles of Geomorphology – John Wiley & Sons – 1984.
8. Worcestor – A text Book of Geomorphology - Von Nostrand Renihold Company, Delhi.
9. Wooldridge, S.W. and Morgan, R.S: An Outline of Geomorphology – Longman Green & Co., London

UNITS	TOPIC	LECTURE HOURS	MODE OF TEACHING
UNIT 1			
	Origin of the earth	1	VLC
	Theories - Origin of the earth	7	Maps and Diagrams
	Land and Sea Distribution – Tedra hedral theory- Recent View : Big Bang Theory .	4	Maps and Diagrams
UNIT 11			
	Wegner's Continental Drift Theory	4	Maps ,Diagrams and Models
	Plate Tectonics	4	Maps ,Diagrams and Models
	Isostasy	4	Maps ,Diagrams and Models
UNIT III			
	Structure of the Earth	2	Models
	Movements Of The Earth Fold Fault	5	Models
	Earth Quakes, Volcanoes , Types and Distribution.	5	Maps ,Diagrams ,Models and VLC
UNIT IV			
	Major relief features, Types Of Mountains	4	Maps , Models and VLC
	Types Of Plateaus	4	Maps , Models and VLC
	Types Of Plains	4	Maps , Models and VLC
UNIT V			
	Rocks Types and Distribution	4	Maps , Models and VLC
	Types of Weathering	6	Maps , Models and VLC
	Formation of soil	2	Maps , Models and VLC

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	3	3	3	4	4	4	4	4	4	4	3	4	4	3	3.64
CO2	4	4	3	4	3	3	4	4	4	4	3	4	3	3	3.57
CO3	4	4	4	4	4	3	3	4	4	4	3	4	3	3	3.64

CO4	4	3	4	4	4	3	3	4	4	4	3	4	3	3	3.57
CO5	4	3	3	3	3	3	4	4	4	4	3	4	3	3	3.43
Mean Overall Score															3.57

Result: The Score for this Course is 3.45 (High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5
Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0
Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = $\frac{\text{Total of Value}}{\text{Total No. of Pos \& PSOs}}$

Mean Overall Score of COs = $\frac{\text{Total of Mean Score}}{\text{Total No. of COs}}$

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of Geography

Programme : B.SC GEOGRAPHY (UG) **Part III: MAJOR**
Core/Allied/Elective: CORE
Semester : I **Hours : 4 P/W 60Hrs P/S**
Sub. Code : G12 **Credits :4**

TITLE OF THE PAPER: CARTOGRAPHY

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT
	4	2	-	1	1

PREAMBLE:

The Paper on cartography describes nature-scope – modern trends- latitudes –longitudes- international date line and maps scale – maps - point- line- area- symbols- contours- map projection

COURSE OUTCOME At the end of the Semester, the Students will be able to	Unit	Hrs P/S
UNIT 1 CO1: Develop an idea about the nature , scope , history and modern trends in cartography	1	12
UNIT 2 CO2: Getting familiar with the latitudes ,longitudes local time , standard time and international date line and understanding maps scale and types	2	12
UNIT 3 CO3: Analyze different types of maps and symbols	3	12
UNIT 4 CO4: acquire the knowledge about methods of showing in reliefs in maps and explain about survey of India topographical map and its index	4	12
UNIT 5 CO5: apply the knowledge about projection and classification in preparation of maps	5	12

SYLLABUS

SEMESTER – 1

PAPER – II

CODE: G12- CARTOGRAPHY

UNIT I:

Definition – Nature – Scope – - history - Modern Trends in Cartography

UNIT II:

The Earth - Latitude and Longitude – Local time – Standard time and International Date Line - Scale –Types and Methods of Representation.

UNIT III:

Maps - Types and Uses – Cartographic Symbols and their uses: Point , Line and Area.

UNIT IV:

Methods of showing Relief : Spot Height - Bench mark – Hachuring – Layer tints – Hill Shading and Contours – Survey of Indian Topographical Maps –Map Index.

UNIT V:

Map projections - General Principles – Classification – Zenithal, Cylindrical, Conical and World Projections- Universal Transverse Mercator Projection (UTM)- introduction to photogrammatry

REFERENCES:

1. Ahmad Khan. M. Z –Text Book of Practical Geography – Concept Publishing Company – New Delhi – 2001
2. Ishtiaq M. – A text book of Practical Geography – Heritage Publisher – New Delhi - 1989.

3. Jayachandran.S – Practical geography – Tamilnadu Book Society, Chennai, 1963 (Tamil version).
4. Misra R.P. and Ramesh. A- Fundamentals of Cartography – Concept Publishing Company – New Delhi - 2002.
5. Robinson.A.H. Elements of Cartography. John Wiley &Sons.U.S.A - 1995.
6. Monkhouse F.J .&Wilkinson.H.R–Maps and Diagrams – Methuen London - 1994.
7. Singh R.L; Elements of Practical Geography Kalyani Puplication. New Delhi.1979
8. Singh and Kanunja – Map work and Practical Geography – Central Book Depot – Allahabad.1966
9. SethuRakkayee .S – An Introduction to Cartography – Shanmugam Pathipagam, madurai-7,2005(Tamil copy).

UNITS	TOPIC	LECTURE HOURS	MODE OF TEACHING
UNIT 1			
	Nature and Scope of cartography	2	Chalk and Talk , Maps, Diagrams and Models
	History of cartography	5	Maps, Diagrams and Models
	Modern Trends in Cartography	5	Maps, Diagrams and Models
UNIT 11			
	Latitude and Longitude	3	Explain with Globe, Atlas , Models and Maps
	Local time – Standard time and International Date Line	3	Explain with Globe, Atlas , Models and Maps
	Scale and its Types	6	Demonstrate with the Globe, Atlas , Models and Maps
UNIT III			
	Maps - Types and Uses	6	Demonstrate with the Globe, Atlas , Models and Maps
	Cartographic Symbols and their uses: Point , Line and Area	6	Demonstrate with the Globe, Atlas and Maps
UNIT IV			
	Methods of showing Relief Spot Height - Bench mark – Hachuring	4	Explain with the help of survey of India topographical maps
	Layer tints – Hill Shading and Contours	4	Explain with the help of survey of India topographical maps
	Survey of Indian Topographical Maps –Map Index	4	Explain with the help of survey of India topographical maps
UNIT V			
	Map projections - General Principles –	3	Demonstrate with the skeleton Globe, Atlas , Models and Maps
	Classification	5	Demonstrate with the skeleton Globe, Atlas , Models and Maps
	World Projections	4	Demonstrate with the skeleton Globe, Atlas , Models and Maps

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	4	4	4	4	4	4	4	4	4	4	3	4	4	3	3.857
CO2	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3.929
CO3	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3.857
CO4	3	3	3	4	3	3	3	3	3	3	3	4	3	3	3.143
CO5	3	4	4	4	3	4	3	3	3	3	3	3	3	3	3.286
Mean Overall Score															3.614

Result: The Score for this Course is 3.45 (High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5
Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0
Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = $\frac{\text{Total of Value}}{\text{Total No. of Pos \& PSOs}}$

Mean Overall Score of COs = $\frac{\text{Total of Mean Score}}{\text{Total No. of COs}}$

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of Geography

Programme : B.SC GEOGRAPHY (UG) **Part III: Major**
Core/Allied/Elective: CORE
Semester : I & II **Hours : 8 (2+6) P/W 30+ 90 Hrs P/S**
Sub. Code : PG1 **Credits : 4**

TITLE OF THE PAPER: MAPPING TECHNIQUES AND REPRESENTATION OF GEOGRAPHICAL DATA PRACTICAL – I

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT
	8	2	2	3	1

PREAMBLE:

The practical paper explains the Maps, Maps Scale, Enlarge and Reduction of maps , Bearings and Direction, Representation of Reliefs by Contours and Climatic Diagrams .

COURSE OUTCOME At the end of the Semester, the Students will be able to	Unit	Hrs P/S
CO1: Understand the map scale and their types , Representation through the Enlargement and Reductions methods , Similar Triangular methods.	1	30
CO2: Acquire more knowledge about Bearing and direction the map distance with Thread ; Divider & Rotometer – Measurement of area : Square method, Linear method & Planimeter.	2	30
CO3: Develop mapping skill through the Representation of Relief: Hill shading – Bench Mark – Interpolation of contour – Contour Features.	3	30
CO4: develop the cartographics skill through the Representation of climatic by Climatic graph- Hyther Graph- Ergo Graph- Wind Rose.	4	30

SYLLABUS

SEMESTER - I & II

PAPER –III

CODE : PG1 MAPPING TECHNIQUES AND REPRESENTATION OF GEOGRAPHICAL DATA PRACTICAL – I

UNIT I:

Maps: Scales- Graphical, Comparative and Diagonal – Enlargement and Reduction of maps – Square, Similar Triangular methods .

UNIT II:

Bearing and Direction: Measurement of map distance by Thread ; Divider & Rotometer – Measurement of area : Square method, Linear method & Planimeter.

UNIT III:

Representation of Relief: Hill shading – Bench Mark – Interpolation of contour – Contour Features.

UNIT IV:

Representation of climate: Climatic graph- Hyther Graph- Ergo Graph- Wind Rose.

REFERENCES:

1. Ahmad khan. M.Z- Text Book of practical Geography – Concept Publishing company ,New Delhi – 1988.
2. Ishtiaq M. – A text Book of practical Geography – Heritage Publishers - New Delhi - 2001.
3. Jayachandran.S – Practical geography – Tamilnadu Book Society, Chennai, 1963 (Tamil copy).

4. Misra R.P. and Ramesh. A – Fundamentals of Cartography – Concept Publishing company – New Delhi – 2002.
5. Monkhouse F.J. & Wilkinson H.R - Maps and Diagrams- Methuen, London - 1994.
6. Dr. Pijushkanti Saha & Dr. ParthBasu - Advanced Practical Geography – A Laboratory Manual - Books&Allied Pvt.Ltd,Kolkatta - 2004.
7. Singh and Kanunja - Map work and Practical Geography –Central Book Depot –Allahabad – 1979
8. Singh R.L - Elements of Practical Geography – Kalyani PublisheNew Delhi - 1979.

UNITS	TOPIC	LECTURE HOURS	MODE OF TEACHING
UNIT 1			
	Maps	4	Chalk And Talk ,Demonstration and using maps and models
	Scales- Graphical, Comparative and Diagonal	13	Chalk And Talk ,Demonstration and using instruments
	Enlargement and Reductions methods , Similar Triangular methods.	13	Chalk And Talk ,Demonstration and using instruments
UNIT 11			
	Bearing and Direction	10	Chalk And Talk ,Demonstration and using instruments
	Measurement of map distance	10	Chalk And Talk ,Demonstration and using instruments
	Measurement of area	10	Chalk And Talk ,Demonstration and using instruments
UNIT III			
	Representation of Relief- Interpolation of contour	15	Using topographical sheet , Demonstration and using chats
	Contour Features	15	Demonstration and using instruments
UNIT IV			
	Representation of climate: Climatic graph- Hyther Graph- -	15	Using climatic data and weather reports.
	Ergo Graph	10	Using climatic data and weather reports.
	Wind Rose	5	Using climatic data and weather reports.

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

CO2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
CO3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
CO4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Mean Overall Score															4.25

Result: The Score for this Course is 3.45 (High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5
Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0
Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = $\frac{\text{Total of Value}}{\text{Total No. of Pos \& PSOs}}$

Mean Overall Score of COs = $\frac{\text{Total of Mean Score}}{\text{Total No. of COs}}$

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of Geography .

Programme : B.SC GEOGRAPHY (UG) **Part III: MAJOR**
Core/Allied/Elective: CORE
Semester : II **Hours : 4 P/W 60 Hrs P/S**
Sub. Code : G21 **Credits :4**

TITLE OF THE PAPER: GEOMORPHOLOGY – II

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT
	4	2	-	1	1

PREAMBLE: The Paper on Geomorphology-II indented to acquaint to the students with the knowledge about gradational processes – denudation- transportation and deposition- work of rivers, drainage pattern- river capture , rejuvenation – normal cycle of erosion Davis and Penk – karst topography and glacier, erosion and deposition wind and wave erosion depositional landforms – types of coast – hydrological cycle and sub cycle.

COURSE OUTCOME At the end of the Semester, the Students will be able to	Unit	Hrs P/S
UNIT 1 CO1: acquire the knowledge about the gradational process of denudation, transportation, and deposition Understand the work of river	1	12
UNIT 2 CO2: Familiar with drainage pattern , river capture and rejuvenation . understand the concepts of Davis and Penck	2	12
UNIT 3 CO3: know the features of glacier and karst topography	3	12
UNIT 4 CO4: understand the features of wind and wave	4	12
UNIT 5 CO5:able to Explain the hydrological and sub cycle man's intervention in the hydrological cycle.	5	12

SYLLABUS

SEMESTER – II
PAPER – IV
CODE: G21 - GEOMORPHOLOGY – II

UNIT I:

Earth Sculpture – Denudation – Transportation and Deposition – Work of Rivers

UNIT II:

Drainage Pattern – River Capture – Rejuvenation – Normal Cycle of Erosion – Davis and Penck.

UNIT III:

Erosion and Deposition – Karst Land Forms – Glaciers

UNIT IV:

Erosion and Deposition – Work of Wind and Waves – Types of Coast.

UNIT V:

Hydrological Cycle – Sub Cycles – Man's intervention in the Hydrological Cycle.

