

**B. Sc, GEOGRAPHY (2017 – 2018)**

S No	SEM	Category	Paper Code	Title of the Paper	Maximum Marks			Maximum marks for passing			Hours Week	Credits
					CIA	E.E	Total	CIA	E.E	Total		
1	<b>I</b>	Part - I	17U1GYT1/H1	Tamil – I / Hindi - I	25	75	100	10	30	40	6	3
2		Part - II	17U1GYE1	English - I	25	75	100	10	30	40	6	3
3		Core	17U1GYC1	Geomorphology - I	25	75	100	10	30	40	5	5
4		Core	17U1GYC2	Climatology	25	75	100	10	30	40	5	5
5		Allied	17U1GYA1	Allied Statistics - I	25	75	100	10	30	40	5	4
		Allied	17U2GYAP1	Allied Statistics Practical (NS)	-	-	-	-	-	-	3	-
6		ES	17U1GYES	Environment studies	-	100	100	-	40	40	-	1
7	<b>II</b>	Part - I	17U2GYT2/H2	Tamil – II/ Hindi - II	25	75	100	10	30	40	6	3
8		Part - II	17U2GYE2	English - II	25	75	100	10	30	40	6	3
9		Core	17U2GYC3	Geomorphology - II	25	75	100	10	30	40	5	5
10		Core	17U2GYCP1	Representation of Relief and Map Making	40	60	100	16	24	40	4	4
11		Allied	17U2GYAP1	Allied Statistics Practical (NS)	40	60	100	16	24	40	3	2
12		Allied	17U2GYA2	Allied Statistics - II	25	75	100	10	30	40	5	4
13		SBE - I	17U2GYS1	Skill Based Elective - I Environmental Geography	25	75	100	10	30	40	1	1
14		VBE	17U2GYVE	Value Based Education - SS	25	75	100	10	30	40	-	-
15	<b>III</b>	Part - I	17U3GYT3/H3	Tamil - III/ Hindi - III	25	75	100	10	30	40	6	3
16		Part - II	17U3GYE3	English - III	25	75	100	10	30	40	6	3
17		Core	17U3GYC4	Oceanography	25	75	100	10	30	40	5	5
18		Core	17U3GYC5	Human Geography	25	75	100	10	30	40	5	4
19		Allied	17U3GYA3	Cartography - I	25	75	100	10	30	40	5	4
		Allied	17U4GYAP2	Allied Practical – Cartography (NS)	-	-	-	-	-	-	3	-
20		GS	17U3GYGS	Gender Studies – SS	-	100	100	-	40	40	-	-

S No	SEM	Category	Paper Code	Title of the Paper	Maximum Marks			Maximum marks for passing			Hours Week	Credits
					CIA	E.E	Total	CIA	E.E	Total		
21	IV	Part - I	17U4GYT4/H4	Tamil - IV/ Hindi - IV	25	75	100	10	30	40	6	3
22		Part - II	17U4GYE4	English - IV	25	75	100	10	30	40	6	3
23		Core	17U4GYC6	World Regional Geography	25	75	100	10	30	40	5	5
24		Core	17U4GYCP2	Climatic Diagram and Weather Map (Practical)	40	60	100	16	24	40	4	4
25		Allied	17U4GYA4	Cartography - II	25	75	100	10	30	40	3	2
26		Allied	17U4GYAP2	Allied Practical - Cartography (NS)	40	60	100	16	24	40	5	4
27		SBE - II	17U4GYS2	Skill Based Elective - Economic Geography	25	75	100	10	30	40	1	1
28	V	Core	17U5GYC7	Geography of Resources	25	75	100	10	30	40	5	5
29		Core	17U5GYC8	Agricultural Geography	25	75	100	10	30	40	5	5
30		Core	17U5GYC9	Settlement Geography	25	75	100	10	30	40	5	5
31		Core	17U5GYC10	Geography of Asia	25	75	100	10	30	40	4	5
32		Major Elective-1	17U5GYEL1A 17U5GYEL1B	Geography of India Geography of Tourism - I	25	75	100	10	30	40	4	4
33		Major Elective-2	17U5GYEL2A 17U5GYEL2B	Geography of Tamilnadu/ Regional Planning	25	75	100	10	30	40	4	4
34		NME	17U5GYNME	Non Major Elective - Demographic Studies	25	75	100	10	30	40	2	1
35		SSD	17U6GYSSD	Soft Skill Development	-	100	100	-	40	40	1	-
36	VI	Core	17U6GYC11	Geo Informatics	25	75	100	10	30	40	6	6
37		Core	17U6GYC12	Disaster Management	25	75	100	10	30	40	6	5
38		Core	17U6GYCP3	Practical - Map Projection and Surveying	40	60	100	16	24	40	6	4
39		Core	17U6GYCP4	Practical-Map Interpretation and Remote Sensing	40	60	100	16	24	40	4	4
40		Major Elective-3	17U6GYEL3A 17U6GYEL3B	Political Geography/ Medical Geography	25	75	100	10	30	40	3	3
41		Major Elective-4	17U6GYEL4A 17U6GYEL4B	Bio Geography/ Geography of Tourism - II	25	75	100	10	30	40	3	3
42		CN	17U6GYCN	Comprehension	-	100	100	-	40	40	1	1
43		GK	17U6GYGK	General Knowledge	-	100	100	-	40	40	1	-
				<b>Extension Activities</b>								
					<b>Total 4300</b>						<b>180</b>	<b>140</b>

**B.Sc. GEOGRAPHY (2017 - 2018)**

<b>Paper Code</b>	<b>Total No. Of Papers</b>	<b>Total Marks</b>	<b>Total Credits</b>	<b>Classification</b>
<b>Part - I</b>	<b>04</b>	<b>400</b>	<b>12</b>	√
<b>Part - II</b>	<b>04</b>	<b>400</b>	<b>12</b>	√
<b>Part - III</b>				
Core	16	1600	76	
Allied	06	600	20	√
Major Elective	04	400	14	
	<b>26</b>	<b>2600</b>	<b>110</b>	
<b>Part - IV</b>				
Environmental Studies	1	100	1	
Value based education	1	100	--	
Skill Based Elective	2	200	2	
Gender studies	1	100	--	
Non Major Elective	1	100	1	√
Soft skill development	1	100	--	
G.K	1	100	--	
Comprehensive Test	1	100	1	
	<b>9</b>	<b>900</b>	<b>05</b>	
<b>Part - V</b>	<b>Extension Activity</b>		<b>1</b>	X
<b>Total</b>	<b>43</b>	<b>4300</b>	<b>140</b>	√

**A.VEERIYA VANDAYAR MEMORIAL SRI PUSHPAM COLLEGE  
(AUTONOMOUS),  
POONDI, THANJAVUR DIST.**

**Question Pattern for UG and PG Programmes for students to  
be admitted during 2017 – 2018 and afterwards**

**Total Marks: 75**

**QUESTION PATTERN**

**SECTION – A  
(Question 1 to 10)**

**10 x 2 = 20 Marks**

1. Short Answer Questions
2. Two Questions from each units (All are answerable)

**SECTION – B  
(Question 11 to 15)**

**5 x 5 = 25 Marks**

1. 5 Paragraph type questions with "either / or" type choice.
2. One question from each unit of the Syllabus.
3. Answer all the questions.

**SECTION – C  
(Question 16 to 20)**

**3 x 10 = 30 Marks**

1. 5 Essay type questions – any three are answerable.
2. One questions from each unit of the Syllabus.

**B.Sc., Geography**

Semester	Subject Code	Title Of The Paper	Hours Of Teaching / Week	No. of Credits
<b>I</b>	<b>17U1GYT1</b>	<b>இக்கால இலக்கியம் (செய்யுள் , உரைநடை, சிறுகதை, புதினம், நாடகம்)</b>	<b>6</b>	<b>3</b>

**கூறு: 1 செய்யுள்**

**நேரம்: 18**

1. இராமலிங்க அடிகளார் - திருவருட்பா - இறைத் திருக்காட்சி —1—10
2. பாரதியார் - தேசியகீதம் : பாரத தேசம் — எங்கள் நாடு,
3. பாரதிதாசன் - புதிய உலகம்: உலக ஒற்றுமை —பேரிகை, தளைஅறு,  
மானுட சக்தி
4. பட்டுக்கோட்டை கல்யாண சுந்தரம் -காடு வெளையட்டும் பெண்ணெ ,
5. நாமக்கல் கவிஞர் - என்றுமுளதென்றமிழ் ,
6. கவிமணி : ஒற்றுமையே ,உயர்வு நிலை—நாட்டுக்குழைப்போம்

**கூறு: 2 உரைநடை**

**நேரம்: 18**

1. கேட்டிவி - இராகபாவம் (1 முதல் 15 வரை)
2. கேட்டிவி - பயணங்கள் தொடரும்

**கூறு: 3 சிறுகதை**

**நேரம்: 18**

1. கேட்டிவி - குரல் கொடுக்கும் வானம்பாடி (1 முதல் 10 வரை)
2. கேட்டிவி - மனோரஞ்சிதம் முழுவதும்

**கூறு: 4 புதினம்**

**நேரம்: 18**

கு.வெ. பாலசுப்பிரமணியன் - காளவாய்

**கூறு: 5 நாடகம் , இலக்கிய வரலாறு**

**நேரம்: 18**

1. கலைவாணன் — கு.சா.கிருஷ்ணமுர்த்தி( NCBH வெளியீடு )
2. சிறுகதை, புதினம், நாடகம், கவிதை, உரைநடை

*B.Sc., Geography*

Semester	Subject Code	Title Of The Paper	Hours Of Teaching/ Week	No. of Credits
<b>I</b>	<b>17U1GYE1</b>	<b>PART – II ENGLISH PROSE, POETRY AND COMMUNICATION SKILLS</b>	<b>6</b>	<b>3</b>

**Objective**

- To initiate the Students to understand English through Prose, Poetry and Basic Communicative Grammar.