REFERENCES:

1.Chorley. R.J.: Introduction to Physical Hydrology Metheum - 1974.
2. Das Gupta - Principles of Physical Geography Chand and Company, New Delhi - 1999.
3. Dayal. P. A Text Book of Geomorphology - IInd Edition Shukla Book Dept. Patna – 800004- India - 1995.

4. Gautham Mahajan : Hydrology – Ashish Publishing House, New Delhi.
5. Kellaway P. George : A Background of Physical Geography – Macmillan Company - 1966.
6. Monkhouse : Principles of Physical Geography – University of London - 1975.
7. Nizamuddin Khan - An Introduction to Physical Geography - Concept PublishingCompany New Delhi -2001
8. Strahler H. Alan: Modern Physical Geography – John Wiley & Sons – 1992
9. Strahler H. Alan: Principles of Physical Geography – John Wiley& Sons.
10. Thornbury : Principles of Geomorphology – John Wiley & Sons – 1984.
11. Worcestor – A text Book of Geomorphology – Von Nostrand Renihold Company. Delhi.

UNITS	TOPIC	LECTURE HOURS	MODE OF TEACHING
UNIT 1			
	Earth Sculpture – –	2	Group Discussion , Models, Maps and Charts, and VCL
	Denudation – Transportation and Deposition - Work of Rivers	10	Group Discussion , Models, Maps and Charts, and VCL
UNIT 11			
	Drainage Pattern – River Capture – Rejuvenation	4	Group Discussion , Models, Maps and Charts, and VCL
	Normal Cycle of Erosion – Davis and Penck.	8	Group Discussion , Models, Maps and Charts, and VCL
UNIT III			
	Erosion and Deposition – Karst Land Forms	6	Group Discussion , Models, Maps and Charts, and VCL
	Erosion and Deposition Land Forms – Glaciers	6	Group Discussion , Models, Maps and Charts, and VCL
UNIT IV			
	Erosion and Deposition – Work of Wind	6	Group Discussion , Models, Maps and Charts, and VCL
	Erosion and Deposition Waves – Types of Coast.	6	Group Discussion , Models, Maps and Charts, and VCL
UNIT V			
	Hydrological Cycle – Sub Cycles –.	6	Group Discussion , Models, Maps and Charts, and VCL
	Man's intervention in the Hydrological Cycle	6	Group Discussion , Models, Maps and Charts, and VCL

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4.0
CO2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4.0
CO3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4.0
CO4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4.0
CO5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5.0
Mean Overall Score															4.2

Result: The Score for this Course is 3.45 (High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5
Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0
Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = $\frac{\text{Total of Value}}{\text{Total No. of Pos \& PSOs}}$

Mean Overall Score of COs = $\frac{\text{Total of Mean Score}}{\text{Total No. of COs}}$

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of Geography.

Programme : B.Sc. Geography **Part III: MAJOR**

Core/Allied/Elective: CORE

Semester : IV **Hours : 4 P/W 60 Hrs P/S**

Sub. Code : G31 **Credits: 4**

TITLE OF THE PAPER: CLIMATOLOGY

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT
	4	2	-	1	1

PREAMBLE: It is a part of physical geography, the scientific study of climate. it explains elements of climate.

COURSE OUTCOME At the end of the Semester, the Students will be able to	Unit	Hrs P/S
UNIT 1 CO1: Understand the importance of weather and climate, composition and structure of atmosphere and know the insolation.	1	12
UNIT 2 CO2: Know about the pressure belts and the wind system	2	12
UNIT 3 CO3: Identify the Atmospheric moisture , precipitation and types clouds	3	12
UNIT 4 CO4: Familiar about the mass and fronts, classification of cyclone and thunderstorms	4	12
UNIT 5 CO5: Know about the classification of Climatic - Greenhouse Effect and Global warming	5	12

SYLLABUS

SEMESTER – IV
PAPER – VII
CODE: G31 -CLIMATOLOGY

UNIT I

Climatology: Meaning, Scope & Content - composition and structure of atmosphere – insolation and heat budget.

UNIT II

Atmospheric pressure and wind: definition- measurement – distribution – pressure belts. Factors affecting wind – monsoon, jet stream –local winds.

UNIT III

Atmospheric moisture and precipitation: evaporation – condensation – clouds types – forms and distribution.

UNIT IV

Air mass and fronts: classification – cyclone – tropical- temperate – anticyclone and thunderstorms

UNIT V

Climatic classification: Koppen and Thornthwaite's – Greenhouse Effect and Global warming.

BOOKS FOR REFERENCE:

1. Berry and Chorley – Atmosphere, Weather and Climate – Metheun.
2. Glenn T .Trewartha & Lyle H. Horn An Introduction to Climate- McGraw Hill Book Company- New Delhi - 1980.
3. Howard J. CritchField(1999)-General Climatology - Prentice Hall of India New Delhi - 1999.
4. Keith Smith. Principles of Applied Climatology -McGraw Hill Book Co., New york - 1998.
5. Lal D.S. Climatology- Chaitanya Publisher's House , Allahabad - 1998.
6. Lal.M.Global Warming-Concerns for Tomorrow - Tata McGraw Hill publishing company Ltd - New Delhi - 1993.
7. Oliver. John E, and John J Hiddore,(2003) Climatology - An Atmospheric Science - Pearson Education (Singapore) PVT.Ltd, New Delhi - 2003.
8. Siddhartha.K . Atmosphere Weather And Climate Kisalaya Publication Pvt . Ltd New Delhi

UNITS	TOPIC	LECTURE HOURS	MODE OF TEACHING
UNIT 1			
	Meaning, Scope & Content	5	Maps, Atlas , VLC and PPT
	composition and structure of atmosphere –	5	Maps, Atlas , VLC and PPT
	insolation and heat budget.	5	Maps, Atlas , VLC and PPT
UNIT 11			
	Atmospheric pressure and wind: definition-measurement – distribution – pressure belts.	5	Maps, Atlas , VLC and PPT
	Factors affecting wind monsoon	5	Maps, Atlas , VLC and PPT
	jet stream –local winds.	5	Maps, Atlas , VLC and PPT
UNIT III			
	Atmospheric moisture and precipitation:	5	Maps, Atlas , VLC and PPT
	evaporation ,condensation	4	Maps, Atlas , VLC and PPT
	clouds types – forms and distribution	6	Maps, Atlas , VLC and PPT
UNIT IV			
	Air mass and fronts:	5	Maps, Atlas , VLC and PPT

	classification – cyclone – tropical-temperate –	4	Maps, Atlas , VLC and PPT
	anticyclone and thunderstorms	6	Maps, Atlas , VLC and PPT
UNIT V			
	Climatic classification: Koppen. Thornthwaite's –	6	Maps, Atlas , Census Report VLC and PPT
	Greenhouse Effect	6	Maps, Atlas , VLC and PPT
	Global warming	3	Maps, Atlas , VLC and PPT

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
CO3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
CO4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
CO5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Mean Overall Score															4.2

Result: The Score for this Course is 3.45 (High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5
Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0
Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = $\frac{\text{Total of Value}}{\text{Total No. of Pos \& PSOs}}$

Mean Overall Score of COs = $\frac{\text{Total of Mean Score}}{\text{Total No. of COs}}$

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of Geography.

Programme : B.Sc. Geography **Part III: MAJOR**

Core/Allied/Elective: CORE

Semester : III **Hours : 4 P/W 60 Hrs P/S**

Sub. Code : G32 **Credits: 4**

TITLE OF THE PAPER: GEOGRAPHY OF RESOURCES

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT
	4	2	-	1	1

PREAMBLE: The paper explain the changes that occur in world resources and the meaning, use, distribution, and importance of **resources**. The geographically informed student must understand that a "**resource**" is a cultural concept. A **resource** is any physical material constituting part of Earth that people need and value.

COURSE OUTCOME At the end of the Semester, the Students will be able to	Unit	Hrs P/S
UNIT 1 CO1: Know the difference of Renewable & Non- Renewable resources – and its Significance.	1	12
UNIT 2 CO2: Analyse the population Distribution and Density and understand Problems of Population.	2	12
UNIT 3 CO3: Understand the types of Fishing and distribution and identify the Forests and its conservation to know about the Cattle and Sheep rearing	3	12
UNIT 4 CO4: Know about the Agriculture – Type and Major crops	4	12
UNIT 5 CO5: identify the Mineral Resources and Energy Resource. Know about the various industries and its Distribution.	5	12

SYLLABUS

SEMESTER – IV
PAPER – VII
CODE: G32 - GEOGRAPHY OF RESOURCES

UNIT I

Resources : Definition – Types – Renewable & Non- Renewable – Significance of Resources. Land as a Resource – Land Utilization and Conservation.

UNIT II

Human Resource –Distribution , Density and Growth – Problems of Population .

UNIT III

Fisheries –types , factors affecting fishing - Major Fishing grounds of the world – Forests – Types, Distribution , Uses and Conservation - Cattle and Sheep rearing.

UNIT IV

Agriculture – Types- Shifting, Sedendary -Intensive and Extensive – Mixed farming – Plantation Agriculture - Major crops – Rice , Wheat, Cotton, Tea and Coffee - Production and Distribution

UNIT V

Mineral Resources – Iron Ore, Mica and Bauxite – Energy Resources-Coal, Petroleum Natural Gas, solar, wind and tidal energy - Major Manufacturing Industries– Iron and Steel, Ship building and Cotton Textile Industries- Production and Distribution.

BOOKS FOR REFERENCE:

9. Berry and Chorley – Atmosphere, Weather and Climate – Metheun.
10. Glenn T .Trewartha & Lyle H. Horn An Introduction to Climate- McGraw Hill Book Company- New Delhi - 1980.
11. Howard J. CritchField(1999)-General Climatology - Prentice Hall of India New Delhi - 1999.
12. Keith Smith. Principles of Applied Climatology -McGraw Hill Book Co., New york - 1998.
13. Lal D.S. Climatology- Chaitanya Publisher's House , Allahabad - 1998.
14. Lal.M.Global Warming-Concerns for Tomorrow - Tata McGraw Hill publishing company Ltd - New Delhi - 1993.
15. Oliver. John E, and John J Hiddore,(2003) Climatology - An Atmospheric Science - Pearson Education (Singapore) PVT.Ltd, New Delhi - 2003.
16. Siddhartha.K . Atmosphere Weather And Climate Kisalaya Publication Pvt . Ltd New Delhi

UNITS	TOPIC	LECTURE HOURS	MODE OF TEACHING
UNIT 1			
	Resources : Definition – Types – Renewable & Non-Renewable–	6	Chalk and talk , Maps, Atlas , VLC and PPT
	Significance of Resources.	2	Chalk and talk , Maps, Atlas , VLC and PPT
	Land as a Resource – Land Utilization and Conservation.	4	Chalk and talk , Maps, Atlas , VLC and PPT
UNIT 11			
	Human Resource –Distribution ,	4	Maps, Atlas , VLC and PPT
	Density and Growth –	5	Maps, Atlas , VLC and PPT
	Problems of Population	3	Maps, Atlas , VLC and PPT
UNIT III			
	Fisheries –types , factors affecting fishing - Major Fishing grounds of the world	5	Chalk and talk , Maps, Atlas , VLC and PPT
	Forests – Types, Distribution , Uses and Conservation	4	Chalk and talk , Maps, Atlas , VLC and PPT
	Cattle and Sheep rearing	3	Chalk and talk , Maps, Atlas , VLC and PPT
UNIT IV			
	Agriculture – Types-	5	Maps, Atlas , VLC and PPT

	Agriculture - Major crops – Rice , Wheat, Cotton,	4	Maps, Atlas , VLC and PPT
	Tea and Coffee - Production and Distribution	3	Maps, Atlas , VLC and PPT
UNIT V			
	Mineral Resources – Iron Ore, Mica and Bauxite	3	Chalk and talk, Maps, Atlas , Census Report VLC and PPT
	– Energy Resources-Coal, Petroleum Natural Gas, solar, wind and tidal energy -	4	Chalk and talk ,Maps, Atlas , VLC and PPT
	Manufacturing Industries– Iron and Steel, Ship building Cotton Textile Industries- Production and Distribution	5	Chalk and talk ,Maps, Atlas , VLC and PPT

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
CO3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
CO4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
CO5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Mean Overall Score															4.2

Result: The Score for this Course is 4.2 (Very High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5
Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0
Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = $\frac{\text{Total of Value}}{\text{Total No. of Pos \& PSOs}}$

Mean Overall Score of COs = $\frac{\text{Total of Mean Score}}{\text{Total No. of COs}}$

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer:
Department of Geography.

Programme : **B.SC GEOGRAPHY (UG)** **Part III: MAJOR**
Core/Allied/Elective: CORE

Semester : III **Hours : 5 P/W 75 Hrs P/S**
Sub. Code : G41 **Credits :5**

TITLE OF THE PAPER: HUMAN GEOGRAPHY

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT
	5	2	1	1	1

PREAMBLE:
Orderly description and interpretation of morphology, functions and spatial organization of human settlements on the earth surface

COURSE OUTCOME At the end of the Semester, the Students will be able to	Unit	Hrs P/S
UNIT 1 CO1: Nature and scope : understand the branches of Human Geography	1	15
UNIT 2 CO2: Know the Concepts of Determinism , Possiblism and Probablism.	2	15
UNIT 3 CO3: able to analyze Levels of Culture – Primitive to modern – World cultural Regions.	3	15
UNIT 4 CO4: explain Language,Religion , Race and Distribution	4	15
UNIT 5 CO5:Understand the demographic pattern, problems and related theories.	5	15

SYLLABUS

SEMESTER – III
PAPER – V
CODE: G41 - HUMAN GEOGRAPHY

UNIT-I:

Definition , Scope and Content –Branches of Human Geography – Inter-disciplinary Approach: systematic-behavioural approach

UNIT-II:

Different Views – Concepts of Determinism , Possiblism and Probablism.

UNIT-III:

Levels of Culture – Primitive to modern – World cultural Regions.

UNIT-IV:

Language and Religion –_language groups - Race - Criteria for Classification- Major types – Distribution.

UNIT-V:

Population – Spatial Pattern of distribution – Growth, Problems of over Population – Malthusian – Optimum theory of Population – Migration – Causes – Types – Problems.

BOOKS FOR REFERENCE

1. Brock – A Geography of Man Kind – John Wiley, & Sons, New York - 1994.
2. *David M. Smith – Human Geography – Edward Arnold (Publishers) Ltd, London -1977.*
3. Deblij – Human Geography – John Wiley, & Sons New York – 1996.
4. Garnier – Geography of Population – Longmans Publications, London – 1990.
5. Majid Husain – Cultural Geography – Anmol publication Pvt. Ltd., New Delhi – 1994.
6. Majid Husain – Human Geography – Rawath Publications, Jaipur - 2003.
7. Money D.C. – Introduction to Human Geography – University Tutorial Press Ltd., London – 1972.
8. Specer K. Thomas – Cultural Geography – Anmol publication Pvt., Ltd., New Delhi 1994.

UNITS	TOPIC	LECTURE HOURS	MODE OF TEACHING
UNIT 1			
	Scope and content Definition	5	Chalk and talk
	Branches	5	PPT lecture
	Approachs	5	PPT Lecture and Test
UNIT 11			
	Views – Concepts of Determinism	5	PPT lecture
	Possiblism	5	PPT lecture
	Probablism.	5	PPT Lecture and Test
UNIT III			
	Levels of Culture – Primitive to modern	5	Chalk and talk -video
	World cultural	5	video lecture
	cultural Regions	5	PPT lecture
UNIT IV			
	Language and Religion –_language - religion	5	video lecture
	Classification- Race	5	video lecture
	Types – Distribution	5	Chalk And Talk- Test
UNIT V			
	Population –distribution – Growth, and Problems–	5	Chalk And Talk and PPT lecture
	Theory	5	Chalk And Talk
	Migration	5	Video Lecture And Test

Course Outcomes	Programme Outcomes (Pos)	Programme Specific Outcomes (PSOs)	Mean scores of Cos

(Cos)	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	3	3	3	5	4	3	3	3	3	4	3	3	3	3	3.3
CO2	3	5	3	3	3	4	3	4	3	3	4	3	3	3	3.4
CO3	3	3	4	5	4	3	5	3	4	3	3	3	3	4	3.6
CO4	3	3	5	4	3	4	3	4	3	5	5	4	3	3	3.7
CO5	3	4	3	3	3	3	5	3	3	4	3	3	4	3	3.4
Mean Overall Score															3.5

Result: The Score for this Course is 3.45 (High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5
Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0
Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = $\frac{\text{Total of Value}}{\text{Total No. of Pos \& PSOs}}$	Mean Overall Score of COs = $\frac{\text{Total of Mean Score}}{\text{Total No. of COs}}$

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of Geography

Programme : B.SC GEOGRAPHY (UG) **Part III: MAJOR**
Core/Allied/Elective: CORE
Semester : II **Hours : 6 P/W 90 Hrs P/S**
Sub. Code : PG2 **Credits : 4**

TITLE OF THE PAPER: REPRESENTATION OF SOCIO ECONOMIC DATA AND WEATHER MAP INTERPRETATION PRACTICAL – II

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT
	6	2	1	2	1

PREAMBLE:
The practical paper explains the representation of Socio-Economic Data with graph and diagrams and methods of weather map interpretation. Maps, Maps Scale, Enlarge and Reduction of maps , Bearings and Direction, Representation of Reliefs by Contours and Climatic Diagrams .

COURSE OUTCOME At the end of the Semester, the Students will be able to	Unit	Hrs P/S
UNIT-I CO1: Understand the Statistical method: One dimensional diagrams, Two dimensional diagrams, Three dimensional diagrams with computer assistance	1	20
UNIT-II CO2: Acquire more knowledge about the Pyramidal diagrams- pictorial-flow, line pie diagrams with computer assistance	2	20
UNIT-IIICO3: Develop the mapping skill through the data – drawing of isopleths-choropleth- chorochromatic and choroschematic maps.	3	25
UNIT-I VCO4: Familiar with the cartographic skill through the Methodological signs and symbols- station models- study and representation of weather reports of India	4	25

SYLLABUS

SEMESTER – IV
PAPER – VIII
REPRESENTATION OF SOCIO ECONOMIC DATA AND WEATHER MAP INTERPRETATION PRACTICAL – II

CODE: PG2

UNIT – I:

Statistical method: One dimensional diagrams- Bar- Two dimensional diagrams- Rectangular, square and circle- Three dimensional diagrams – cubes and sphere – with computer assistance.

UNIT – II:

Pyramidal diagrams- pictorial- flow, line , pie diagrams with computer assistance

UNIT – III:

Method of representing distribution of data – drawing of isopleths- choropleth- chorochromatic and choroschematic maps.

UNIT – IV:

Meteorological signs and symbols- station models- study and representation of weather reports of India

BOOKS FOR REFERENCE

1. Ahmad khan. M.Z- Text Book of practical Geography – Concept Publishing company ,New Delhi – 1988.
2. Ishtiaq M. – A text Book of practical Geography – Heritage Publishers - New Delhi - 2001.
3. Jayachandran.S – Practical geography – Tamilnadu Book Society, Chennai, 1963 (Tamil copy).
4. Misra R.P. and Ramesh. A – Fundamentals of Cartography – Concept Publishing company – New Delhi – 2002.
5. Monkhouse F.J. & Wilkinson H.R - Maps and Diagrams- Methuen, London - 1994.
6. Dr. Pijushkanti Saha & Dr. ParthBasu - Advanced Practical Geography – A Laboratory Manual - Books&Allied Pvt.Ltd,Kolkatta - 2004.
7. Singh and Kanunja - Map work and Practical Geography –Central Book Depot –Allahabad – 1979
8. Singh R.L - Elements of Practical Geography – Kalyani PublisheNew Delhi - 1979.

UNITS	TOPIC	LECTURE HOURS	MODE OF TEACHING
UNIT 1			
	Statistical method: One dimensional diagrams- Bar-	5	Chalk And Talk ,Demonstration and using instruments(computer)
	Two dimensional diagrams- Rectangular, square and circle	5	Chalk And Talk ,Demonstration and using instruments (computer)
	Three dimensional diagrams – cubes and sphere –	10	Chalk And Talk ,Demonstration and using instruments(computer)
UNIT 11			
	Pyramidal diagrams-	5	Chalk And Talk ,Demonstration and using instruments(computer)
	pictorial- flow, line	10	Chalk And Talk ,Demonstration and using instruments(computer)
	pie diagrams with computer assistance	5	Chalk And Talk ,Demonstration and using instruments(computer)
UNIT III			
	Method of representing distribution of data – drawing of isopleths- choropleth-	10	Using topographical sheet , Demonstration and using chats
	chorochromatic and choroschematic maps	15	Demonstration and using instruments
UNIT IV			
	Meteorological signs and symbols-	10	Using climatic charts and weather reports.
	station models- study and representation of weather reports of India	15	Using climatic data and weather reports.

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	

CO1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
CO4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Mean Overall Score															4.75

Result: The Score for this Course is 4.75 (High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5
Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0
Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = $\frac{\text{Total of Value}}{\text{Total No. of Pos \& PSOs}}$

Mean Overall Score of COs = $\frac{\text{Total of Mean Score}}{\text{Total No. of COs}}$

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of Geography .

Programme : B.Sc GEOGRAPHY (UG) **Part III: Major**
Core/Allied/Elective: core
Semester : V **Hours : 5 P/W 75 Hrs P/S**
Sub. Code : G51 **Credits :5**

TITLE OF THE PAPER: OCEANOGRAPHY

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT
	5	2	1	1	1

PREAMBLE: Oceanography is a branch of physical geography deals with meaning scope, ocean temperature, salinity and density. Dynamics of ocean and corals, marine deposits and marine resources.

COURSE OUTCOME At the end of the Semester, the Students will be able to	Unit	Hrs P/S
UNIT 1 CO1: Acquire knowledge about the meaning , scope and significance of oceanography and configuration of ocean floor	1	15
UNIT 2 CO2:understand the Temperature , Salinity and Density of sea water – Atlantic, Pacific and Indian Ocean .	2	15
UNIT 3 CO3: Familiar with Dynamics of Ocean Water – Waves and Tides and Tsunami	3	15
UNIT 4 CO4: understand the types and general Ocean Currents- Types- Corals	4	15
UNIT 5 CO5: develop knowledge about the Marine Deposits and Marine Resources.	5	15

SYLLABUS

PAPER- IX

CODE : G51 - OCEANOGRAPHY

UNIT I:

Oceanography – Meaning ,Scope ,Content and Significance – Distribution of Land and Sea – Tetrahedral Theory – Surface Configuration of the Ocean Floor – Bottom Relief : Atlantic, Pacific and Indian Ocean.

UNIT II:

Temperature , Salinity and Density of sea water – Atlantic, Pacific and Indian Ocean .

UNIT III:

Dynamics of Ocean Water – Waves and Tides- Types and Effects of Tides – Tsunami.

UNIT IV:

Ocean Currents- Types- Factors - General Circulation of Ocean Currents–- Atlantic, Pacific and Indian Ocean. Coral Reefs - Types.

UNIT V:

Marine Deposits – Classification and Geographical Distribution – Marine Resources – Food – Energy – Minerals.

REFERENCES:

1. Alyn.c.Duxbury and Alison . B. Duxbury- an introduction to the world's oceans- Addison Wesley publishing company ltd .1994.
2. Chorley.R.J- Introduction to Physical Hydrology- Methuen – 1974.
3. Das Gupta-Principles of Physical Geography – Chand & Co-New Delhi - 1955.
4. Gorden Pirie.R-Oceanography-Oxford University Press- U.S.A -1977.
5. Monkhouse- Principles of Physical Geography-John Wiley & Sons - 1992.
6. Philip Lake- Physical Geography- MacMillan & Co - 1966.
7. Siddhartha.K.- Oceanography- A Brief Introduction – Kisalya Publication, Pvt.Ltd - 1999.
8. Sharma and Vatal-Oceanography for Geographers –Chaitanya Publication - 1986.
9. Strahler – Physical Geography - John Wiley & Sons – New York -1992.
10. Tom Garrison – Oceanography – An Introduction to Marine Science – Words Worth Publishing Company – Belmont – California - 1993.

UNITS	TOPIC	LECTURE HOURS	MODE OF TEACHING
UNIT 1			
	Oceanography – Meaning ,Scope ,Content and Significance	5	Group discussion, Maps and Atlas
	Distribution of Land and Sea – Tetrahedral Theory	5	Group discussion, Maps and Atlas
	Configuration of the Ocean Floor	5	Group discussion, Maps and Atlas
UNIT 11			
	Temperature of the oceans	5	chalk and talk and usage of maps and atlas
	Salinity of the oceans	5	chalk and talk and usage of maps and atlas
	Density of sea water –	5	chalk and talk and usage of maps and atlas
UNIT III			
	Dynamics of Ocean Water – Waves and their types	5	Maps , Atlas , Models and VLC
	Tides- Types and Effects	8	Maps , Atlas , Models and VLC
	Tsunami.	2	Models and VLC
UNIT IV			
	General Circulation of Ocean Currents–-	10	Maps , Atlas , Models and VLC
	Reefs - Types	5	Maps , Atlas , Models and VLC
UNIT V			
	Marine Deposits	8	Maps , Atlas , Models and VLC
	Marine Resources	7	Maps , Atlas , Models and VLC

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
CO3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Mean Overall Score															4.6

Result: The Score for this Course is 3.45 (High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5
Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0
Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = $\frac{\text{Total of Value}}{\text{Total No. of Pos \& PSOs}}$

Mean Overall Score of COs = $\frac{\text{Total of Mean Score}}{\text{Total No. of COs}}$

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of Geography

Programme : B.SC GEOGRAPHY (UG) **Part III: MAJOR**
Core/Allied/Elective: CORE
Semester : IV **Hours : 6 P/W 90 Hrs P/S**
Sub. Code : PG3 **Credits : 4**

TITLE OF THE PAPER: MAP MAKING AND INTERPRETATION - PRACTICAL -III

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT
	6	2	1	2	1

PREAMBLE: The Practical Paper demonstrate the methods of interpret And Analyse The Survey Of India Topographic Map, OS and US toposheet- Aerial photographs and Satellite imageries

COURSE OUTCOME At the end of the Semester, the Students will be able to	Unit	Hrs P/S
UNIT-I CO1: Able to apply and interpretation of the map index – survey of India topographical maps.	1	15
UNIT-II CO2: Understand the interpretation of the Ordnance – US – toposheet.	2	30
UNIT-IIICO3: Develop the idea about the interpretation of Air photo	3	20
UNIT-I VCO4: acquire knowledge about the interpretation of satellite imageries	4	15

SYLLABUS

SEMESTER – IV
PAPER – VIII
MAP MAKING AND INTERPRETATION - PRACTICAL -III

CODE: PG3

UNIT – I:

Principles of Map Making : Signs and Symbols- Interpretation of Indian topographical maps-SOI maps 1:50,000

UNIT – II:

Cartographic appreciation - British Topographical maps – US Topographical maps Interpretation

UNIT – III:

Aerial photographs - Photo scale determination – Stereo Pair – Interpretation .