**Unit – I**

Shakespeare - Shall I compare thee to a Summer's Day?

John Milton – On His Blindness.

William Wordsworth – The Solitary Reaper

P.B.Shelley – Song to the Men of England.

Robert Frost – The Road not Taken

Nissim Ezekiel - Night of the Scorpion

**Unit – II**

1) The Running Rivulets of Man,

2) Parliament is Marking Time,

3) The Lady in Silver Coat,

4) Mr. Applebaum at Play.

**Unit – III**

1) The Feigning Brawl of an Imposter,

2) Thy Life Is My Lesson,

3) Solve The Gamble,

4) The Stoic Penalty.

**Unit – IV**

1) Nobility In Reasoning,

2) Malu the Frivolous Freak,

3) Bharath! Gird Up Your Loins!

4) Honesty is the Cream Of Chastity

**Unit – V**

Parts of Speech, Nouns, Pronouns, Conjunctions, Adjectives, Articles, Verbs, Adverbs, Interjection – sentence.

**References Book:**

A Melodious Harmony – Sri.KTV, Rajendra Publishing House, Poondi, 2017.

Flying Colours – Prof. K.Natarajan, New Century Book House (P) LTD., 2017.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>I</b>	<b>17U1GYC1</b>	<b>GEOMORPHOLOGY – I</b>	<b>5</b>	<b>5</b>

**Unit I** Origin of the Earth - Nebular Theory, Tidal hypothesis, Binary star theory and Big bang theory - Structure of the Earth - Inner Core, Outer Core, Mantle, Interior of the Earth – Barysphere, Pyrosphere, lithosphere.

**Unit II** Classification of rocks - igneous rocks, Sedimentary and metamorphic rocks - Earth movements - Plate Tectonics, Major plate, plate movements, Exogenitic and Endogenitic movements - Folds and Faults - Types of Folds, Type of faults, joints.

**Unit III** Volcanoes – Types of volcanic system – Volcanic structure, volcanic eruption, the Geographic distribution of volcanoes. Earthquake – Types of earthquake, causes of earthquake, distribution of earthquake, Wegner’s continental drift – Isostasy.

**Unit IV** Major Landforms – mountains, plateaus and plains – types and distribution of mountains, plateaus and plains – Desert – Types of deserts – Sandy Desert – Stony Desert, the Hot deserts, the coastal desert, the mid-latitude desert, the ice and snow deserts.

**Unit V** Weathering – types of weathering – Mechanical weathering, Frost weathering, temperature weathering, Chemical weathering, Solution, Mass movement (or) Mass wasting, Soil formation characteristics, types of soils, distribution of soils and soil profile.

**Reference Books:**

1. Balbir Singh Negi, Physical Geography, S. J. Publications, Meerut.
2. Das Gupta. A., and Kapoor. A .N. Principles of Physical Geography, S.C. Chand & company Ltd.
3. Strahler A. H. and Strahler A. N. – Modern Physical Geography, New York, John Wiley and sons.
4. Robinson. H. Physical Geography, Mac Donald and Evans Ltd.
5. Thorn Bury. D. Principles of Geomorphology, Wiley Eastern Ltd, New Delhi.
6. Lobeck. A. K. An Introduction to the Study of Landscapes, Mc Graw – Hill Book Company.
7. Sharma. V. K. Earth Surface Process and Forms, Tata Mc Graw – Hill Publishing Company Ltd, New Delhi.

Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>I</b>	<b>17U1GYC2</b>	<b>CLIMATOLOGY</b>	<b>5</b>	<b>5</b>

**Unit I** Atmosphere – origin, Composition of the atmosphere and structure – Layered structure of atmosphere, Modern views regarding the structure of atmosphere. Insolation: Distribution of insolation – Atmospheric depletion of solar radiation – heat budget.

**Unit II** Temperature of the Atmosphere – Heat and temperature, processes of heat energy transfer – Heating and cooling of the atmosphere – controls of temperature factors affecting distribution – seasonal horizontal and vertical – normal lapse rate – temperature inversion.

**Unit III** Air pressure – variations in air pressure and weather – Pressure gradient, pressure variations – diurnal and seasonal, Basic atmospheric pressure patterns – vertical structure of cyclone and anticyclones, general characteristics of cyclones and anticyclones – vertical variations in air-pressure, wind – controlling factors, general circulation planetary wind belts, seasonal winds – Monsoon winds – original and characteristics – local wind, land breeze and sea breeze El Nino – La Nino.

**Unit IV** Humidity – source of atmospheric moisture – the hydrological cycle, Humidity and temperature, Humidity measurements, Evaporation, Factors affecting rate of evaporation, condensation – Forms of condensations – clouds – types precipitation forms – air masses – tropical and temperature cyclones – thunderstorms – jet streams, toranado.

**Unit V** Classification of climate – Basic classification, Koppen’s Thornthwalte’s classification – Trewarthis classifications, weather and forecasting methods – benefits of forecasting.

**Reference Books:**

1. Lal. D.S. Climatology, Chaitanya Publishing House, Allahabad.
2. Howard J. Chritchfield, General Climatology, Prentice- Hall of India Pvt Ltd.
3. Glen. T. Trewartha and Iyes H. Horn An Introduction to Climate, International student Edition. Mc Graw Hill International Book Company.
4. Patterson – Climatology.
5. Barry & Chorley – Atmosphere, Weather and Climate.



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Semester	Subject code	Title of the paper	Hours of Teaching/ Week	No. of Credits
<b>I</b>	<b>17U1GYA1</b>	<b>Allied Statistics – I</b>	<b>5</b>	<b>4</b>

**Unit I** **15 Hrs**

Meaning and Scope of Statistics – Collection of data – Primary and Secondary – Methods of Primary data collection - Sources of Secondary Data – Classification and Tabulation.

**Unit II** **15 Hrs**

Formation of Frequency distribution – Presentation of data by Diagrams and Graphs – Bar diagram, Pie diagram, Pictogram and Cartogram – Histogram, Frequency polygon, Frequency curve and ogives.

**Unit III** **15 Hrs**

Measures of Central tendency – Mean, Median, Mode, Geometric Mean and Harmonic Mean – their computation - merits and demerits.

**Unit IV** **15 Hrs**

Measures of Dispersion - Range, Quartile Deviation, Mean Deviation, Standard Deviation and Co-efficient of Variation. Skewness – Meaning - Measures of skewness – Karl Pearson’s and Bowley’s co-efficient of skewness.

**Unit V** **15 Hrs**

Curve fitting – Principles of Least squares - Fitting of straight line - Fitting of parabola – Fitting of power curves.

**Textbook:**

*Business Mathematics and Statistics(Part- II), PA. Nananitham, Jai Publishers, Trichy,2014.*

Unit I : Chapter 1 (Pages: 1-7, 28 – 40, 60 – 80)

Unit II : Chapter 6 (Pages: 98 – 147)

Unit III: Chapter 7 (Pages: 159 – 250)

Unit IV: Chapter 8, 9 (Pages: 301 – 416)

Unit V : Chapter 11 (Pages: 496 – 502)

**References:**

1. Statistical Methods – S.P.Gupta.
2. Statistics – R.S.N.Pillai and V.Bagavathi.
3. Statistics – Theory, Methods and Application – D.C.Sancheti and V.K.Kapoor.
4. Applied General Statistics – Frederick – E.Croxton and Dudley J.Cowden.

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Semester	Subject code	Title of the paper	Hours of Teaching/ Week	No.of Credits
<b>I &amp; II</b>	<b>17U2GYAP1</b>	<b>Allied Statistics Practical (N.S)</b>	<b>3 + 3</b>	<b>-</b>

1. Frequency distribution.
2. Mean, Median, mode
3. Quartile deviation
4. Moving average method for 5 years
5. Method of least square
6. Co-efficient of correlation between x and y
7. Goodness of fit Test -  $\psi^2$  distribution
8. F – Test: Equality of two population variances
9. Lagrange’s Interpolation
10. ANOVA - One way classification

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Semester	Subject Code	Title Of The Paper	Hours Of Teaching / Week	No. of Credits
<b>II</b>	<b>17U2GYT2</b>	<b>இடைக்கால இலக்கியம் - பயன்முறைத் தமிழ் -இலக்கண வரலாறு</b>	<b>6</b>	<b>3</b>

**கூறு: 1**

**நேரம்: 18**

1. திருஞானசம்பந்தர் - தேவாரம் - கோளறு திருப்பதிகம்
2. திருநாவுக்கரசர் -தேவாரம் -தனித்திருக் குறுந்தொகை - மாசில்வீணையும் - 1—10 பதிகம்
3. சுந்தரர் -தேவாரம் - திருநொடித்தான்மலைப் பதிகம் —தானெனை முன்படைத்தான்
4. மாணிக்கவாசகர் - திருவாசகம் - திருப்பொன்னூசல்

**கூறு: 2**

**நேரம்: 18**

1. குலசேகராழ்வார்: திருவித்துவக்கோட்டம்மான் : 1—10 பாடல்கள்
2. நம்மாழ்வார் - திருவாய் மொழி -இரண்டாம்பத்து —1—10 பாடல்கள்
3. ஆண்டாள் - நாச்சியார் திருமொழி —வாரணமாயிரம் 1—10 பாடல்கள்
4. திருமங்கையாழ்வார் - சிறிய திருமொழி —1—10 பாடல்கள்

**கூறு: 3**

**நேரம்: 18**

1. திருமூலர் - திருமந்திரம் - அட்டாங்க யோகம் —1—10 பாடல்கள்
2. குமரகுருபரர் - மீனாட்சியம்மை பிள்ளைத் தமிழ்: வருகைபருவம்
3. திரிகூடராசப்பக் கவிராயர் - குற்றாலக் குறவஞ்சி - நாட்டு வளம்
4. வீரமாமுனிவர் - திருக்காவலூர்க் கலம்பகம் — முதல் 5 பாடல்கள்
5. குணங்குடி மஸ்தான் சாகிபு - ஆனந்தக் களிப்பு —முழுதும்

**கூறு: 4 பயன்முறைத் தமிழ்**

**நேரம்: 18**

வாக்கிய அமைப்பு - புணர்ச்சி வகைகள் - வலிமிகும், வலி மிகா இடங்கள் - எழுத்துப்பிழை நீக்கம் லகர, ளகர, ழகர வேறுபாடுகள் - சொற்களைப் பிரித்துப் பொருள் காணும் முறை - நிறுத்தற் குறியீடுகள் - சரியான தமிழ் வடிவம் அறிதல்.

சொல்லியல் - சொல் வகை - இலக்கண வகை - இலக்கிய வகை - பெயர்ச்சொல் - இடுகுறி - காரணம் - அறுபொருட் பெயர் (பொருள், இடம், காலம், சினை, குணம், தொழில்) - வினைச்சொல் - இடைச் சொல் - உரிச்சொல் - முற்று - எச்சம் - விகுதிகள் - இடைநிலை - தன்வினை - பிறவினை - தெரிநிலை வினை - குறிப்பு வினை-வழுவமைதி.

**கூறு: 5 இலக்கண வரலாறு**

**நேரம்: 18**

இலக்கண வரலாறு - தமிழ்த் துறை வெளியீடு.

*B.Sc., Geography*

Semester	Subject Code	Title Of The Paper	Hours Of Teaching/ Week	No. of Credits
<b>II</b>	<b>17U2GYE2</b>	<b>PART – II ENGLISH EXTENSIVE READERS AND COMMUNICATIVE SKILLS</b>	<b>6</b>	<b>3</b>

**Objective**

- To impart language and communicative skills through short stories, one act plays and communicative grammar

**Unit – I**

Shakespeare – The Seven Stages of Man

Long Fellow – A Psalm of Life

Nissim Ezakiel - Enterprise

William Wordsworth – The world is too much with us

**Unit – II**

Anton Chekov – The Proposal

J.B.Priestly - Mother's Day

**Unit - III**

William Faulkner - A Rose for Emily

P. Lankesh - Bread

Katherine Mansfield - The Doll's House

**Unit – IV**

Tense, Question Tag, Dialogue Writing, Paragraph Writing, Adjectives, Adverb

**Unit – V**

Voices, Degrees of Comparison, Direct and Indirect

**Book Prescribed:**

Unit I , II, III , Voices of vision in English (Vol. I & II), Board of Editors, Pava Printers (P) Ltd., Chennai, 2016.

Unit IV & V – Communicative grammar by the Department of English, Poondi, 2017.

**B.Sc., Geography**

Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>II</b>	<b>17U2GYC3</b>	<b>GEOMORPHOLOGY – II</b>	<b>5</b>	<b>5</b>

**Unit I** Denudation – Agents – Work of River – Erosional Work of Rivers, Processes of Fluvial Erosion, Transportation of Rivers, Depositional Work of Rivers, Landforms Produced By Rivers, Erosional Landforms – River Valleys, Potholes waterfalls Rapids, Interlocking Spurs, Structural Beneches, River Terraees, Meanders and Oxbow lakes, Incised Meanders, Peneplains, Depositional Landforms, Alluvial Fans and Cones, Flood Plains, Natural Levees, Delter, Ideal Conditions For Formation, Structure, Growth, Classification.

**Unit II** Glaciers – Development of Glaciers – Types of Glaciers, Mountain (or) Valley Glaciers, Piedmont Glaciers, Continental Glaciers, Thermal Classification of Glaciers, Glacial Movements. Erosional Landforms – Small Features, Striations, Polished Surface, Grooves, Friction Creeks, Glaciers Mills. Deposition Landforms – Glacial Drift, Jill, Stratified Drift Outwash, Moraines, Till Plain, Drumlins.

**Unit III** Characteristics of Arid Regions – Major Landforms of Arid Region – Bdson, Playa, Desert Pavements, Bajades – Erotional Landforms, Deflation Hollows (Blow Outs), Desert Pavements, Ventifacts, Pedestal Rocks, Yardang, Zeugen, Depositional Landforms – Ripples, Sand Ridges, Large Scale Forms – Sand Shadows and Sand Drifts, Sand Sheets, Sand Levees, Whale- Backs, Sand Dunes, Sand Sea (or) Ergs, Dust and Loess Deposits.

**Unit IV** Underground Water and Karst Topography – Erosional Landforms – Sinking Creeds, Karst Valley, Natural Tunnels and Bridges, Spebothem ;and other Cave Deposits, Calk Landscape.

**Unit V** Coastal Environment, Wave Structuare – Types of Wave – Erosional Landfoarms – Sea Cliffs, Beaches – Depositional Landforms – Sand Bars, Lagoons, Mud Flats, Spits, Connectiong Vars, Tombolos, etc. – Johnson Classification of Coast.

**Reference Books:**

1. Balbir Singh Negi, Physical Geography, S. J. Publications, Meerut.
2. DasGupta.A.and Kapoor.A.N.Principles of Physical Geography,
3. Strahler A. H. and Strahler A. N. – Modern Physical Geography,
4. Robinson. H. Physical Geography, Mac Donald and Evans Ltd.
5. Thorn Bury. D. Principles of Geomorphology, Wiley Eastern ltd, New Delhi.
6. Lobeck. A. K. An Introduction to the Study of Landscapes, Mc Graw – Hill Book Company.
7. Sharma. V. K. Earth Surface Process and Forms, Tata Mc Graw – Hill Publishing Company Ltd, New Delhi.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>II</b>	<b>17U2GYCP1</b>	<b>Core Practical – REPRESENTATION OF RELIEF AND MAP MAKING</b>	<b>4</b>	<b>4</b>

**Unit I** Maps and scales – Types – Construction and uses.

**Unit II** Measurements of distances and areas.

**Unit III** Enlargement and reduction – Map combination.

**Unit IV** Direction and bearings – Types of North.

**Unit V** Representation of relief – Spot heights, bench marks – Contour diagrams of relief features – Interpolation of contours.

**Reference Books:**

1. Gopal singh – Map work and practical geography, Vikas publishing house.
2. Ishtiaq – Practical geography, Jawahar publishing and distributors.
3. Monkhouse. F. J. and H. R. Wilkinson – Map and designs, B. I. publicarions.
4. Zamir Alvi – A text book of practical geography, Vikas publishing house Pvt ltd.
5. Zulfequar Ahmad khan. M. D. Text book of practical geography, Concept publishing company, New Delhi.

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Semester	Subject code	Title of the paper	Hours of Teaching/ Week	No.of Credits
<b>I &amp; II</b>	<b>17U2GYAP1</b>	<b>Allied Statistics Practical (N.S)</b>	<b>3 + 3</b>	<b>2</b>

1. Frequency distribution.
2. Mean, Median, mode
3. Quartile deviation
4. Moving average method for 5 years
5. Method of least square
6. Co-efficient of correlation between x and y
7. Goodness of fit Test -  $\chi^2$  distribution
8. F – Test: Equality of two population variances
9. Lagrange's Interpolation
10. ANOVA - One way classification

**B.Sc., Geography**

Semester	Subject code	Title of the paper	Hours of Teaching/ Week	No. of Credits
<b>II</b>	<b>17U2GYA2</b>	<b>Allied Statistics-II</b>	<b>5</b>	<b>4</b>

**Unit I**

**15 Hrs**

Correlation – Meaning and Definition – Types of Correlation - Scatter diagram, Karl Pearson’s co-efficient of Correlation - Spearman’s Rank Correlation – Regression in two variables

**Unit II**

**15 Hrs**

Interpolation and Extrapolation – Methods of Interpolation-Lagrange’s Method-Parabolic Curve Method-Extrapolation.

**Unit III**

**15 Hrs**

Statistical Inference-Tests of Hypotheses – Tests of Significance for Small Samples – The Assumption of Normality-Students t-Distribution –Properties of t-Distribution – Application of the t-Distribution .

**Unit IV**

**15 Hrs**

$\chi^2$  Test and Goodness of Fit – Introduction -  $\chi^2$  Defined – Degrees of Freedom – The Chi-Square Distribution – Constants of  $\chi^2$  Distribution – The  $\chi^2$  Test when the Degrees of Freedom Exceed 30 – Alternative Method of Obtaining the value of  $\chi^2$  - Conditions for Applying  $\chi^2$  Test, Uses of  $\chi^2$  Test – Additive property of  $\chi^2$

**Unit V**

**15 Hrs**

F-Test and Analysis of Variance – The F-Test or the variance Ratio Test Applications of F-test-Analysis of variance – Assumptions in Analysis of variance – Technique of analysis of variance – Coding of Data

**Text Book:**

1. **Business Mathematic and Statistics**, P. A. Navnitham, Jai Publishers, Trichy, 2007  
UNIT – I : Chapter 12 (Pages: 503 – 552)
2. **Statistical Methods**, S. P. Gupta, Thirty-fourth Edition, 2005.  
UNIT – II: Volumes I : Chapter 15 (Pages: 674 – 694)  
UNIT – III: Volumes II : Chapter 3 (Pages: 882 – 888, 910 – 929)  
UNIT – IV: Volumes II : Chapter 4 (Pages: 952 – 972)  
UNIT – V: Volumes II : Chapter 5 (Pages: 1006 – 1018)

**Reference:**

“**Fundamentals of mathematical statistics**”, S.C and Kapoor V.K., Sultan Chand & Sons 2002.



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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>II</b>	<b>17U2GYS1</b>	<b>Skill Based Elective – I Environmental Geography</b>	<b>1</b>	<b>1</b>

**Unit I**

Spectrum of environmental geology, global changes in the Earth system and climate Anthropogenic impacts on the atmosphere, local impacts changing the landscape, role of geology in understanding atmospheric change.