UNIT – IV:

Satellite Imageries – Interpretation

BOOKS FOR REFERENCE

1. Gopal Singh – Map Work and Practical Geography , Vikas Publishing House Pvt Ltd., New Delhi, 1999.
2. Ishtiaq . M – A Text Book of Practical Geography – Heritage Publishers, New Delhi 1989.
3. Mishra. R.P and Ramesh. A – Fundamentals of Cartography – Concept Publishing Company, New Delhi 1999.
4. Monkhouse. F.J – Maps and Diagrams – Methuen and Company Ltd., London 1994.
5. SethuRakkayee .S – An Introduction to Cartography – Shanmugam pathipagam Madurai-7, 2005 (Tamil copy).
6. Singh R.L – Elements of Practical Geography – Kalyani Publishers, Ludhiana 1979.
7. Jayachandran.S – Practical Geography – Tamilnadu Book Society, Chennai, 1963 (Tamil copy).
8. ZulfiguarAhamad Khan.M.Z. – Textbook of Practical Geography – Concept Publishing Company, New Delhi 1998.

UNITS	TOPIC	LECTURE HOURS	MODE OF TEACHING
UNIT 1			
	Principles of Map Making : Signs and Symbols-	10	Chalk And Talk ,Demonstration and using instruments(computer)
	Interpretation of Indian topographical maps-SOI maps 1:50,000	15	Chalk And Talk ,Demonstration and using instruments
UNIT 11			
	Cartographic appreciation - British Topographical maps	15	Chalk And Talk ,Demonstration and using instruments
	US Topographical maps Interpretation	15	Chalk And Talk ,Demonstration and using instruments
UNIT III			
	Aerial photographs - Photo scale determination - Stereo Pair – Interpretation .	20	Using Stereo Pair and Demonstration
UNIT IV			
	Satellite Imageries – Interpretation	15	Using climatic charts and weather reports.

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
CO4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Mean Overall Score															4.75

Result: The Score for this Course is 4.75 (High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5
Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0

Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = Total of Value / Total No. of Pos & PSOs

Mean Overall Score of COs = Total of Mean Score / Total No. of COs

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of Geography .

Programme : B.SC GEOGRAPHY (UG) **Part III: MAJOR**
Core/Allied/Elective: CORE
Semester : VI **Hours : 6 P/W 90 Hrs P/S**
Sub. Code :G61 **Credits : 5**

TITLE OF THE PAPER: BASIC REMOTE SENSING AND GEOGRAPHICAL INFORMATION SYSTEM

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT
	6	3	1	1	1

PREAMBLE: The paper emphasize the knowledge about Remote Sensing –Elements of Remote Sensing and Computer based tool for mapping and analyzing feature events on earth

COURSE OUTCOME At the end of the Semester, the Students will be able to	Unit	Hrs P/S
UNIT 1 CO1: Acquisition of information about an object- area without making physical contact by air crafts and satellite.	1	18
UNIT 2 CO2: To understand the Elements of remote sensing system , sensing of emitted energy and the use of non- imaging sensors	2	18
UNIT 3 CO3: Examine the air photos through sophisticated methods	3	18
UNIT 4 CO4: Refers to the structure of the instruments has mounted	4	18
UNIT 5 CO5:To manage the spatial data with suitable applications	5	18

SYLLABUS

SEMESTER- VI
PAPER – XII

CODE: G61 - BASIC REMOTE SENSING AND GEOGRAPHICAL INFORMATION SYSTEM

UNIT I:

Remote sensing – Definition – Basic principles – Scope and Historical development of Indian Remote Sensing in Space Programmes.

UNIT II:

Major elements of Remote Sensing System – Electromagnetic Energy – EMR – Spectrum- Energy Interaction

UNIT III:

Development of Aerial Photography – Types- Characteristics and Elements of Air photo Interpretation.

UNIT IV:

Platforms – Sensor System – Space Imagery – LAND SAT System – SPOT System - IRS Series.

UNIT IV:

GIS Components- Raster and Vector Data -Symbols: Point, Line, Polygon – Digitalization- DBMS -Statistical Analysis.

REFERENCES:

1. Agarwal C.S. and P.K. Garg– Text Book of Remote Sensing – Wheeler publishers, New Delhi - 2000
2. Bhatta . B – Remote Sensing and GIS – Oxford University Press, New Delhi – 2008.
3. Campbell, James.B – Introduction to Remote Sensing – The Guild Press – New york - 1996
4. Curran.p – Fundamentals of Remote Sensing – Longman London – 1990.
5. Chouhan T.S. & Josi K.N. Applied Remote Sensing and Photo Interpretation – Vigyan Prakashan Jodhpur – 1996
6. Kang- Tsung Chang – Introduction to Geographic Information Systems – Published by McGraw – Hill,A Business Unit of the McGraw – Hill Companies, Newyork - 2002
7. Kudral M.K., Dr. Nag. P – Digital Remote sensing – Concept of Publsihing Company, New Delhi – 1998.
8. Lillesand .T.M. and Kiefer R. W. – Remote Sensing and Image Interpretation, Fourth Edition, John wiley & Sons, Inc New york – 2000.
9. Mathur P.M. – Computer Application in Geography, Weliey - 1991
10. Misra .R.P. Ramesh .A - Fundamentals of Cartography- Concept Publishing Company, New Delhi –2002
11. Narayan.L.R.A – Remote Sensing and its Applications – Universities press.. – 1999.
12. Patel.A.N. and Surendra Singh - Remote Sensing Principles an Application – Scientific Publishers (India) Jodhpur - 1999.
13. Pradeep Kumar – Dictionary of Geographical Information Systems – Bio Tec Books, 1123/74, Trinagar Delhi - 2007
14. Rampal,K.K – Hand Book of Aerial Photography and Interpretation – Concept Publishing Company, New Delhi – 1999.

UNITS	TOPIC	LECTURE HOURS	MODE OF TEACHING
UNIT 1			
	Remote sensing Definition – Basic principles	6	Chalk & talk
	Scope	6	Video lecture and student seminar
	Historical development	6	PPT lecture
UNIT 11			
	elements of Remote Sensing System – Energy sources	6	Chalk & talk
	– EMR – Spectrum-	6	PPT lecture

	Interaction energy	6	Video lecture and student seminar
UNIT III			
	Aerial Photography Development and Types	6	Chalk & talk and student PPT
	Characteristics and Elements	6	PPT lecture
	Air photo Interpretation.	6	e-content and practical assessment
UNIT IV			
	Platforms – Sensor System	6	PPT lecture
	LAND SAT System – SPOT System	6	PPT lecture and student seminar
	IRS Series	6	PPT And Video Lecture -Test
UNIT V			
	GIS Components	6	Chalk and talk and chart-test
	Raster and Vector Data	6	PPT and computer software
	DBMS -Statistical Analysis	6	computer software- practical

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	4	5	3	3	4	4	3	5	4	3	5	4	3	5	3.9
CO2	5	4	3	3	3	4	5	4	3	5	3	4	5	3	3.9
CO3	5	3	3	4	4	3	3	3	4	5	5	4	3	3	3.7
CO4	3	3	4	5	4	5	4	3	4	4	5	4	3	3	3.9
CO5	5	4	3	4	5	4	5	4	4	3	3	4	5	3	4.0
Mean Overall Score															3.9

Result: The Score for this Course is 3.9 (High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5
Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0
Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = $\frac{\text{Total of Value}}{\text{Total No. of Pos \& PSOs}}$

Mean Overall Score of COs = $\frac{\text{Total of Mean Score}}{\text{Total No. of COs}}$

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of English.

Programme : B.Sc. Geography **Part III: MAJOR**

Core/Allied/Elective: CORE

Semester : VI **Hours : 5 P/W 75Hrs P/S**

Sub. Code : G62 **Credits: 5**

TITLE OF THE PAPER: GEOGRAPHY OF INDIA

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT
	5	2	1	1	1

PREAMBLE: The paper Geography of India is regional study explains the Physical, socio-economic development and distribution of resources

COURSE OUTCOME At the end of the Semester, the Students will be able to	Unit	Hrs P/S
UNIT 1 CO1: Understand the location Physiography, Drainage, Climate, and Vegetation of India	1	15
UNIT 2 CO2: Know the silent feature, problems and prospects of Agriculture.	2	15
UNIT 3 CO3: Know about the power resources in India.	3	15

UNIT 4 CO4: Understand the nature of industries and study the spatial Distribution of manufacturing industries in India	4	15
UNIT 5 CO5: Understand population Composition in India	5	15

SYLLABUS

SEMESTER – VI
PAPER – XIII
CODE: G62-GEOGRAPHY OF INDIA

UNIT I

Location, Relief, Drainage, Climate, Soil and Natural Vegetation - Unity in Diversity

UNIT II:

Agriculture: Irrigation – Types – Multipurpose Projects – Major Crops – Cultivation and Distribution of Rice , Wheat, Cotton, Sugarcane, Tea, Oilseeds & Tobacco.

UNIT III:

Power Resources – Coal, Petroleum, Natural Gas - Hydro Electric Power, Atomic power – Minerals : Iron, Manganese, Bauxite, Copper & Mica.

UNIT IV:

Industries – Iron and Steel, Automobiles, Ship Building, Cotton Textiles & Jute

UNIT V:

Population –Growth – Distribution –Density- Population Problems - Transport: Land, Water and Air - Trade .

BOOKS FOR REFERENCE

1. Agarwal – India's Populations - some Problems in Perspective Planning – Asia Publishing House , Madras - 1960.
2. Majid Hussain – Geography of India – Tata McGraw Hill Ltd, New Delhi - 2008.
3. Memoria.C.B. – Economic and Commercial Geography – Kitab Mahal, Allahabad -1970.
4. Mishra.R.P. , Sundaram.K.V. and Prakash Roa.V.L.S. – Regional Development – Planning in India , Vikas Publishing House, New Delhi - 1979.
5. Prithwish Nag and Smitha Sen Gupta – concept Publishing Company – New Delhi - 2002.
6. Prithwish Kumar Roy and Somnath Mukherjee.N.W. – Economic Geography , An Appraisal of Resources – Central Book Agency , Kolkatta - 1992.
7. Sharma and Couthinho.O. – Economic and Commercial Geography of India – Vikas Publications - 2001.
8. Siddhartha.K. – India - The Physical Aspects, Centre For Development of Environment Resources.
9. Singh.R.L. – Regional Geography of India – NGSI Varanasi -1971.
10. Spate.O.H.K. and Learnmonth.A.T.A. – India and Pakistan – B1 Publications, Madras - 1972.
11. Tiwari.R.C. - Geography of India – Prayag Pustak Bhawan , Allahabad - 2008.

UNITS	TOPIC	LECTURE HOURS	MODE OF TEACHING
UNIT 1			
	Location, Relief, , Soil	5	Maps, Atlas , VLC and PPT
	Drainage, Climate	5	Maps, Atlas , VLC and PPT
	Natural Vegetation - Unity in Diversity	5	Maps, Atlas , VLC and PPT
UNIT 11			
	Agriculture: Irrigation Types- Multipurpose Projects	5	Maps, Atlas , VLC and PPT

	Major Crops – Cultivatio and Distribution of Rice , Wheat, Cotton,	5	Maps, Atlas , VLC and PPT
	Sugarcane, Tea, Oilseeds & Tobacco.	5	Maps, Atlas , VLC and PPT
UNIT III			
	Power Resources – Coal, Petroleum, Natural Gas -	5	Maps, Atlas , VLC and PPT
	Hydro Electric Power, Atomic power –	4	Maps, Atlas , VLC and PPT
	Minerals : Iron, Manganese, Bauxite, Copper & Mica.	6	Maps, Atlas , VLC and PPT
UNIT IV			
	Industries – Iron and Steel,	5	Maps, Atlas , VLC and PPT
	Automobiles, Ship Building,	4	Maps, Atlas , VLC and PPT
	Cotton Textiles & Jute	6	Maps, Atlas , VLC and PPT
UNIT V			
	Population –Growth – Distribution –Density- Population Problems -	6	Maps, Atlas , Census Report VLC and PPT
	Transport: Land, Water	6	Maps, Atlas , VLC and PPT
	Air - Trade .	3	Maps, Atlas , VLC and PPT

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
CO3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
CO4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
CO5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Mean Overall Score															4.2

Result: The Score for this Course is 3.45 (High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5

Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0
Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = Total of Value / Total No. of Pos & PSOs

Mean Overall Score of COs = Total of Mean Score / Total No. of COs

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of Geography.

Programme : B.SC GEOGRAPHY (UG) **Part III: MAJOR**

Core/Allied/Elective: CORE
Semester : IV **Hours : 6 P/W 90 Hrs P/S**
Sub. Code : PG4 **Credits : 4**

TITLE OF THE PAPER: MAP PROJECTION AND SURVEYING

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT
	6	2	1	2	1

PREAMBLE: The paper demonstrate the construction of Map projections , understand and practice different survey methods.