**Unit II**

Nitrogen oxide and ozone layer, cycling of carbon, records of pale temperature in ice cores of glaciers, palaeo – temperature changes during the glacial ages, glacial ages, last ice age, causes of glaciating, limestone deposits in geological sequence. Cenozoic climate extremes, evolution of life especially the impact on human evolution.

**Reference Books:**

1. Valdiya. K. S. Environmental Geology – Indian Context – Tata Mc Graw Hill.
2. Keller. E. A. Environmental Geology – Bell and Howell, USA.
3. Bryant. E. Natural Hazards – Cambridge University Press.
4. Patwardhan. A. M. The Dynamic Earth System – Prentice Hall.
5. Subramaniam. V. Textbook In Environmental Science – Narosa International;
6. Bell. F. G. Geological Hazards – Routledge, London;
7. Smith. K. Environmental Hazards – Routledge, London.

**B.Sc., Geography**

Semester	Subject Code	Title Of The Paper	Hours Of Teaching / Week	No. of Credits
III	17U3GYT3	காப்பியங்கள், கட்டுரைகள், இலக்கிய வரலாறு	6	3

**கூறு: 1 காப்பியங்கள் 1**

**நேரம்: 18**

1. சிலப்பதிகாரம் - புகார்க் காண்டம்—மனையறம்படுத்த காதை
2. மணிமேகலை - ஆதிரை பிச்சையிட்ட காதை
3. சீவக சிந்தாமணி - மண்மகள் இலம்பகம்
4. கம்பராமாயணம் - மிதிலைக் காட்சிப் படலம்

**கூறு: 2 காப்பியங்கள் 2**

**நேரம்: 18**

1. பெரிய புராணம் -மெய்ப்பொருள் நாயனார் புராணம் —முழுதும்
2. அரிசந்திரபுராணம் —மயான காண்டம்
3. தேம்பாவணி - திருமணப் படலம்—1—10 பாடல்கள்
4. சீறாப்புராணம் -நபி அவதாரப் படலம் —1—10 பாடல்கள்

**கூறு: 3 கட்டுரைத் தொகுப்பு**

**நேரம்: 18**

கட்டுரைத் தொகுப்பு - தமிழ்த்துறை வெளியீடு

**கூறு: 4 பொதுக்கட்டுரை, மொழிபெயர்ப்புப் பயிற்சி**

**நேரம்: 18**

பயிற்சிக் கட்டுரைகளும் கடிதங்களும் -பாவை வெளியீடு  
கட்டுரைப் பயிற்சி - 10 மதிப்பெண்  
மொழிபெயர்ப்புப் பயிற்சி - 5 மதிப்பெண்  
கலைச்சொல்லாக்கம்

**கூறு: 5**

**நேரம்: 18**

**அ. இலக்கிய வரலாறு**

பக்தி இலக்கியங்கள் - காப்பிய இலக்கியங்கள் - சிற்றிலக்கியங்கள்

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Semester	Subject Code	Title Of The Paper	Hours Of Teaching/ Week	No. of Credits
<b>III</b>	<b>17U3GYE3</b>	<b>PART – II ENGLISH SHAKESPEARE, EXTENSIVE READERS AND COMMUNICATIVE SKILLS</b>	<b>6</b>	<b>3</b>

**Objective**

- To introduce the language of the world renowned dramatist and novelist to enhance the vocabulary and communicative skills of the learners.

**Unit – I**

Funeral Oration – Julius Caesar

Trial for a Pound of Flesh – The Merchant of Venice

**Unit – II**

He Kills Sleep – Macbeth

The gulling scene of malvalio – Twelfth Night

**Unit – III**

Romeo and Juliet

In Love is a “Midsummer Madness” – Tempest

**Unit – IV**

R.L. Stevenson – Treasure Island

**Unit – V**

Note making, Hints Developing, Expansion of Ideas and Proverbs, Clauses and sentence, Structure simple, Compound and Complex.

**Book Prescribed:**

Unit – I, II & III: Selected scenes from Shakespeare, Prof.K.Natarajan, Pavai Printers (p) Ltd., 2017.

Unit IV: Treasure Island Abridged by E.F. Dodd

Unit V: Communicative Grammar by Department of English, Poondi, 2017.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>III</b>	<b>17U3GYC4</b>	<b>OCEANOGRAPHY</b>	<b>5</b>	<b>5</b>

**Unit I** Distribution of Land and Sea – Surface configuration of the ocean floor : Continental Shelf, Continental Solpe, Continental Rise, Abyssal Plain, Mid Ocean and Oceanic Frenches – Relief Of Indian, Atlantic And Pacific Ocean.

**Unit II** Temperature – Process of heating and cooling – Temperature Variations – Insolation, Nature of the Surface, Land Breeze and Sea Breeze, Seasonal Effect, Controlling Factors – Distribution Vertical and Horizontal Distribution.

**Unit III** Circulation of oceanic water – Waves – Types of waves, Attrition, Long Short Drift, Corrosion, Abrasion, Backwash, Swash, and Dominant Wave. Tides and Currents Semidiurnal tides, Diurnal tides, Mixed Tides, Spring and Neaptider. Wind Drifted Surface current, Equatorial current, Cool–Cold current, Powerful current, Currents of Atlantic, Indian and Pacific oceans.

**Unit IV** Marine resources – Coral reef – conditions for growth and Types, Distribution - Chemical composition of Oceans, Gases in Oceanic and sea water, Types and distribution – Mineral wealth, other mineral resources.

**Unit V** Marine Deposits – Sources and main types. Theories: Darwin, Murray, Daly and Davis. Deep sea deposits. Classification – Marine Sediments – Distribution of Sediments.

**Reference Books:**

1. Lal . D. S. Oceanography, Chatianya Publishing House.
2. Grant Gross, Oceanography, Prentice Hall International Edition.
3. Sharma. R. C. and M. Vital, Oceanography for Geographers, Chatianys Publishing House.
4. Paul r. Pinet, Oceanography, West Publishing Company.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>III</b>	<b>17U3GYC5</b>	<b>HUMAN GEOGRAPHY</b>	<b>5</b>	<b>4</b>

**Unit I** Scope and Content – Town, Village definition - Relation of Man with land in Urban areas, Scope of Urban, Relationship between Urbanization and Economic Development, Regional development of urban, Growth and spread of Medieval Towns, Types of origin, Cycle of Urban development – Recent trends in human geography.

**Unit II** Concept Of Culture – Small Town, Major Town City, Metropolis, Functional Classification Of Towns – Administrative Towns, Commercial Towns, Market Towns, Mining Towns, Industrial Towns, Cultural Towns, Residential Towns.

**Unit III** World Cultural Regions – Ecological Models Of Urban Structure – Concentric Zone Theory, Central Business District, Zone In Transition, Residential Zone etc. Von Thunen’s Model, Food Gathers, AunTERS – Cultivators, Nomads, Levels Of Culture In Twentieth Century.

**Unit IV** Human Races – Classification – Distribution – Growth Of Population, Density of Population Elements of Urban System – Rural Urban Ratio, Pattern of Urbanization, Metropolitan cities of India – Delhi, Mumbai, Calcutta, Urban Region of India – North Indian Plains Southern India, Island Regions.

**Unit V** Population – Distribution of Rural And Urban Population - Growth of Rural And Urban Population – Problems of Over Population and Under Population – Migration Types, Causes, Consequences of Migration etc.

**Reference Books:**

1. Majid Husain – Human Geography, Rawat Publications.
2. Gillian C. Morgan – human and Economic Geography, Oxford University Publication.
3. Aime Vincent Perpillou – Human Geography, Longman Group Limited.
4. C. Daryll Forde – Habitat Economy and Society, Methuen Publishers.
5. Chanda R. C. Population Geography, Kalyani Publishers.
6. Ray M. Northam – Urban Geography, John Willey And Sons Publications.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>III</b>	<b>17U3GYA3</b>	<b>ALLIED – CARTOGRAPHY – I</b>	<b>5</b>	<b>4</b>

**Unit I** Definition, Nature, Scope and Content of Cartography – History, Art and science of Cartography – Cartography as a system of communication - Impact of technology - Branches of Cartography.

**Unit II** Maps – Classification of Maps – Uses of Maps – Growth, development and modern trends in cartography - Map Design and Layout - Limitations.

**Unit III** Map Scale – Types, concept and application – Geographical construction of Plain Linear, Statement, Diagonal and Comparative – Representative Fractions - Uses.

**Unit IV** Shape, Size and Direction Dimension of The Earth – Plane, Spherical and Rectangular Systems – Latitudes and Longitudes – International Date Line – Time Zones – Direction.

**Unit V** Map projections – General principles and classifications - Criteria for Choice of Projections; Attributes and Properties of Zenithal Gnomonic Polar Case, Zenithal Stereographic Polar Case, Cylindrical Equal Area, Mercator’s Projection, Conical Projection with Two Standard Parallel, Bonne’s Projection.

**Reference Books:**

1. Misra R. P. and A. Ramesh – Fundamentals of Cartography, Concept Publishing Company.
2. Erwin and Raisz – Principles of Cartography, Me Graw Hill Book Company.
3. Robinson. H. - Elements of Cartography, John Wiley and Son Inc.
4. Monkhouse – Map and Diagrams.
5. R. C. Singh – Elements of Practical Geography Students to Friends, Allahabad.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>III &amp; IV</b>	<b>17U4GYAP2</b>	<b>ALLIED PRACTICAL – CARTOGRAPHY (NS)</b>	<b>3+3</b>	<b>-</b>

**Unit I** SOI Toposheet layout and nimering – 2 inch to 1 mile, 1 inch to 1 mile, 1inch to 4 mile, 1:2,50,000, 1:50,000, 1:25,000 and OSM Series – Conversion.

**Unit II** Latitude, Longitude, distance and time – Latitude and Distance – Longitude and time – International date line.

**Unit III** Drawing conventional signs and symbols of SOI toposheets, British Ordnance survey sheets – USGS sheets – comparison.

**Unit IV** Drawing International Beaufort Notations – Weather elements.

**Unit V** Map symbolization – Qualitative and Quantitative symbols of point, line and area.

**Reference Books:**

1. Misra R . P and A. Ramesh – Fundamentals of Cartography, Concept Publishing Company.
2. Erwin and Raisz – Principles of Cartography, Me Graw Hill Book Company.
3. Robinson. H. - Elements of Cartography, John Wiley and Son Inc.
4. Monkhouse – Map and Diagrams.
5. R. C. Singh – Elements of Practical Geography Students to Friends, Allahabad.

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Semester	Subject Code	Title Of The Paper	Hours Of Teaching / Week	No. of Credits
<b>IV</b>	<b>17U4GYT4</b>	<b>சங்க இலக்கியம் - அறு இலக்கியம் - செம்மொழி - இலக்கிய வரலாறு</b>	<b>6</b>	<b>3</b>

**கூறு: 1**

**நேரம்: 18**

**குறுந்தொகை**

1. குறிஞ்சி - (பா.எ.:3)
2. முல்லை - (பா.எ.94)
3. மருதம் - (பா.எ.45)
4. நெய்தல் - (பா.எ.:49)
5. பாலை - (பா.எ.:41)

**நற்றிணை**

1. குறிஞ்சி - (பா.எ. 32)
2. முல்லை - (பா.எ. 81)
3. மருதம் - (பா.எ. 210)
4. நெய்தல் - (பா.எ. 226)
5. பாலை - (பா.எ.229)

**கலித்தொகை**

1. பாலை - (பா.எ. 6)
2. குறிஞ்சி - (பா.எ. 38)

**அகநானூறு**

1. குறிஞ்சி : - (பா.எ. 68)
2. மருதம் - (பா.எ. 86)

**கூறு: 2**

**நேரம்: 18**

**ஐங்குறுநூறு**

குறிஞ்சி - தோழிக்கு உரைத்த பத்து: பாடல் எண்கள் —III—120

**புறநானூறு**

பாடல் எண்கள் 8,17,20,95,141,159,184,186,188,206

**பதிற்றுப்பத்து**

ஏழாம் பத்து —பாடல் எண். 1

**பரிபாடல்**

எட்டாம் பாடல் : செவ்வேள்

**கூறு: 3**

**நேரம்: 18**

நெடுநல்வாடை முழுவதும்

திருக்குறள் : வான்சிறப்பு, பெருமை, காதற் சிறப்புரைத்தல்

**கூறு: 4**

**நேரம்: 18**

**செம்மொழி வரலாறு**

மொழி - விளக்கம் - மொழிக்குடும்பங்கள் - உலகச் செம்மொழிகள் - இந்தியச் செம்மொழிகள் - செம்மொழித் தகுதிகள் - வரையறைகள் - வாழும் தமிழ்ச்செம்மொழி - தொன்மை - தமிழின் சிறப்புகள் - தமிழ்ச் செம்மொழி நூல்கள்.

**கூறு: 5**

**நேரம்: 18**

**அ. இலக்கிய வரலாறு**

சங்க இலக்கியங்கள், பதினெண்கீழ்க்கணக்கு நூல்கள்



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Semester	Subject Code	Title of The Paper	Hours of Teaching/ Week	No. of Credits
<b>IV</b>	<b>17U4GYE4</b>	<b>PART – II ENGLISH ENGLISH FOR COMPETITIVE EXAMINATIONS</b>	<b>6</b>	<b>3</b>

**Objective**

- To prepare the learners for competitive examinations and to know the fundamentals of practical communication.

**Unit – I**

**Grammar** – Number, Subject, Verb, Agreement, Articles, Sequence of Tenses, Common Errors.

**Unit – II**

**Word Power** - Idioms & Phrases, one word substitutes, Synonyms, Antonyms, Words we often confuse, foreign words & phrases, spelling.

**Unit – III**

Reading & Reasoning – Comprehension, Jumbled Sentences.

**Unit - IV**

**Writing Skills** – Paragraph, Precis Writing, Expansion of an idea, Report Writing, Essay, Letters, Reviews (Film & Book)

**Unit – V**

**Speaking**- Public speaking, Group Discussion, Interview, Spoken English.

**Prescribed Text:**

English for Competitive Examinations, by Ayothi, Trichy, 2017.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>IV</b>	<b>17U4GYC6</b>	<b>WORLD REGIONAL GEOGRAPHY</b>	<b>5</b>	<b>5</b>

**Unit** Asia – Physical, Features, Socio – Economic Set-Up – Regional Studies of South Asia, South East Asia, East Asia, West and Central Asia – Climate.

**Unit II** Europe – Boundary – Physical features, climate, Socio-economic features – Regional studies of British Isles, New South Wales, North Ireland, European Union, Eastern Europe and Mediterranean Realm.

**Unit III** North and South America – Physical Feature – Climate – Economic and Demographic Set-Up – Regional Studies – North America – Physical Features Climate, Population, Latin America – Physical Features, Climate, South America – Physical Features, Climate, South America – Physical Features, Climate, New England Brazil, Chile and Peru.

**Unit IV** Australia and New Zealand – Boundaries, Physical Features, Climate, Social Economic Set-Up – Regional Studies of Australia – Boundaries, Physical Features, Climate – New Zealand And Pacific Islands.

**Unit V** Contemporary issues in World Geography – Globalization, W.T.O. and World Summit, UN Environment Programmes (UNEP), UN Development Programmes, Population, Distribution, Density, Environment and Sustainable Development.

**Reference Books:-**

1. Heintzelman and Highsmith – World Regional Geography.
2. Don R. Hoy – Geography and Development a World Regional Approach, Collier Mac Millan Publisher.
3. Goh-Cheng leong – Certificate human and Economic Geography, Oxford University Publication.
4. Jackson. R. H. and Hudman. L. E. – World Regional Geography Issues for Today, John Wiley, New York.
5. Cole. J. – A Geography of the World's Major Regions, Routledge, London.
6. Ward. P. W. and Miller. A. – World Regional Geography A Question Of Place, John Wiley, New York.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching / Week	No. of Credits
<b>IV</b>	<b>17U4GYCP2</b>	<b>Practical – CLIMATIC DIAGRAMS AND WEATHER MAPS</b>	<b>4</b>	<b>4</b>

**Unit I** Diagrammatic representation of climatic data—line and bar diagrams—construction and uses.

**Unit II** Hythergraph, Climograph and Climatographs – Construction and uses.

**Unit III** Wind roses diagram and Ergograph – Construction and uses.

**Unit IV** Rainfall Dispersion Diagrams – Construction and uses.

**Unit V** Weather Symbols – Station model –Weather map interpretation.

**Reference Books:**

1. Gopal singh – Map work and practical geography, Vikas publishing house.
2. Ishtiaq – Practical geography, Jawahar publishing and distributors.
3. Monkhouse. F. J. and H. R. Wilkinson – Map and designs, B. I. publicarions.
4. Zamir Alvi – A text book of practical geography, Vikas publishing house Pvt ltd.
5. Zulfequar Ahmad khan. M. D. Text book of practical geography, Concept publishing company, New Delhi.
6. R. I. Singh – Elements of Practical Geography, Kalyani publishers.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>IV</b>	<b>17U4GYA4</b>	<b>ALLIED – CARTOGRAPHY – II</b>	<b>3</b>	<b>2</b>

- Unit I** Map symbolization – Point, line and area symbols – Qualitative and Quantative Representation - Mapping of Physical – climatic – Socio economic data.
- Unit II** Map drawing and measuring Techniques – Map setting - Maps compilation and generalization – Map design and layout – Principles and constraints – Formats of map.
- Unit III** Map design and problems – general design problless – principles of cartographic design and design of map symbols - Lettering – style, form and size – Mechanics of lettering – Positioning of letters – Geographical names.
- Unit IV** Map Reproduction – Process of Map production –Photographic systems – Multiple Reproduction Processes – Computer application in Cartography – Computer mapping – Remote Sensing and Cartography – Uses of Air photographs and Satellite images in Cartography - Instruments – Duplicating process – Printing process.
- Unit V** Thematic Maps – Definition – Types – Problems – Diagrammatic Data Presentation – Line, Bar and Circle = Cartographic Overlays – Point, Line and Areal Data. - Geographic information science (GIS) – Land information system (LIS) – Global positioning system (GPS) – International cooperation in cartography.

**Reference Books:**

1. Misra R . P and A. Ramesh – Fundamentals of Cartography, Concept Publishing Company.
2. Erwin and Raisz – Principles of Cartography, Me Graw Hill Book Company.
3. Robinson. H. - Elements of Cartography, John Wiley and Son Inc.
4. Monkhouse – Map and Diagrams.
5. R. C. Singh – Elements of Practical Geography Students to Friends, Allahabad.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>III &amp; IV</b>	<b>17U4GYAP2</b>	<b>ALLIED PRACTICAL – CARTOGRAPHY (NS)</b>	<b>3+2</b>	<b>4</b>

**Unit I** SOI Toposheet layout and nimering – 2 inch to 1 mile, 1 inch to 1 mile, 1inch to 4 mile, 1:2,50,000, 1:50,000, 1:25,000 and OSM Series – Conversion.

**Unit II** Latitude, Longitude, distance and time–Latitude and Distance – Longitude and time – International date line.

**Unit III** Drawing conventional signs and symbols of SOI toposheets, British Ordnance survey sheets – USGS sheets – comparison.

**Unit IV** Drawing International Beaufort Notations – Weather elements.

**Unit V** Map symbolization – Qualitative and Quantitative symbols of point, line and area.

**Reference Books:**

1. Misra R . P and A. Ramesh – Fundamentals of Cartography, Concept Publishing Company.
2. Erwin and Raisz – Principles of Cartography, Me Graw Hill Book Company.
3. Robinson. H. - Elements of Cartography, John Wiley and Son Inc.
4. Monkhouse – Map and Diagrams.
5. R. C. Singh – Elements of Practical Geography Students to Friends, Allahabad.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>IV</b>	<b>17U4GYS2</b>	<b>Skill Based Elective - II Economic Geography</b>	<b>1</b>	<b>1</b>

**Unit I** Scope and content of economic geography – basic concepts – nature of resource – Farming in the world – Shifting – subsistence commercial and plantation farming – mixed farming – horticulture – market gardening – production and distribution of rice, wheat, sugarcane, coffee, tea, cotton and jute – major forest types and distribution, conservation of forests.