COURSE OUTCOME At the end of the Semester, the Students will be able to	Unit	Hrs P/S
UNIT-I CO1: understand the construction methods of different types of projection	1	15
UNIT-II CO2: Construct and Analyse the different types of projection	2	15
UNIT-IIICO3: Apply the knowledge to conduct the chain, prismatic and plane survey	3	30

UNIT-I VCO4: Understand to measure the height .of the object through (Indian clinometer), leveling(dumpy level) and Area (GPS) survey	4	30

SYLLABUS

SEMESTER –VI

PAPER –XIV

CODE: PG4- MAP PROJECTION AND SURVEYING PRACTICAL – IV

UNIT – I:

Map projections – Meaning – Classification – Construction (Graphical) and uses – choice of projection- Cylindrical Projection: Equidistant – Equal area – Mercator's Projection

UNIT – II:

Conical Projections : One Standard parallel, Two Standard parallels , Bonne's projection and Polyconic projections - Zenithal Projection: Equidistant – Equal Area – Gnomonic – Stereographic Projection - Mollweide - Sinusoidal

UNIT – III:

Surveying - Principles and Applications – Measurement of Distance and Angle – Chain – Prismatic Compass – Plane Table.

UNIT – IV:

Measurement of Height and Level - Indian Clinometer , Dumpy Level - Field survey using GPS

BOOKS FOR REFERENCE

1. Gopal Singh – Map Work and Practical Geography , Vikas Publishing House Pvt Ltd., New Delhi, 1999.
2. Ishtiaq . M – A Text Book of Practical Geography – Heritage Publishers, New Delhi 1989.
3. Mishra. R.P and Ramesh. A – Fundamentals of Cartography – Concept Publishing Company, New Delhi 1999.
4. Monkhouse. F.J – Maps and Diagrams – Methuen and Company Ltd., London 1994.
5. SethuRakkayee .S – An Introduction to Cartography – Shanmugam pathipagam Madurai-7, 2005 (Tamil copy).
6. Singh R.L – Elements of Practical Geography – Kalyani Publishers, Ludhiana 1979.
7. Jayachandran.S – Practical Geography – Tamilnadu Book Society, Chennai, 1963 (Tamil copy).
8. ZulfiguarAhamad Khan.M.Z. – Textbook of Practical Geography – Concept Publishing Company, New Delhi 1998.

UNITS	TOPIC	LECTURE HOURS	MODE OF TEACHING
UNIT 1			
	Map projections Classification– choice of projection- Cylindrical Projection: Equidistant – Equal area – Mercator's Projection	8	Chalk And Talk ,Demonstration and using instruments(computer)
	Construction (Graphical) and uses	7	Chalk And Talk ,Demonstration and using instruments
UNIT 11			
	Conical Projections : One Standard parallel, Two Standard parallels , Bonne's projection	6	Chalk And Talk ,Demonstration and using instruments
	Polyconic projections - Zenithal Projection: Equidistant – Equal Area – Gnomonic – Stereographic Projection	5	Chalk And Talk ,Demonstration and using instruments

	Mollweide - Sinusoidal	4	Chalk And Talk ,Demonstration and using instruments
UNIT III			
	Surveying - Chain – Prismatic Compass – Plane Table	30	Using topographical sheet , Demonstration and using chats
UNIT IV			
	Indian Clinometer , Dumpy Level - Field survey using GPS	30	Using climatic charts and weather reports.

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
CO4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Mean Overall Score															4.75

Result: The Score for this Course is 4.75 (Very High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5
Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0
Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = $\frac{\text{Total of Value}}{\text{Total No. of Pos \& PSOs}}$

Mean Overall Score of COs = $\frac{\text{Total of Mean Score}}{\text{Total No. of COs}}$

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of Geography .

Programme : B.SC GEOGRAPHY (UG) **Part III: MAJOR**
Core/Allied/Elective: SKILL BASED ELECTIVE
Semester : III **Hours : 2 P/W 30Hrs P/S**
Sub. Code : SG31 **Credits :2**

TITLE OF THE PAPER: TOUR AND TRAVEL

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT
	2	1		0.5	0.5

PREAMBLE: The paper emphasis the student to understand physical, social and economical development of area and the impact of man and environmental relationship related with tour and travel

COURSE OUTCOME	Unit	Hrs P/S

At the end of the Semester, the Students will be able to		
UNIT 1 CO1: Know the idea about the Travel – Motivation - Meaning and Nature of Tourism - Types of Tourism.	1	6
UNIT 2 CO2: Understand the Elements of Tourism – Attraction, Accessibility, Accommodation and Amenities	2	6
UNIT 3 CO3: Acquire more knowledge about the Travel formalities – Tour Itinerary – Travel Agencies – Travel Abroad Facilities – Visa, Passport, Bank Restrictions – Traveller's Cheques.	3	6
UNIT 4 CO4: Explain the Role of Transport in Tourism Development.	4	6
UNIT 5 CO5: observe and recognize Tourism Potentials of India - special reference to Tamilnadu- The role of India Tourism Development Corporation (ITDC) and Tamilnadu Tourism Development Corporation (TTDC)	5	6

SYLLABUS

SEMESTER – III

SKILL BASED ELECTIVE – I

CODE: SG31 -TOUR AND TRAVEL

UNIT-I: Travel – Motivation - Meaning and Nature of Tourism - Types of Tourism.

UNIT-II: Elements of Tourism – Attraction, Accessibility, Accommodation and Amenities .

UNIT-III: Travel formalities – Tour Itinerary – Travel Agencies – Travel Abroad Facilities – Visa, Passport, Bank Restrictions – Traveller's Cheques.

UNIT-IV: Role of Transport in Tourism Development.

UNIT-V: Tourism Potentials of India with special reference to Tamilnadu- The role of India Tourism Development Corporation (ITDC) and Tamilnadu Tourism Development Corporation (TTDC)

BOOKS FOR REFERENCE

1. Bhatia A.K. – Tourism Development Principles and Practices Pvt. Ltd. – Sterling Publishers, New Delhi - 2002.
2. Bhatia A.K. International Tourism – Fundamentals and Practices Sterling Publications New Delhi - 1991.
3. Burkart and Medik – Tourism Past, Present and Future – Heinemann - 1976.
4. Kaul. R.N. – Dynamics of Tourism, A. Triology – Vol. I, II, III – Sterling Publishers Pvt, New Delhi - 1985.
5. Manoj Das – India – A Tourist Paradise – Sterling Publishers, New Delhi - 1983.

Robinson H.A. – Geogrpahy of Tourism – Macdonald and Evans London - 1996

UNITS	TOPIC	LECTURE HOURS	MODE OF TEACHING
UNIT 1			
	Travel – Motivation - Meaning and Nature of Tourism -	3	Group discussion, VLC and PPT lecture
	Types of Tourism	3	Group discussion, VLC and PPT lecture
UNIT 11			
	Elements of Tourism –	2	chalk and talk and usage of maps ,PPT and VLC
	Attraction, Accessibility,	2	chalk and talk and usage of maps ,PPT and VLC

	Accommodation and Amenities	2	chalk and talk and usage of maps ,PPT and VLC
UNIT III			
	Travel formalities – Tour Itinerary –	2	Group discussion, VLC and PPT lecture
	Travel Agencies – Travel Abroad Facilities – Visa, Passport,	2	Group discussion, VLC and PPT lecture
	Bank Restrictions – Traveller's Cheques	2	Group discussion, VLC and PPT lecture
UNIT IV			
	Role of Transport in Tourism Development-Land and Water	3	Group discussion, chalk and talk and usage of maps VLC and PPT lecture
	Air Transport	3	Group discussion, chalk and talk and usage of maps VLC and PPT lecture
UNIT V			
	Tourism Potentials of India (India Tourism Development Corporation-ITDC)	3	chalk and talk ,Group discussion, , Maps and Atlas and PPT lecture
	Tamilnadu (Tamilnadu Tourism Development Corporation-TTDC)	3	chalk and talk ,Group discussion, Maps and Atlas and PPT lecture

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Mean Overall Score															4.8

Result: The Score for this Course is 4.8 (Very High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5

Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0
Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = Total of Value / Total No. of Pos & PSOs	Mean Overall Score of COs = Total of Mean Score / Total No. of COs

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of Geography

Programme :B.SC GEOGRAPHY (UG) **Part III: MAJOR**

Core/Allied/Elective: SKILL BASED ELECTIVE

Semester : III **Hours : 2 P/W 30Hrs P/S**

Sub. Code : SG32 **Credits :2**

TITLE OF THE PAPER: DISASTER MANAGEMENT

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT
	2	1		0.5	0.5

PREAMBLE: Disaster management is a part of Environmental Geography –explains the hazard and its impact and management.		
COURSE OUTCOME At the end of the Semester, the Students will be able to	Unit	Hrs P/S
UNIT 1 CO1: Knowledge about the hazard, types - natural , manmade and environmental hazards	1	6
UNIT 2 CO2: Understand the effects of global warming and causes of cyclones, flood, drought and tsunamis	2	6
UNIT 3 CO3: Analyze the human impact on agriculture, consequences of deforestation and desertification	3	6
UNIT 4 CO4: Knowledge about the classification of pollutions- air, water and noise pollution	4	6
UNIT 5 CO5: Examine the awareness programmes about the disaster management	5	6

SYLLABUS

SEMESTER – III

SKILL BASED ELECTIVE-II

CODE : SG32 - DISASTER MANAGEMENT

UNIT-I:

Disaster and Hazards –Definition and Types- Environmental Hazards -Earthquake, Volcanoes & Landslide.

UNIT-II: Global Warming - Greenhouse Effect - Cyclones - Flood – Drought – Tsunami.

UNIT-III: Human impact on Agriculture – Deforestation - Desertification.

UNIT-IV: Pollution - Definition and classification.

UNIT-V: Disaster Management and Environmental Impact Assessment.

BOOKS FOR REFERENCE

1. Aaradhana. P.S- Environmental Management- Rajat Publication, New Delhi - 1998.
2. Abbasi.S.A.- Environmental Impact Assessment - Discovery Publishing House, New Delhi - 2000.
3. Agarwal.S.K.- Environmental Issues and Themes - APH Publishing corporation, New Delhi.
4. Chawla- Natural Hazards and Disaster Management – Suman Printing Press – shahdara, New Delhi - 1993
5. Clark.B.D- Environmental Impact Assessment - Mansell Publication, London - 1980.
6. Robinson.H. - Biogeography Plymouth - MacDonald and Evans Ltd - 1972.
7. Sharma.P.D.- Ecology and Environment - Rastogi Publications, Meerut - 1994.
8. Trivedi.P.R. - Water Pollution - Akashdeep Publishing House, New Delhi - 1992.

UNITS	**TOPIC**	**LECTURE HOURS**	**MODE OF TEACHING**
UNIT 1			
	Disaster and Hazards –Definition	2	Group discussion, VLC and PPT lecture
	Types- Environmental Hazard	2	Group discussion, VLC and PPT lecture
	Earthquake, Volcanoes & Landslide.	2	Group discussion, VLC and PPT lecture
UNIT 11			

	Global Warming - Greenhouse Effect -	2	chalk and talk and usage of maps and Atlas and VLC
	Cyclones	2	chalk and talk and usage of maps and atlas and VLC
	Flood – Drought – Tsunami	2	chalk and talk and usage of maps and atlas and VLC
UNIT III			
	Human impact on Agriculture	2	Group discussion, VLC and PPT lecture
	Deforestation	2	Group discussion, VLC and PPT lecture
	Desertification	2	Group discussion, VLC and PPT lecture
UNIT IV			
	Pollution - Definition	1	Group discussion, VLC and PPT lecture
	classification.	5	Group discussion, VLC and PPT lecture
UNIT V			
	disaster management mitigation	3	Group discussion, Census Report, Maps and Atlas and PPT lecture
	Environmental Impact Assessment	3	Group discussion, Census Report, Maps and Atlas and PPT lecture

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Mean Overall Score															4.8

Result: The Score for this Course is 4.8 (Very High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5
Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0
Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = $\frac{\text{Total of Value}}{\text{Total No. of Pos \& PSOs}}$

Mean Overall Score of COs = $\frac{\text{Total of Mean Score}}{\text{Total No. of COs}}$

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of Geography

Programme : B.SC GEOGRAPHY (UG) **Part III: MAJOR**
Core/Allied/Elective: SKILL BASED ELECTIVE
Semester : IV **Hours : 2 P/W 30Hrs P/S**
Sub. Code : SG43 **Credits :2**

TITLE OF THE PAPER: RURAL DEVELOPMENT IN INDIA

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT
	2	1		0.5	0.5
PREAMBLE: The broad perspective of the paper embraces all aspects of improvement in the quality of rural life.					

COURSE OUTCOME At the end of the Semester, the Students will be able to	Unit	Hrs P/S
UNIT 1 CO1: Understand the concept of rural development	1	6
unit 2 co2: Develop an idea about the links between agricultural and rural development	2	6
UNIT 3 CO3: acquire knowledge about the rural based industries	3	6
UNIT 4 CO4: understand the different types of social issues.	4	6
UNIT 5 CO5: know different types of rural development programmes.	5	6

SYLLABUS

SEMESTER – III

SKILL BASED ELECTIVE – I

CODE: SG43 - RURAL DEVELOPMENT IN INDIA

UNIT-I: Meaning - Scope of Rural Development.

UNIT-II: Agriculture and Rural Development – Elements of Agricultural Sector – Links between Agriculture and Rural Development.

UNIT-III: Rural Industries – Small Scale and Cottage Industries – Handicrafts – Poultry, Dairying, Sericulture, Vermi Culture, Mushroom Culture.