**Unit II** World minerals mining – Iron ore – Bauxite – Manganese – Copper – Power resources - coal, Petroleum, Natural Gas, Atomic minerals – Major region of Hydel power generation – Conservation of power resources – manufacturing industries of the world – localization factor – iron and steel – textiles – chemicals – automobiles – ship building.

**Reference Books:**

1. J. L. Guha and Pr. Chatterjee. – Economic Geography.
2. R. N. Dubey and L. R. Sing – Economic and Commercial Geography.
3. S. K. Sadhukon – Economic Geography.
4. Dr. M. R. Chandhran – Economic Geography.
5. K. K. Khanna And V. I. Gupta. – Economic and Commercial Geography.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>V</b>	<b>17U5GYC7</b>	<b>GEOGRAPHY OF RESOURCES</b>	<b>5</b>	<b>5</b>

**Unit I** Concept of resources – Resource elements – Soil – types of soils, distribution of soil, Water – means of irrigation, types of irrigation, distribution of water resources, Land - types of land, Mountain – platean hills, plains, coastal areas – Forest – types of forest, distribution of forest, utilization of forest, Agriculture – Green revolution, types of Agriculture, distribution, production, major crops – rice, wheat, tea, rubber, sugarcane, cotton, jute, Minerals – iron, coal, Energy resources – power resources, renewable non-renewable resources.

**Unit II** Land – types, conservation, soil – erosion – land forms, conservation, Water resources – irrigation purpose, power – multipurpose project – transport – types of transport, water transport, air transport, land transport, Railways – merits and demerits, Fisheries – types, major fishing grounds of the world, problems.

**Unit III** Natural vegetation: Forest – types of forest, products, conservation, Greenland – types (Savanna, Steppe), distribution, Livestock – cattle rearing, dairy production (milk and milky products), white revolution, Agriculture – intensive extensive, wet and dry, mixed farming, commercial plantation and food crops.

**Unit IV** Energy – Thermal, water, atomic – water and Nuclear power – conventional energy – solar energy, wind energy, Minerals – iron, coal, ferrous non-ferrous, manganese, mica, copper and bauxite.

**Unit V** Major industries – locational factors – iron and steel, automobile, shipbuilding and textile industries – Transport- Trade – internal and international trade.

**Reference Books:**

1. Prithvish Roy and Somnath Mukerjee – Economic geography an appraisal of resources, New central book agency, Kolkata.
2. V. K. Gupta – Economic and commercial geography, Sultan Chand and cons.
3. S. K. Sadhukhan – Economic geography an appraisal of resources, S. Chand and company.
4. A. Das Gupta – Economic and commercial geography. Mukhrjee and co. Pvt. Ltd.
5. M. c. Agarwal – Commercial geography, Himalaya publishing house.
6. B. S. Negi – Economic and commercial Geography of the world, S. Chand and Co. Pvt Ltd.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>V</b>	<b>17U5GYC8</b>	<b>AGRICULTURAL GEOGRAPHY</b>	<b>5</b>	<b>5</b>

- Unit I** Nature, scope, significance and development of agricultural geography – Approaches to the study of agricultural geography – sources of agricultural data – Major crops – Type of Agriculture, food crops, commercial crops, plantation crops, oil seeds etc.
- Unit II** Determination of agricultural land use – cropping pattern – crop concentration – crop combination – Green Revolution – Five year plants, utilitarian of new technology, Hybrid varieties of seeds, production of agriculture, impacts and consequences.
- Unit III** Land use and land cover – Von Thunen’s theory of agricultural location – Whittlesey’s classification of agricultural regions.
- Unit IV** Agriculture in India – Land use and shifting cultivation, Rotation cropping pattern, Specific problems in Indian agriculture and their management, five year planning, Agricultural policy in India.
- Unit V** Contemporary issues – Flood natural Hazards, Soil erosion, food, nutrition and hunger, food security, drought and food aid programmes – environmental degradation, role of migration, fertilizers, insecticides and pesticides.

**Reference Books:**

1. Gregor. H. P. – Geography of Agriculture, Prentice Hall, New York.
2. Grigg. D. Mb. The Agricultural Systems of The World, Cambridge University Press, New York.
3. Hartshorn T. N. And Alexander. J. W. Economic Geography, Prentice Hall, New Delhi.
4. Mannion. A. M. Agriculture and Environment Change, John Willey, London.
5. Morgon. W.B. And Norton. R. J. C. Agricultural Geography, Mathuen.
6. Singh. J. and Dhillon. S. S. Agricultural Geography, Tata McGraw Hill Publishers, New Delhi.
7. Taarrant. J. R. Agricultural Geography, Willey, New York.



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Semester	Subject Code	Title Of The Paper	Hours of Teaching /Week	No. of Credits
<b>V</b>	<b>17U5GYC9</b>	<b>SETTLEMENT GEOGRAPHY</b>	<b>5</b>	<b>5</b>

**Unit I** Nature, scope AND CONTENT – Definition of urban and rural settlements – salient features of human settlements in India – meaning of settlements, various types of rural settlements, various house types in india – The relationship between house types with relief climate and building – materials urban areas as given by census of India. Functional classification of urban settlements in India, Distributiional patterns of rural urban settlements.

**Unit II** Settlement site and structure: Internal morphology – external farmhouse – house types – rural settlement types – dispersed settlements, physical factors, cultural factors and historical factors, building materials used for roofs, cities according to the factors, factors affecting the location of settlements, positive factors.

**Unit III** Special organization – size, spacing and hierarchy of settlements, emergence and characteristics of urban settlements – The processes patterns and functions of human settlement function of settlements, patterns of settlements – urban forms and functions.

**Unit IV** Urbanization – classification of urban settlements – urban morphology and landuse structure – CBD – periphery – urban expansion – urban and rural settlement geography – man relationship with his environment, rural settlements involved primary activates, farming, lumbering and mining. Site factors for settlements physical environment depend in water supply – relief, soils shatter, defence.

**Unit V** Settlement – environment relationship, global and regional pattern, policies and programmes – urban growth problems, ware housing, water – supply, transport, pollution, Isolution to the urban problems, urban theory, urban zoiing – CBD – the limner city, the suburbs – the rural urban fringer slum squatter settlements.

**Reference Books:**

1. Chisholm. M. Rural Settlement and Land Use, Hutchinson, London.
2. Clout. R. D. Rural Geography, Pergamon Press, London.
3. H. Carter – The Study of Urban Geography, Edward Arnold, London.
4. J. H. Johnson – Urban Geography of Towns, Hutchinson University Library, London.
5. Mayer & Kohn – Readings In Urban Geography, Central Book Depot, Aahabad.
6. Northam – Urban Geography, John Wiley & Sons Inc.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>V</b>	<b>17U6GYC10</b>	<b>GEOGRAPHY OF ASIA</b>	<b>4</b>	<b>5</b>

- Unit I** Significance of Geographical Location – Physiographic – Climate – Relief - Drainage – Major river system, Major multipurpose river projects.
- Unit II** Soil types and Classification – Agricultural Production –Characteristics of Asian agriculture. Land use pattern. Cropping pattern. Irrigation. Rice and Wheat – Rubber, Tea and coffee, Sugar cane and Jute - Marine food production.
- Unit III** Mineral and Energy Resources – Iron ore, Manganese, Tin, Bauxite, Coal, Petroleum and Natural Gas, Hydrothermal and atomic power.
- Unit IV** Industrial Production and Distribution – factors of location and production of major industries– Iron and Steel, Cotton and Textile, Sugar cane, Automobile, Cement, Chemicals and engineering, food processing, Resources and industrial development.
- Unit V** Population- Distribution, density and growth. Occupational structure, literacy and age and sex structure. Migration. Urbanisation.Transport – Roads, Railways, and waterways Major ports - Trade – Internal and international Trade.

**Reference Books:**

1. Human and Economic Geography by co-chang leoang, Oxford press
2. World Geography – Hembridge
3. Geography of Asia- Dobby
4. A Regional Geography of the world – D. S. Manku
5. Geography of Asia. Swaroop, Shanthi. King Books, New Delhi.
6. Geography of Asia. Tirtha,R (2005 ) Rawat Publications, Jaipur.
7. Geography of Asia. Tiwari S.K (1995 Kedar Nath Ram Nath, Meerut.
8. Asia: Tiwari S.K (1995)Saral Adhyayan. Kedar Nath Ram Nath, Meerut

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>V</b>	<b>17U5GYEL1A</b>	<b>Major Elective – I GEOGRAPHY OF INDIA</b>	<b>4</b>	<b>4</b>

**Unit I** Location – continent of unity in diversity – structure and relief – drainage – climate – soil – types and distribution – natural vegetation – types and distribution.

**Unit II** Regionalization of India – Agricultural region – Industrial region – Transport – Road – Railway – water – Air – Ports- Trade – Globalization – Planning regions - IT industry in India & Tamil Nadu.

**UNIT III** Irrigation – Types – Multipurpose project - Agriculture – geographical requirements of crops – rice - wheat – millets – pulses – oilseeds – sugarcane – cotton - jute Tea – Coffee – rubber – agricultural problems – Green Revolution in India – livestock –fisheries

**UNIT IV** Minerals – coal, oil, iron ore, manganese, bauxite, copper – power resources – hydel, thermal and atomic – industries – iron and steel, cement, textile, sugar, paper, shipbuilding – small scale and cottage industries.

**UNIT V** Population growth – distribution – density and problems – urbanization – Transport and Trade.

**Reference Books:-**

1. Ranjit Tirtha and Gopal Krishnan – Geography of India, Rawat Publications, Jaipur- New Delhi.
2. Prithvish Nag and Smita Sengupta – Geography of India, Concept Publishing Company, New Delhi.
3. C. B. Mamoria – Geography of India, Shivalal Agarwl Co. Agra.
4. R. L. Singh – India A Regional Geography, National Geographical Society of India.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>V</b>	<b>17U5GYEL1B</b>	<b>Major Elective – I GEOGRAPHY OF TOURISM - I</b>	<b>4</b>	<b>4</b>

**Unit I** Tourism – definition – Growth and development of tourism – model of tourism- origin, Basic component of tourism – element of tourism - destination, and transit – factors of tourism.

**Unit II** Tourism Motivation - Physical, historical, socio – cultural, economic environmental, education, political, recreational and natural wonders. Hospitality. Tourist centers – classification – Peter’s Inventory – Geffrey Wall’s Theory.

**UNIT III** Types of tourism – tourism, eco tourist, adventure tourism, heritage tourism, pilgrimages – measurement of tourism phenomena. The need for measurement - problems of measurement – method of measurement - Tourist statistics

**UNIT IV** Recent Trends of Tourism: International and Regional; Domestic (India); Eco-Tourism, Sustainable Tourism, Meetings, Incentives, Conventions and Exhibitions (MICE)

**UNIT V** Components of tourism industry – travel, hospitality, visitors services – distance, modes, cost, - culture and hospitality – food, beverages – stay and accommodation.

**Reference Books:**

1. Manett Kumar – Tourism Today, Kanishka Publishing House, Kelhi.
2. Michael. M. Coltman – Tourism Marketing, Vanostrand Reintold, New York.
3. Fodder Hoddles - Fodder’s Guide Of India, Hoden And Strongton.
4. Rosemary Burton – Travel Geography, Pitman Publishing, London.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>V</b>	<b>17U5GYEL2A</b>	<b>Major Elective – II GEOGRAPHY OF TAMIL NADU</b>	<b>4</b>	<b>4</b>

**Unit I** Location – Physiography - Relief – Drainage – Climate.

**Unit II** Soils – Types – Soil conservation – Natural vegetation – Types – Distribution.

**UNIT III** Irrigation – Multipurpose projects – Agriculture – problems - Distribution of crops: paddy, millets, pulses, oilseeds, sugarcane, cotton, Tea, Coffee, rubber and spices.

**UNIT IV** Minerals – Iron, Coal, Bauxite –Industries – Textile Industries, Sugar Industry, Cement Industry, Paper, Automobile, IT and BPO, Industrial Regions

**UNIT V** Population – Growth, Distribution, Density and Problems – Urbanization – Transport And Trade.

**Reference Books:**

1. R. L. Singh – India Regional Geography, Vbs Publishers and Distributors, New Delhi.
2. Dr. A. Ramesh And R. S. Eiwari – Basic Resource Atlas of Tamil Nadu, University of Madras.
3. Poduval R. N. – Foodgrain Economy of Tamil Nadu Problems and Prospects, Emerald Publishers, Chennai.
4. Velappan. D. – Economic Development of Tamil Nadu, Emerald Publishers, Chennai.
5. Ranjiet Tirtha & Gopala Krishnan – Geography of India – Rawat Publications, Jaipur.
6. Prithvish Nag & Smitha Sengupta – Geography of India, Concept Publishing Co. New Delhi.
7. Gopal Singh – Geography of India, Athma Ram & Sons, Delhi.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>V</b>	<b>17U5GYEL2B</b>	<b>Major Elective – II REGIONAL PLANNING</b>	<b>4</b>	<b>4</b>

**Unit I** Concepts and Principles: Frame work for regional planning, Need for Regional Planning; Types of regional Planning. - Approaches: Bottom up approach – Top down approach.

**Unit II** Region and Regionalism: Definition of region - Classification of regions – Types of regions – Regional hierarchy – Resource regions – Problem regions: hilly region, tribal region, drought prone regions.

**UNIT III** Planning processes: sectoral, temporal and spatial dimensions - Short-term and long-term perspectives of planning – Multi-level planning - Indicators of development.

**UNIT IV** Regional population analysis - Population projection - Impact of population on regional Planning

**UNIT V** Regional Planning in India and Tamil Nadu – Block level and District level planning – Panchayat Raj system.

**Reference Books:**

1. Bhat, L.S (1973) Regional Planning in India, Statistical Publishing Society, Calcutta.
2. Hall, P. (1992) Urban and Regional Planning, Routledge, London.
3. Misra, R.P. (1971) Regional Planning: Concept, Techniques, Policies and Case Studies, University of Mysore, Mysore.
4. Misra, R.P. & Sundaram K. V. (1974) Regional Development Planning In India, Vikas Publishing House, Delhi.
5. Mishra, R.P. (1980) Multi-Level Planning Heritage Publishers, Delhi.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>V</b>	<b>17U5GYNME</b>	<b>Non Major Elective DEMOGRAPHIC STUDIES</b>	<b>2</b>	<b>1</b>

**Unit I** Demography – Scope, content and trends, relevance of demographic studies and its applications- population information – Census and sample survey – Fertility services – Household survey – study of demographic structure – population distribution and structure – Age – sex variation – Ethnicity – Literacy structure – occupational differences – income variation.

**Unit II** Growth dynamic – growth estimation – impacts of death and birth growth – population movements – rural urban movements, intra-national and international migration – migration and growth – population dynamics – demographic transition – mortality factors – population changes – demographic planning and problems – problems, planning in developed and developing countries – policies – population resources – population geography in the 21<sup>st</sup> century.

**Reference Books:**

1. Clark. I. Geography of Population, Approaches and Applications. Pergamon Press, Oxford, U. K.
2. Chandna . R. C. A Geography of Population, Kalyani Publishers, New Delhi.

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Semester	Subject Code	Title Of The Paper	Hours Of Teaching/ Week	No. of Credits
<b>V</b>	<b>17U5GYSSD</b>	<b>SOFT SKILLS DEVELOPMENT</b>	<b>1</b>	<b>-</b>

**Unit : I**

Proficiency in English – Group Discussion - Interview – Presentation Skills  
– Percentage and its application – Error Correction.

**Unit : II**

Communication Skills – Art of Listening, Art of Reading, Art of Writing.  
Corporate Skill – Time Management, Stress Management.

**Text Books**

1. Meena K and Ayothi (2013) A Book on Development of Soft Skills (Soft. Skills: A Road Map to Success) P.R. Publishers & Distributors, No. B -20 & 21 V.M.M. Complex, Chatiram Bus Stand, Tiruchirappalli – 620002.
2. Hariharan S, Sundararajan N and Shanmugapriya S.P. (2010) Soft Skills, MJP Pubglishers, Chennai – 600 005.

**References**

1. Alex K (2012) Soft Skills – Know yourself & Know the world, S.Chand & Company LTD. Ram Nagar, New Delhi – 110 055.
2. Martin Avis, Effective Time Management Skills for everyone, Avis Consultancy, London.



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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>VI</b>	<b>17U6GYC11</b>	<b>GEOINFORMATICS</b>	<b>6</b>	<b>6</b>

**Unit I** Remote Sensing – Definition – Types – Aerial Photography – Types of Photographs – Elements of Photo Interpretation – Interpretation of Aerial Photo – General procedure for Photo Interpretation – Preliminary Stage – Detailed Examination, Interpretation Stage – Three Dimensional Interpretation – Method Stereoscopic – Depths Precipitation.

**Unit II** Space Borne Remote Sensing – Elements of EMR – Energy Interaction In Atmosphere – Terrestrial Interaction – Spectral Reflectance Curves – Platforms – Sensors – Resolution – Active and Passive Remote Sensing.

**Unit III** Orbit – Sensor Characteristics and Applications of Weather Satellites – Land Observation Satellites- LANDSAT, SPOT, IRS, IKONOS, AEM, NOAA, GOES, NIMBUS, METEOSAT, SEASAT, RADARSAT, OCEAN SAT – Marine Observation Satellite – Remote Sensing Applications.

**Unit IV** GIS – definition – components of GIS – Raster and Vector data structure – Georeferencing – digitization – GIS Analysis – Application of GIS – data quality issues, spatial accuracy – Temporal accuracy – Attribute accuracy, conceptual accuracy.

**Unit V** Introduction to GNSS/GPS – Historical development – segments – Error sources – DGPS – GNSS/GPS Application – Precision and resolute on spatial Resolution – Temporal resolution – Thematic resolution – Modeling – Errors – Point Error, Modern Line Area Data – Error Models, Dot and Pixel.

**Reference Books:**

1. Lillisand .T. M. And R. W. Kiefer – Remote Sensing and Image Interpretation, John Wiley & Sons, New York.
2. Campbell. J. B. – Introduction to Remote Sensing, Taylor and Francis, London.
3. Burrough. P. A. And Mc Donnell. R. – Principles of Geographical Information Systems, Oxford University Press, London.
4. Heywood. I. Comelius. S. and Carver. S. – An Introduction to Geographical Information Systems, Addison Wiley Longmont, New York.
5. Robinson . H. Arthur Et. Al. – Elements of Cartography, John Wiley & Sons, Inc Singapore.
6. Agraval.N. K. – Essentials of GPS , Geodesy and GPS Publication, Hydrabad.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>VI</b>	<b>17U6GYC12</b>	<b>DISASTER MANAGEMENT</b>	<b>6</b>	<b>5</b>

**Unit I** Disasters: Definition and Concepts: Hazards – Disasters - Risk and Vulnerability -Classification - emergency and disaster – Types of disasters - Impacts: physical, social, economic, political, environmental and psychological – Resilience

**Unit II** Natural Disasters: Earthquakes - Tsunamis - Landslides - Volcanoes - Floods - Cyclones - Drought - Disease Epidemics - Causes and Effects.