UNIT-IV: Social Issues – Poverty, Housing and Shelter, Empowerment of Women, Health Care, Environmental Issues – Water Supply and Sanitation.

UNIT-V: Rural Development Programmes –Panchayat Raj - Integrated Rural Development Authority (IRDA) – National Bank for Agricultural and Rural Development (NABARD) – Self Help Group (SHG).

BOOKS FOR REFERENCE

1. Harish Chandra Singh – Rural Environment Development and Planning – Chugh Publications – Allahabad,India - 1989.
2. Moni.M. and Suresh Misra – Rural India Achieving Millennium Development Goals and Grassroots Development - Concept Publishing Company - 2009.
3. Sarojini Vats Women's Participation in Rural Development – Abijeet Publication New Delhi - 2004.
4. Sneh Sangwan Randhir Singh Sangwan – Rural Urban Divide – Changing Spatial Pattern Of Social Variables – Concept Publishing Company - 2003.
5. Vasant Desai – Rural Development Vol – I to Vol – V – Himalaya Publishing House - 1988.
6. Dr. B.P.Tyagi – Agricutural Economics and Rural Development- Jai Prakash Nath &Co - Meerut - 2005

UNITS	TOPIC	LECTURE HOURS	MODE OF TEACHING
UNIT 1			
	Meaning - Scope of Rural Development	6	Group discussion, VLC and PPT lecture
UNIT 11			
	Agriculture and Rural Development	2	chalk and talk and usage of maps ,PPT and VLC
	Elements of Agricultural Sector	2	chalk and talk and usage of maps ,PPT and VLC
	Links between Agriculture and Rural Development.	2	chalk and talk and usage of maps ,PPT and VLC
UNIT III			

	Rural Industries – Small Scale and Cottage Industries – Handicrafts –	2	Group discussion, VLC and PPT lecture
	Poultry, Dairying,	2	Group discussion, VLC and PPT lecture
	Sericulture, Vermi Culture, Mushroom Culture.	2	Group discussion, VLC and PPT lecture
UNIT IV			
	Social Issues – Poverty, Housing and Shelter,	2	Group discussion, chalk and talk and usage of maps ,VLC and PPT lecture
	Empowerment of Women, Health Care,	2	Group discussion, chalk and talk and usage of maps, VLC and PPT lecture
	Environmental Issues – Water Supply and Sanitation	2	Group discussion, chalk and talk and usage of maps, VLC and PPT lecture
UNIT V			
	Rural Development Programmes –Panchayat Raj -	2	Group discussion, VLC and PPT lecture
	Integrated Rural Development Authority (IRDA) –	2	Group discussion, VLC and PPT lecture
	National Bank for Agricultural and Rural Development (NABARD) – Self Help Group (SHG).	2	Group discussion, VLC and PPT lecture

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
CO3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Mean Overall Score															4.6

Result: The Score for this Course is 4.6 (Very High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5
Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0
Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = $\frac{\text{Total of Value}}{\text{Total No. of Pos \& PSOs}}$

Mean Overall Score of COs = $\frac{\text{Total of Mean Score}}{\text{Total No. of COs}}$

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of Geography

Programme : B.SC GEOGRAPHY (UG) **Part III: MAJOR**
Core/Allied/Elective: SKILL BASED ELECTIVE
Semester : VI **Hours : 2 P/W 30 Hrs P/S**
Sub. Code : SG65 **Credits :2**

TITLE OF THE PAPER: WATER RESOURCE MANAGEMENT

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT
	2	1		0.5	0.5

PREAMBLE: Water Resource management is a part of Physical Geography. It analyze the sources, uses, problems ,conservation and planning.

COURSE OUTCOME At the end of the Semester, the Students will be able to	Unit	Hrs P/S
UNIT 1 CO1: Know about the importance of water and factors affecting runoff	1	6
UNIT 2 CO2: Understand the storage of water - Glaciers, River Channels, Lakes and Reservoirs	2	6
UNIT 3 CO3: Analyze the various uses of water and need for irrigation	3	6
UNIT 4 CO4: Identify the major problems of water and consequences of flood and Drought	4	6
UNIT 5 CO5: Acquire the necessity of conserve the water and laws of protection of water resource.	5	6

SYLLABUS

SEMESTER – VI
SKILL BASED ELECTIVE – V
CODE: SG65 - WATER RESOURCE MANAGEMENT

UNIT-I:

Water as a Resource – Surface Water – Run off – Factors affecting Run off – Ground Water – Types – Porosity, Permeability - Water Table.

UNIT-II:

Water storage – Glaciers, River Channels, Lakes and Reservoirs, Soil Moisture, Ground water – Hydrological cycle.

UNIT-III:

Water Uses – Consumptive and non consumptive, Domestic, Municipal, Irrigation and industries.

UNIT-IV:

Problems of water resources- Major areas of Flood and Drought occurrences and Management.

UNIT-V:

Conservation and Planning – Integrated Basin Planning – Conjuctive use of Surface and Groundwater Resources – Laws of Protection of Water Resource.

BOOKS FOR REFERENCE

1. Butler – Process and pattern in physical geography – Johnes Ltd, London 1985.
2. Chow. V.T. Hand Book of Applied Hydrology – M.C. Crow Hill 1964.
3. David Keithtoo – Ground Water Hydrology – John Wiley and sons, New York 1960.
4. Ragunath – Hydrology Principles Analysis Design – Wiley Eastern Ltd. New Delhi 1986.

UNITS	TOPIC	LECTURE HOURS	MODE OF TEACHING
UNIT 1			
	Water as a Resource – Surface Water – Run off	2	Chalk and talk and VLC
	Ground Water – Types	2	PPT Lecture and VLC
	Porosity, Permeability - Water Table.	2	PPT Lecture and VLC
UNIT 11			

	Water storage – Glaciers, River	2	PPT Lecture and VLC
	Channels, Lakes and Reservoirs,	2	PPT Lecture and VLC
	Soil Moisture, Ground water – Hydrological cycle.	2	PPT Lecture and VLC
UNIT III			
	Water Uses – Consumptive and non consumptive,	2	Chalk and talk - VLC
	Domestic, Municipal,	2	PPT Lecture and VLC
	Irrigation and industries	2	PPT Lecture and VLC
UNIT IV			
	Problems of water resources	2	chalk and talk -VLC
	Major areas of Flood and Drought	2	Chalk and talk - VLC
	Flood and Drought occurrences and Management	2	Chalk and talk - VLC
UNIT V			
	Conservation and Planning – Integrated Basin Planning	2	Chalk And Talk and PPT lecture
	Groundwater Resources	2	Chalk And Talk and PPT lecture
	Laws of Protection of Water Resource.	2	Chalk And Talk VLC

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
CO2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
CO3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Mean Overall Score															4.4

Result: The Score for this Course is 4.4 (High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%

Scale	1	2	3	4	5
Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0
Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = $\frac{\text{Total of Value}}{\text{Total No. of Pos \& PSOs}}$

Mean Overall Score of COs = $\frac{\text{Total of Mean Score}}{\text{Total No. of COs}}$

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of Geography

Programme : B.Sc. GEOGRAPHY (UG) **Part III: MAJOR**

Core/Allied/Elective; SKILL BASED ELECTIVE

Semester : VI **Hours : 2 P/W 30 Hrs P/S**

Sub. Code : SG66 **Credits: 2**

TITLE OF THE PAPER: GEOGRAPHY OF HEALTH

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT
	2	1		0.5	0.5

PREAMBLE: Geography of Health is a sub discipline of human **geography**, which deals with the interaction between people and the environment. **Health geography** views **health** from a holistic perspective encompassing society and space, and it conceptualizes the role of place, location and **geography** in **health**, well-being and disease

COURSE OUTCOME At the end of the Semester, the Students will be able to	Unit	Hrs P/S
UNIT 1 CO1: Understand the nature scope and significance of health geography.	1	6
UNIT 2 CO2: Find out the Geographical Background of Diseases. Create Awareness of malnutrition and hygiene.	2	6
UNIT 3 CO3: Understand classification of diseases.	3	6
UNIT 4 CO4: Create Awareness of malnutrition and hygiene.	4	6
UNIT 5 CO5: Understand the Process of health care planning in India.	5	6

SEMESTER – VI
SKILL BASED ELECTIVE – VI
CODE: SG66 - GEOGRAPHY OF HEALTH

UNIT-I:

Nature, Scope and significance of Geography of Health.

UNIT-II:

Geographical factors affecting Human Health – Physical, Social, Economic and Environmental factors.

UNIT-III:

Classification of Diseases – Genetic, Communicable, Non – Communicable and Deficiency disease.

UNIT-IV:

Major Diseases – Cholera, Malaria, Tuberculosis, Hepatitis, Leprosy, Cardiovascular, Cancer, AIDS and STDS.

UNIT-V

Health Care Planning in India – Health care services, Primary Health Care, Family Welfare, Immunization, National Diseases Eradication Programmes.

BOOKS FOR REFERENCE

1. Ahmed Hussain .Geography and Health-Mahaveer & sons,New Delhi-2007.
2. Cliff. A and Hagget. P. – Atlas of Disease Distribution – Basil Backwell Oxford – 1989.
3. May J.M. The World Atlas of Disease, Nat. Book Trust, New Delhi - 1970.
4. Misra.R.P Geography of Health - Concept Publishing Company,New Delhi-2007
5. Park. K. Preventive and Social Medicine - M/s Banarasidas Bhenot, Jabalpur - 2007.
6. Rais A, and Learmonth A.T. A - Geographical Aspects of Health and Diseases in India - 1970.

UNITS	TOPIC	LECTURE HOURS	MODE OF TEACHING
UNIT 1			
	Geography of Health-Nature	2	Chalk and talk
	Scope	2	Chalk and talk
	significance	2	Chalk and talk
UNIT 11			
	Geographical factors affecting Human Health – Physical	2	Medical reports and VLC
	Social,	2	Medical reports and VLC
	Economic and Environmental factors	2	Medical reports and VLC
UNIT III			
	Classification of Diseases – Genetic, Communicable,.	2	Medical reports ,VLC and PPT Representation
	Non – Communicable	2	Medical reports, VLC and PPT Representation
	Deficiency disease	2	Medical reports ,VLC and PPT Representation
UNIT IV			
	Major Diseases – Cholera, Malaria, Tuberculosis,	2	Medical reports ,VLC and PPT Representation
	Hepatitis, Leprosy, Cardiovascular,	2	Medical reports, VLC and PPT Representation
	Cancer, AIDS and STDS.	2	Medical reports ,VLC and PPT Representation
UNIT V			
	Health Care Planning in India – Health care services, Primary Health Care,	2	Medical reports ,VLC and PPT Representation
	Family Welfare, Immunization,	2	Medical reports ,VLC and PPT Representation
	National Diseases Eradication Programmes.	2	Medical reports ,VLC and PPT Representation

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

CO4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Mean Overall Score															4.8

Result: The Score for this Course is 3.45 (High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5
Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0
Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = $\frac{\text{Total of Value}}{\text{Total No. of Pos \& PSOs}}$	Mean Overall Score of COs = $\frac{\text{Total of Mean Score}}{\text{Total No. of COs}}$

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of Geography.

Programme : B.SC GEOGRAPHY (UG) **Part III: MAJOR**
Core/Allied/Elective: ELECTIVE
Semester : V **Hours : 5 P/W 75 Hrs P/S**
Sub. Code : EG51 **Credits :5**

TITLE OF THE PAPER: WORLD REGIONAL GEOGRAPHY

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT
	5	2	1	1	1

PREAMBLE: The explains the broad regional divisions of the world in a changing world system.To appraise the students about resources: their potentials: utilization and suitability aspects. To provide for an understanding and appreciation of the mutual dependence and resource sharing.

COURSE OUTCOME At the end of the Semester, the Students will be able to	Unit	Hrs P/S
UNIT 1 CO1: know about different types of Regions – understand the specific characteristics	1	15
UNIT 2 CO2: Acquire knowledge about Tropical Regions – Monsoon type – Sudan type - Sahara type – Caribbean type	2	15
UNIT 3 CO3: Analyse the Warm Temperate Regions- Mediterranean type- China type – Tropical Desert type.	3	15
UNIT 4 CO4: Understand the Cool Temperate Regions- West European type – St.Lawrence type- Prairie type.	4	15
UNIT 5 CO5: Explain about the Polar Regions – Taiga type – Tundra type	5	15

SYLLABUS

SEMESTER – V
MAJOR ELECTIVE – II
CODE : EG51 - WORLD REGIONAL GEOGRAPHY

UNIT –I:

Regions – Definition- Climatic and Natural Regions- Equatorial Regions – Lowland or the Amazon type -Highland or the Ecuador type

UNIT –II:

Tropical Regions – Monsoon type – Sudan type - Sahara type – Caribbean type

UNIT –III:

Warm Temperate Regions- Mediterranean type- China type – Tropical Desert type.

UNIT –IV:

Cool Temperate Regions- West European type – St.Lawrence type- Prairie type.

UNIT –V:

Polar Regions – Taiga type – Tundra type.

BOOKS FOR REFERENCE

1. Balaji H. Muller O - Geography, Regions and concepts -John Wiley & sons, Newyork-1993.
2. Henitzelman and High Smith – World regional *geography* Prentice - Hall of India (Private)Ltd Newdelhi - 1965.
3. Khanna k.k and Gupta.VK- Economic and commercial Geography and sons,Educational publishers;New Delhi-2001
4. Mamoria C.B – Economic and commercial Geography Shiva Lal Agarwala & company, Agra- 1992
5. Negi. B.S –Geography of Resourcses - Kedarnath Ramanth pulications, Meerut - 1993.
6. Prethiwish kumar Roy & somnath mukhergee – Economic Geography - New central Book Agency, Calcutta - 1993.
7. Sharma and courtinoco . C - Economic and Commerical Geography of India - Vikas Publishing House (Pvt) Ltd,patna-1980
8. Wheeler J.H, Trentonkostbande J - Saunders college Publishing, Philedelphia. - 1990.
9. Willisam van Royer & Nels A.Bengtson - Fundamentals of Economic Geography
10. An introduction tothe study of resources - Prentice Hall of India (Pvt) Ltd, New Delhi

UNITS	TOPIC	LECTURE HOURS	MODE OF TEACHING
UNIT 1			
	Regions – Definition- Climatic and Natural Regions	5	Chalk and talk , Group discussion, Maps ,Atlas and PPT lecture
	Equatorial Regions – Lowland or the Amazon type -	5	Chalk and talk , Group discussion, Maps ,Atlas and PPT lecture
	Equatorial Regions – Lowland or the Amazon type -	5	Chalk and talk , Group discussion, Maps ,Atlas and PPT lecture
UNIT 11			
	Tropical Regions – Monsoon type – Sudan type -	5	Chalk and talk , Group discussion, Maps ,Atlas and PPT lecture
	Sahara type	5	Chalk and talk , Group discussion, Maps ,Atlas and PPT lecture
	Caribbean type	5	Chalk and talk , Group discussion, Maps ,Atlas and PPT lecture
UNIT III			
	Warm Temperate Regions- Mediterranean type	5	Chalk and talk , Group discussion, Maps ,Atlas and PPT lecture
	China type	5	Chalk and talk , Group discussion, Maps ,Atlas and PPT lecture
	Tropical Desert type.	5	Chalk and talk , Group discussion, Maps ,Atlas and PPT lecture
UNIT IV			
	Cool Temperate Regions- West European type	5	Chalk and talk , Group discussion, Maps ,Atlas and PPT lecture
	St.Lawrence type	5	Chalk and talk , Group discussion, Maps ,Atlas and PPT lecture
	Prairie type	5	Chalk and talk , Group discussion, Maps ,Atlas and PPT lecture
UNIT V			
	Polar Regions – Taiga type	8	Chalk and talk , Group discussion, Maps ,Atlasn PPT lecture and VLC
	Tundra type	7	

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	3	5	5	4	3	3	3	4	3	3	3	4	5	3	3.6
CO2	5	4	3	3	3	4	5	5	4	3	3	3	4	3	3.7
CO3	3	5	4	3	4	3	4	4	3	5	5	4	3	3	3.8
CO4	4	5	5	4	3	3	3	3	4	3	4	5	4	3	3.8
CO5	5	3	3	3	4	3	4	4	3	4	3	4	5	3	3.6

Mean Overall Score	3.7

Result: The Score for this Course is 3.45 (High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5
Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0
Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = $\frac{\text{Total of Value}}{\text{Total No. of Pos \& PSOs}}$	Mean Overall Score of COs = $\frac{\text{Total of Mean Score}}{\text{Total No. of COs}}$

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of Geography

Programme : B.SC GEOGRAPHY (UG) **Part III: MAJOR**
Core/Allied/Elective: ELECTIVE
Semester : V **Hours : 5 P/W 75 Hrs P/S**
Sub. Code : EG52 **Credits :5**

TITLE OF THE PAPER: SETTLEMENT GEOGRAPHY

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT

	5	2	1	1	1

PREAMBLE:

Orderly description and interpretation of morphology, functions and spatial organization of human settlements on the earth surface

COURSE OUTCOME At the end of the Semester, the Students will be able to	Unit	Hrs P/S
UNIT 1 CO1: Nature and scope : to understand the location size and growth has related with nature of Settlements.	1	15
UNIT 2 CO2: Rural settlements : space bound social organization varying from an isolated farmstead	2	15
UNIT 3 CO3: Urban settlements: to study the social organization has much greater scope	3	15
UNIT 4 CO4: Urban morphology : examine the concerned with form, structure and functions of an area	4	15
UNIT 5 CO5:Understand the demographic pattern and problems of urban areas	5	15

SYLLABUS

SEMESTER – V
MAJOR ELECTIVE – II
CODE : EG52 - SETTLEMENT GEOGRAPHY

UNIT –I:

Nature and Scope – Types of Settlements- Rural and Urban

UNIT –II:

Rural Settlements – Locational factors – Rural Settlement Types and Patterns – rural service centres.

UNIT –III:

Urban Settlements – concept – Site & Situation - Functional classification of towns – Factors for Urban Growth – Urbanization - Urbanization in India.

UNIT –IV:

Urban Morphology – Urban Land Use Models - Concentric Zone Theory – Sector Theory – Multiple Nuclei Theory.

UNIT –V:

Urban Demography- Urban Problems – Slums – Transport - Pollution – Urban Planning.

BOOKS FOR REFERENCE

1. Everson J.A & Fitz Gerald B.P-Concepts in Geography- Settlement Patterns- Longman Group Ltd, England-1969.
2. Gohcheng Leong, Gillion c.Morgon – Human & Economic Geography – Oxford University press, Oxford – 1995.
3. Johnson J.H. – Urban geography – An Introductory Analysis – Pergamon Press, London – 1967.
4. Majid Husain – Urban Geography - Anmol Publications Pvt Ltd, New Delhi - 1994.
5. Mandal .R.B Urban Geography – A Text book – Concept publishing Company, New Delhi – 2000.
6. Mayer H.M &Kohn C.F - Readings in Urban Geography – Chicago Printing Press, Chicago – 1967.
7. Misra H.N. - Rural Geography - Heritage Publishers, New Delhi – 1987.
8. Money D.C. - Introduction to Human Geography – Evan Brothers, London - 1967.
9. Sinha S.P. Faguni Ram, Manager Prasad, Hari Ram Nangalia - Instant Encyclopaedia of Geography of Urban and Rural Geography - Mittal Publications, New Delhi – 1993.
10. Singh R.L. - Reading in Rural Settlement Geography – Kalyani Publishers, New Delhi – 1979.

UNITS	TOPIC	LECTURE HOURS	MODE OF TEACHING

UNIT 1			
	Nature and Scope	5	Chalk and talk
	Types of Settlements	5	PPT lecture and student seminar
	Rural and Urban	5	PPT and video lecture
UNIT 11			
	Rural Settlements Locational factors –	5	Chalk and talk -test
	Rural Settlement Types	5	PPT lecture and student seminar
	Patterns	5	PPT lecture
UNIT III			
	Urban Settlements – Site & Situation	5	Chalk and talk -video
	Functional classification	5	PPT , Chalk and talk lecture
	Urbanization	5	video lecture-test
UNIT IV			
	Urban Morphology – Morphology	5	PPT lecture
	Land Use Models	5	PPT lecture and student seminar
	Theory.	5	PPT lecture
UNIT V			
	Demography and Problems – Demography	5	PPT lecture
	Problems	5	video lecture
	Planning	5	Reference and video lecture

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	3	5	5	4	3	3	3	4	3	3	3	4	5	3	3.6
CO2	5	4	3	3	3	4	5	5	4	3	3	3	4	3	3.7
CO3	3	5	4	3	4	3	4	4	3	5	5	4	3	3	3.8
CO4	4	5	5	4	3	3	3	3	4	3	4	5	4	3	3.8
CO5	5	3	3	3	4	3	4	4	3	4	3	4	5	3	3.6
Mean Overall Score															3.7

Result: The Score for this Course is 3.45 (High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5
Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0
Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = $\frac{\text{Total of Value}}{\text{Total No. of Pos \& PSOs}}$

Mean Overall Score of COs = $\frac{\text{Total of Mean Score}}{\text{Total No. of COs}}$

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL

KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of Geography

Programme : B.SC GEOGRAPHY (UG) **Part III: MAJOR**
Core/Allied/Elective: ELECTIVE
Semester : VI **Hours : 5 P/W 75 Hrs P/S**
Sub. Code : EG63 **Credits : 5**

TITLE OF THE PAPER: GEOGRAPHY OF TAMILNADU

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT
	5	2	1	1	1

PREAMBLE: Geography of Tamilnadu is a part of Regional Geography explains the Physical, socio-economic development and distribution of resources **of Tamilnadu.**

COURSE OUTCOME At the end of the Semester, the Students will be able to	Unit	Hrs P/S
UNIT 1 CO1: Identify the location, Relief, Drainage, Climate, Types of Soils and Forest of Tamil Nadu	1	15
UNIT 2 CO2: Examine the distribution of various crops in Tamilnadu	2	15
UNIT 3 CO3: Analyse the minerals and power resources in Tamilnadu	3	15
UNIT 4 CO4: Knowledge about the different types industries in Tamilnadu	4	15
UNIT 5 CO5: Understand the growth, distribution of population of Tamilnadu and the various kinds of transportation like land ,water and air and trade	5	15

SYLLABUS

SEMESTER – VI

MAJOR ELECTIVE –III

CODE: EG63 - GEOGRAPHY OF TAMILNADU

UNIT-I:

Location – Relief and Drainage – Climate – Soil and Natural Vegetation.

UNIT-II:

Agriculture : Irrigation -Types ,Multipurpose projects – Major Crops –Rice, Maize , Cotton, Sugarcane, Tea, Coffee and Tobacco.

UNIT-III:

Mineral Resources – Iron Ore and Bauxite, Power Resources -Renewable-Wind, Solar and Hydro Electric Power, Non Renewable - Coal, Petroleum, Natural Gas - Thermal and Atomic power plants.

UNIT-IV:

Industries – Cotton Textiles, Sugar, Cement Industries and Small Scale Industries.

UNIT-V:

Population – Growth -Distribution – Problems. Transport and Trade.

BOOKS FOR REFFERENCE

1. Basic Resources Atlas of Tamilnadu publications University of Madras 1983.
2. Kumarasamy .V Tamilnadu geography – Sakthi publications Kumbakonam 2003(Tamil Book).
3. Perumalsamy .S- Economic Development of Tamilnadu S.Chand and Company- New Delhi 1996.
4. Sharma, T.C Coutinho- Economic and Commercial Geography of India – Vikas Publishing House Pvt. Ltd.2003.
5. Sura and Manorama Year Book 2012.
6. A Social and Economic Atlas of India. Oxford University Publication – 1987
7. Census Atlas of India-1991.

UNITS	**TOPIC**	**LECTURE HOURS**	**MODE OF TEACHING**
UNIT 1			
	Location - Relief -	5	Group discussion, Maps and Atlas
	Drainage - Climate	5	Group discussion, Maps and Atlas

	-Soil - Natural Vegetation	5	Group discussion, Maps and Atlas
UNIT 11			
	Agricultural Crops - Distribution Of Rice, Wheat , Maize	5	chalk and talk and usage of maps and Atlas
	Cotton, Sugarcane,	5	chalk and talk and usage of maps and atlas
	Tea , coffee and tobacco	5	chalk and talk and usage of maps and atlas
UNIT III			
	Mineral Resources – Iron Ore and Bauxite	5	Maps , Atlas and VLC
	Power Resources -Renewable-Wind, Solar and Hydro Electric Power,	5	Maps , Atlas and VLC
	Non Renewable - Coal, Petroleum, Natural Gas - Thermal and Atomic power plants.	5	Maps , Atlas and VLC
UNIT IV			
	Major Industries – Cotton Textiles,	5	chalk and talk and usage of maps and atlas and PPT lecture
	Sugar, Cement Industries	5	chalk and talk and usage of maps and atlas and PPT lecture
	Small Scale Industries.	5	chalk and talk and usage of maps and atlas and PPT lecture
UNIT V			
	Population – Growth Distribution Problems.	5	Group discussion, Census Report, Maps and Atlas and PPT lecture
	Transport – land transport	5	Group discussion, Census Report, Maps and Atlas and PPT lecture
	Water and air Transport and Trade.	5	Group discussion, Maps and Atlas and PPT lecture

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

CO2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
CO3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
CO4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Mean Overall Score															4.6

Result: The Score for this Course is 4.6 (High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5
Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0
Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = $\frac{\text{Total of Value}}{\text{Total No. of Pos \& PSOs}}$	Mean Overall Score of COs = $\frac{\text{Total of Mean Score}}{\text{Total No. of COs}}$

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of Geography

Semester : v **Hours : 2 P/W 30Hrs P/S**
Sub. Code :NMG1

Credits :

SEMESTER – V

NON – MAJOR ELECTIVE – I

FUNDAMENTALS OF PHYSICAL GEOGRAPHY

CODE: NMG1

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT
	6/7/8	2	1	1	2

PREAMBLE: The paper explain solar System, shape and size of the earth system earth fundamentals of physical geography

COURSE OUTCOME At the end of the Semester, the Students will be able to	Unit	Hrs P/S
1. **UNIT 1 CO1**: Geography – Definition – Solar System – Shape & Size of the Earth –Configuration of Land & Sea.	1	6
1. **UNIT 2 CO2**: Interior of the Earth – Earth Movement - Fold, Fault, Earthquake – Volcanoes.	2	6
UNIT 3 CO3: Rocks – Igneous- Sedimentary- Metamorphic .	3	6
1. **UNIT 4 CO4**: Weathering - Factors –Physical, Chemical, Biological.	4	6
1. **UNIT 5 CO5**: Elements of weather and climate – temperature , pressure , wind, humidity and precipitation	5	6

SYLLABUS

SEMESTER – V

NON – MAJOR ELECTIVE – I

FUNDAMENTALS OF PHYSICAL GEOGRAPHY

CODE: NMG1

UNITS

2. Geography – Definition – Solar System – Shape & Size of the Earth –Configuration of Land & Sea.

3. Interior of the Earth – Earth Movement - Fold, Fault, Earthquake – Volcanoes.

4. Rocks – Igneous- Sedimentary- Metamorphic .

5. Weathering - Factors –Physical, Chemical, Biological.

6. Elements of weather and climate – temperature , pressure , wind, humidity and precipitation

BOOKS FOR REFERENCE

1. Das Gupta & Kapoor – Principles of Physical Geography – Chand & Co., Ltd., New Delhi - 2004.
2. Sharma. T.C. & Coutino - Economic and Commercial Geography of India – Vikas Publishing House Pvt.
3. Patna - 1980.
4. Strahler A.H.& Strahler. A.N. – Modern Physical Geography – John Willey& sons - 2004.
5. Surendar Singh – Geography for the UPSC Civil Service – Preliminary Examination – Tata Mc Graw Hill – New Delhi - 2007.