**Unit III** Anthropogenic Disasters: Chemical and industrial disasters - Nuclear disasters – Fire accidents - Oil spill - Bio-diversity loss - Coral / mangrove depletion - Stampede - Terrorist attacks - Transport accidents.

**Unit IV** Disaster Risk Management: Management Cycle - Response and recovery, risk assessment, mitigation and prevention, preparedness planning, prediction and warning - Community based disaster management - Role of Geoinformatics

**Unit V** Disaster Management in India: Hazard and vulnerability profile of India – Institutional framework - Disaster Management Act - International strategy for disaster reduction.

**Reference Books:**

1. Savindra S. & Jeetendra S. Disaster Management, Pravalika Publications, Allahabad.
2. Govt. of India (2008) Vulnerability Atlas of India, BMTPC, New Delhi.
3. Govt. of India (2011) Disaster Management in India. Ministry of Home Affairs, New Delhi.
4. Kapur, A. Vulnerable India: A Geographical Study of Disasters, Sage Publication, New Delhi.
5. Singh, R. B. Natural Hazards and Disaster Management: Vulnerability and Mitigation, Rawat Publications, New Delhi.
6. Sinha, A. Disaster Management: Lessons Drawn and Strategies for Future, New United Press, New Delhi.
7. Stoltman, J.P. International Perspectives on Natural Disasters, Kluwer Academic Publications. Dordrecht.
8. Singh Jagbir “Disaster Management Future Challenges and Oppurtunities”, Publisher- I.K. International Pvt. Ltd. S-25, Green Park Extension, Uphaar Cinema Market, New Delhi, India.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>VI</b>	<b>17U6GYCP3</b>	<b>Practical – MAP PROJECTION AND SURVEYING</b>	<b>6</b>	<b>4</b>

**Unit I** Construction of map projections (graphical methods only) – Zenithal (polar case only), Cylindrical projection and conical projections – properties and uses.

**Unit II** Polyconic – one standard and two standard parallel – Bonne’s projection – Sinusoidal and Mollwelds’s projections – Properties and uses.

**Unit III** Principles of survey – chain, prismatic compass and plane table survey.

**Unit IV** Indian Clinometers and dumpy level survey.

**Unit V** Electronic and GNSS/GPS survey.

**Reference Books:**

1. Gopal singh – Map work and practical geography, Vikas publishing house.
2. Ishtiaq – Practical geography, Jawahar publishing and distributors.
3. Monkhouse. F. J. and H. R. Wilkinson – Map and diagram, B. I. publicarions.
4. Zamir Alvi – A text book of practical geography, Vikas publishing house Pvt ltd.
5. Zulfequar Ahmad khan. M. D. Text book of practical geography, Concept publishing company, New Delhi.
6. R. I. Singh – Elements of Practical Geography, Kalyani publishers.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>VI</b>	<b>17U6GYCP4</b>	<b>Core Practical MAP INTERPRETATION &amp; REMOTE SENSING</b>	<b>4</b>	<b>4</b>

**Unit I** Interpretation of SOI Topographic sheets – Physical and Cultural details.

**Unit II** Interpretation of NATMO maps – Cartographic appreciation.

**Unit III** Interpretation of Ordinance survey maps and US Topo maps.

**Unit IV** Aerial Photographs – Stereo Vision – Visual Elements – Tracing Physical and Cultural Details – Interpretation.

**Unit V** Satellite Image – Tracing Physical and Cultural Details – Preparation of Landuse / Land Cover Maps – Interpretation.

**Reference Books:**

1. M. Kudrat – Digital Remote Sensing, Concept Publishing Company, New Delhi.
2. K. K. Rampal – Handbook of Aerial Photography and Interpretation, Concept Publishing Company, New Delhi.
3. R. K. Banerjee and Bireswar Banerjee – Remote Sensing Techniques for Regional Development – Ashok Kumar Mittal Concept Publishing Company.
4. R. P. Misra, A. Raemsh – Fundamentals of Cartography – Concept Publishing Company.
5. Paul. J. Curran – Principles of Remote Sensing – Longman Group Uk Ltd.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
VI	17U6GYEL3A	<b>Major Elective – III POLITICAL GEOGRAPHY</b>	3	3

**Unit I** Nature, Scope, Subject matter and recent development in political geography – approaches to study political geography of contemporary India.

**Unit II** State, Nation and Nation State – Concept of Nation and State, Attributes of State – Frontiers, Boundaries, Shape, Size, Territory and Sovereignty, Concept of Nation State; Geopolitics; Theories

**UNIT III** Nation-Building – Colonialism, Decolonization, Neocolonialism, Federalism and other forms of governance.

**UNIT IV** Geopolitics – Heart Land and Rim Land Theories – Regional Organizations of Co- operation– SAARC, ASEAN, OPEC and EU.

**UNIT V** Geopolitical Significance of Indian Ocean – Changing Political Map of India – Centripetal and Centrifugal Forces – Stability and Instability – Interstate Issues –Water Disputes, Riparian Claims and Conflict Resolutions – Unity in Diversity.

**Reference Books:**

1. De Blij . H. J. and Glassner Martin – Systematic Political Geography, John Wiley, New York.
2. Dikshit. R. D. Political Geography – A Contemporary Perspective, Tata McGraw Hill, New Delhi.
3. Sukhwai .B. L. – Modern Political Geography of India, Sterling Publishers, New Delhi.
4. Taylor. Peter – Political Geography, Longman, London.
5. Fisher Charles. A. – Essays in Political Geography, Methuen London.
6. John R. Short – An Introduction to Political Geography Routledge, London.
7. Prescott.J.R.V. – The Geography Of Frontiers And Boundaries Aldine Chicago.
8. Deshpande C. D.- India-A Regional Interpretation Northern Book Centre, New Delhi.
9. Pounds .N. I. G. Political Geography, McGraw Hill, New York.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>VI</b>	<b>17U6GYEL3B</b>	<b>Major Elective – III MEDICAL GEOGRAPHY</b>	<b>3</b>	<b>3</b>

**Unit I** Medical geography – Introduction – Scope – Contents – Components of Medical Geography – Factors affecting health.

**Unit II** Environment and Diseases – Water Borne Diseases – Air Borne Diseases – Minera enrichment and Deficiencies Diseases. Climate Change and Human Health: Changes in climate system – heat and cold; Biological disease agents; food production and nutrition.

**UNIT III** Diseases and society – Environmental types - physical – social – Economical – cultural – sanitation – Environmental Hygiene and Health, social and cultural norms and practices – Role of private, public and institutions in Health.

**UNIT IV** Food and Health- Habits, Food Habits, Family and Community Life, Traditional Outlook Religion and Health.

**UNIT V** Society and Health – Sanitation Modernization, Western Way of Living and Emerging Health Issues. Health and Medical care planning – Health Care Centres – planning - Family and community health planning.

**Reference Books:**

1. Learmoth Andrew – Patterns of Disease and Hunger- a Study in Medical geography, David and Charles, London.
2. Misre. R. P. – Medical Geography of India, NBT, New Delhi.
3. Howe. M. And Loraine (Eds) – Environmental Medicine, William Heinemann.
4. Pyle. G. F. Applied Medical Geography, W. H. Winston Sons, Washington D. C.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>VI</b>	<b>17U6GYEL4A</b>	<b>Major Elective - IV BIO-GEOGRAPHY</b>	<b>3</b>	<b>3</b>

**Unit I** Definition, Scope and Significance of Biogeography – Basic Ecological Concepts and Principles – Ecosystem – Types, Components and Functions – Biome – Types Ecotone and Community – Bio Diversity.

**Unit II** Origin of Fauna and Flora – Plant and animal evolution through geological times – Distribution of plant life on earth and its relation to soil types.

**UNIT III** Problem of extinction of plant and animal life – Habitat decay and their conservation – Process of desertification – its consequences and management.

**UNIT** Effluents – Types, Sources, Effects on fresh water Biology – Eutrophication – management practices (special reference to India)

**UNIT V** Ecological regions of Himalayas and Western Ghats – Plant and animal life – Interrelationships – problems – conservation and management measures.

**Reference Books:**

1. Robinson – Biogeography, ELBS Mc Donald and Evans, London.
2. L. G. Simons – Biogeographically Process, Allen and Unwell, London.
3. C. Barry Cox Black Well – Biographical an Ecological Evolutionary Approach Oxford.
4. B. Seddon – Biogeography, Duck Worth, London.

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Semester	Subject Code	Title Of The Paper	Hours of Teaching/ Week	No. of Credits
<b>VI</b>	<b>17U6GYEL4B</b>	<b>Major Elective- IV GEOGRAPHY OF TOURISM - II</b>	<b>3</b>	<b>3</b>

**Unit I** Accommodation – types of accommodation, accommodation – time sharing – tours and tour operators – private and public tourism development corporations.

**Unit II** Tourism promotion – Role of advertising and publicity - audio, visual, photographs, posters, information offices – Role of handicrafts, fairs, festival, exhibition.

**UNIT II** Tourism organisation – International – – WTO, IATA, PATA, and IUOTO – international tourists flow - National – Regional – Local – Public – Private – Travel information – Role of Travel Agency – Guide Services – Soft skills – Role of Soft Skill in Visitor’s service.

**UNIT IV** Indian Tourism, major types – India as a paradise for tourists –Tourism Infrastructure; Case Studies of Himalaya, Desert and Coastal Areas; National Tourism Policy Importance of tourism in Indian economy.

**UNIT V** Consultant of tourism development – Measure of promoting tourism – Tourism development in Tamil Nadu – Impact on economy.

**Reference Books:**

1. Manett Kumar – Tourism Today, Kanishka Publishing House, Kelhi.
2. Michael. M. Coltman – Tourism Marketing, Vanostand Reintold, New York.
3. Fodder Hoddles - Fodder’s Guide of India, Hoden And Strongton.
4. Rosemary Burton – Travel Geography, Pitman Publishing, London.