UNITS	TOPIC	LECTURE HOURS	MODE OF TEACHING
UNIT 1			
	Geography – Definition – Solar System – Shape & Size of the Earth –Configuration of Land & Sea.	6	Chalk and talk, ,Grouph discussion,with Models , PPT and VLC
UNIT 11			

	Interior of the Earth – Earth Movement -	2	Chalk and talk, ,Group discussion,with Models , PPT and VLC
	Fold, Fault,	4	Chalk and talk, ,Group discussion,with Models , PPT and VLC
UNIT III			
	Rocks – Igneous-Sedimentary-Metamorphic .	6	Chalk and talk, ,Group discussion,with Models , PPT and VLC
UNIT IV			
	Weathering - Factors –Physical, Chemical, Biological.	6	Chalk and talk, ,Group discussion,with Models , PPT and VLC
UNIT V			
	Elements of weather and climate – temperature , pressure , wind, humidity and precipitation	6	Chalk and talk, ,Group discussion,with Models , PPT and VLC

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
CO3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CO5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Mean Overall Score															4.6

Result: The Score for this Course is 4.6 (Very High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5
Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0
Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = $\frac{\text{Total of Value}}{\text{Total No. of Pos \& PSOs}}$

Mean Overall Score of COs = $\frac{\text{Total of Mean Score}}{\text{Total No. of COs}}$

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of English.

SEMESTER-VI

NON MAJOE ELECTIVE

SOCIAL AND CULTURAL GEOGRAPHY

CODE: NMG2

UNITS:

1. Nature, scope and development of social geography

2. Space and society: Understanding society and its structure and process; geographical bases of social formations.

3. Social Geography of India; Evolution of Socio-Cultural regions of India

4. Indian unity and diversity: Role of race, caste, ethnicity; religion and languages.

5. Public policy and social planning in India.

BOOKS FOR REFERENCE:

1. Ahmad, Aijazuddin, Social Geography, Rawat Publication, New Delhi, 1999.
2. De Blij. H.D. Human Geography. John Wiley and son, New York.
3. Dreze Jean, Amartya Sen, Economic Development and Social opportunity, Oxford University Press, New Delhi, 1996.
4. Gregory, D and J.Larry, (eds)Social relations and spatial structures, McMillan, 1985.

Programme : UG **Part IV: / NON – MAJOR ELECTIVE – II**
Semester : VI **Hours : 2P/W 30Hrs P/S**

Sub. Code :NMG2

Credits :

TITLE OF THE PAPER:__ NON – MAJOR ELECTIVE – II

SOCIAL – CULTURAL GEOGRAPHY

Pedagogy	Hours	Lecture	Peer Teaching	GD/VIDOES/TUTORIAL	ICT
	6/7/8	2	1	1	2

PREAMBLE: It's a Branch Of Human Geography
It explains the Social and Cultural aspects of the world

COURSE OUTCOME At the end of the Semester, the Students will be able to	Unit	Hrs P/S
UNIT 1 CO1: To understand the nature and scope of Social Geography	1	6
UNIT 2 CO2: To know the structure and process of the space and society	2	6
UNIT 3 CO3: To explain the knowledge of Socio-Cultural regions of India	3	6
UNIT 4 CO4: To understand the Religion and Caste system of India.	4	6
UNIT 5 CO5: To know the Classification of Indian language – Language Concentration and diversification.	5	6

SYLLABUS

UNITS

1. Nature – Scope and Content of Social and Cultural Geography.
2. Social space and cultural landscape – Elements of Society – Elements of Culture.
3. Characteristics and Classification of Races - Cultural realms of the world.
4. Caste and Religion – religious groups – Caste system of India.
5. Geography of Language – Classification of Indian language – Language Concentration and diversification.

REFERENCES:

1. Alyn.c.Duxbury and Alison . B. Duxbury- an introduction to the world's oceans- Addison Wesley publishing company ltd .1994
2. Chorley.R.J- Introduction to Physical Hydrology- Methuen - 1974
3. Das Gupta-Principles of Physical Geography – Chand & Co- New Delhi - 1955.
4. Gorden Pirie.R-Oceanography-Oxford University Press- U.S.A -1977.
5. Monkhouse- Principles of Physical Geography-John Wiley & Sons - 1992.
6. Philip Lake- Physical Geography- MacMillan & Co - 1966.
7. Siddhartha.K.- Oceanography- A Brief Introduction – Kisalya Publication, Pvt.Ltd - 1999.
8. Sharma and Vatal-Oceanography for Geographers –Chaitanya Publication - 1986.
9. Strahler – Physical Geography - John Wiley & Sons – New York -1992.

10. Tom Garrison – Oceanography – An Introduction to Marine Science – Words Worth Publishing Company – Belmont – California - 1993.

UNITS	TOPIC	LECTURE HOURS	MODE OF TEACHING
UNIT 1			
	Nature – Scope and Content of Social and Cultural Geography	2	Chalk and talk, ,Group discussion, , PPT and VLC
	Scope and Content of Cultural Geography	2	Chalk and talk, ,Group discussion, , PPT and VLC
	Scope and Content of Cultural Geography	2	Chalk and talk, ,Group discussion, , PPT and VLC
UNIT 11			
	Social space and cultural landscape	2	Chalk and talk, ,Group discussion, , PPT and VLC
	Elements of Society	2	Chalk and talk, ,Group discussion, , PPT and VLC
	Elements of Culture	2	Chalk and talk, ,Group discussion, , PPT and VLC
UNIT III			
	Characteristics of Races	2	Chalk and talk, ,Group discussion, , PPT and VLC
	Classification of Races	2	Chalk and talk, ,Group discussion, , PPT and VLC
	Cultural realms of the world	2	Chalk and talk, ,Group discussion, , PPT and VLC
UNIT IV			
	Caste and Religion	2	Chalk and talk, ,Group discussion, , PPT and VLC
	religious groups	2	Chalk and talk, ,Group discussion, , PPT and VLC
	Caste system of India	2	Chalk and talk, ,Group discussion, , PPT and VLC
UNIT V			
	Geography of Language	2	Chalk and talk, ,Group discussion, , PPT and VLC
	Classification of Indian language	2	Chalk and talk, ,Group discussion, , PPT and VLC
	Language Concentration and diversification.	2	Chalk and talk, ,Group discussion, , PPT and VLC

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	3	4	3	3	4	4	3	3	5	3	3	3	3	4	3.428571
CO2	3	4	5	4	3	3	3	3	4	4	4	4	4	4	3.714286
CO3	3	4	4	4	4	4	4	4	3	3	3	3	5	5	3.785714
CO4	3	3	4	4	5	4	3	3	3	4	3	4	3	5	3.642857
CO5	4	5	3	3	5	5	5	5	5	4	4	4	5	5	4.428571
Mean Overall Score															3.8

Result: The Score for this Course is 3.45 (High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5
Relation	0.0-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-5.0
Quality	Very Poor	Poor	Moderate	High	Very High

Mean Score of COs = $\frac{\text{Total of Value}}{\text{Total No. of Pos \& PSOs}}$

Mean Overall Score of COs = $\frac{\text{Total of Mean Score}}{\text{Total No. of COs}}$

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of geography.

SEMESTER – III

VALUE ADDED COURSE

COMPUTER ASSISTED CARTOGRAPHY

UNITS

1. Map – Computer assisted mapping – GIS – Components – Types of spatial Data – Vector and Raster data.
2. Data Base Management – Data types – Classification – Manipulation – Storing and retrieval.
3. Geographic Co ordinates – UTM – Standard usage in GIS.
4. Digitizing – Overlaying – Labeling and Attributed data.
5. Preparing maps, Diagrams, Thematic maps.

BOOKS FOR REFERENCE

1. Peter Nortons (1995) Introduction of Computers, Published by Gelncoe, Newyork.
2. Arthess H.Robinson, Joel L.Morrison, Phillip C.Muebracks, A.Jon Kimberling – Elements of cartography, 6th Ed. John Wiley and Sons, New York.
4. George Bokerte. The GIS Book, Ed.Onward Press.

UNITS	TOPIC	LECTURE HOURS	MODE OF TEACHING
UNIT 1			
		2	Chalk and talk, ,Grouph discussion, , PPT and VLC
		2	Chalk and talk, ,Grouph discussion, , PPT and VLC
		2	Chalk and talk, ,Grouph discussion, , PPT and VLC
UNIT 11			
	Social space and cultural landscape	2	Chalk and talk, ,Grouph discussion, , PPT and VLC

	Elements of Society	2	Chalk and talk, ,Grouph discussion, , PPT and VLC
	Elements of Culture	2	Chalk and talk, ,Grouph discussion, , PPT and VLC
UNIT III			
	Characteristics of Races	2	Chalk and talk, ,Grouph discussion, , PPT and VLC
	Classification of Races	2	Chalk and talk, ,Grouph discussion, , PPT and VLC
	Cultural realms of the world	2	Chalk and talk, ,Grouph discussion, , PPT and VLC
UNIT IV			
	Caste and Religion	2	Chalk and talk, ,Grouph discussion, , PPT and VLC
	religious groups	2	Chalk and talk, ,Grouph discussion, , PPT and VLC
	Caste system of India	2	Chalk and talk, ,Grouph discussion, , PPT and VLC
UNIT V			
	Geography of Language	2	Chalk and talk, ,Grouph discussion, , PPT and VLC
	Classification of Indian language	2	Chalk and talk, ,Grouph discussion, , PPT and VLC
	Language Concentration and diversification.	2	Chalk and talk, ,Grouph discussion, , PPT and VLC

Course Outcomes (Cos)	Programme Outcomes (Pos)							Programme Specific Outcomes (PSOs)							Mean scores of Cos
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	
CO1	3	4	3	3	4	4	3	3	5	3	3	3	3	4	3.428571
CO2	3	4	5	4	3	3	3	3	4	4	4	4	4	4	3.714286
CO3	3	4	4	4	4	4	4	4	3	3	3	3	5	5	3.785714
CO4	3	3	4	4	5	4	3	3	3	4	3	4	3	5	3.642857
CO5	4	5	3	3	5	5	5	5	5	4	4	4	5	5	4.428571
Mean Overall Score															3.8

Result: The Score for this Course is 3.45 (High Relationship)

Mapping	1-20%	21-40%	41-60%	61-80%	81-100%
Scale	1	2	3	4	5
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Mean Score of COs = $\frac{\text{Total of Value}}{\text{Total No. of Pos \& PSOs}}$	Mean Overall Score of COs = $\frac{\text{Total of Mean Score}}{\text{Total No. of COs}}$

BLOOM'S TAXANOMY	INTERNAL	EXTERNAL
KNOWLEDGE	50%	50%
UNDERSTANDING	30%	30%
APPLY	20%	20%

Course Designer: Department of geography.

SEMESTER – IV

VALUE ADDED COURSE

NON – MAJOR ELECTIVE

MAPPING TECHNIQUES

UNITS

1. Map – Definition – Nature – Scope – Modern development of Cartography.
2. The Earth – Latitude and Longitude – Local time – Standard time and International Date line. Fundamentals of Projection.
3. Map scales and Types.
4. Map types and uses.
5. Cartographic Symbols and their uses – Point, Line and Area.

BOOKS FOR REFERENCE

10. Ahmad Khan. M. Z –Text Book of Practical Geography – Concept Publishing Company – New Delhi – 2001
11. Ishtiaq M. – A text book of Practical Geography – Heritage Publisher – New Delhi - 1989.
12. Jayachandran.S – Practical geography – Tamilnadu Book Society, Chennai, 1963 (Tamil version).
13. Misra R.P. and Ramesh. A- Fundamentals of Cartography – Concept Publishing Company – New Delhi - 2002.
14. Robinson.A.H. Elements of Cartography. John Wiley &Sons.U.S.A - 1995.
15. Monkhouse F.J .&Wilkinson.H.R–Maps and Diagrams – Methuen London - 1994.
16. Singh R.L; Elements of Practical Geography Kalyani Puplication. New Delhi.1979
17. Singh and Kanunja – Map work and Practical Geography – Central Book Depot – Allahabad.1966
18. Sethu Rakkayee .S – An Introduction to Cartography – Shanmugam Pathipagam, madurai-7,2005(Tamil copy).