

Particulars of the Semester wise Theory and Practical Papers and paper codes

Semester	Paper Code	Title of the Paper	Course
	GY T A	Physical Geography	DSC
Ι	GY Pr. A	Scale and Maps	DSC
II	GY T B	Human Geography	DSC
	GY Pr. B	General Cartography &IMD Weather Map	DSC
III	GY T C	Regional Geography of Karnataka	DSC
	GY Pr. C	Interpretation of SOI Topographical Maps	DSC
IV	GY T D	Environmental Geography	
	GY Pr. D	Map Projections	DSC
	GY T E-I	Regional Geography of India	DSE
	GY T E-II	Geography of Settlements	DSE
V	GY Pr. E	Basic Statistics	DSE
	GY E.SECIII	Regional Planning& Development	SEC-I
	GY T-GE-IV	Elements of Physical Geography	GE-I
	GY T F-I	Economic Geography of the World	DSE
	GY T F-II	Population Geography	DSE
	GY Pr. F	Field techniques and Survey based Project report	DSE
VI	GY F SECIII	Remote Sensing and GIS based Project report	SEC-II
	T/Pr.		
	GY-GE-IV	Physical Geography of India	GE-II

Note: All the DSC Courses are compulsory. Each DSE shall have at least two papers and students shall choose any one paper from each DSE and Practical is compulsory SEC Practical is compulsory of these two semesters

The practical batches is to be in accordance with University Norms



KARNATAK 🗸 UNIVERSITY

### **DHARWAD**

# CBSC Syllabus for under Graduate Programme in GEOGRAPHY(OPT) B.A :DISCIPLINE SPECIFIC COURSE (DSC) (WITH EFFECT FROM 2020-21)

		(							
Semester	Theory/	Subject	Instruction	Total	Duration	Internal	Sem.	Total	Total
	Practical	code	hour per	syllabus	of	Assessment	End	Marks	Credits
			week	Hrs/	Exam.	Marks	Exam.		
				Sem			Marks		
	Theory	DSC	04hrs	60	03hrs	20	80	100	04
Ι		(GY T:A)							
	Practical	DSC	04hrs	52	03hrs	10	40	50	02
		(GY Pr: A)							
	Theory	DSC	04hrs	60	03hrs	20	80	100	04
II		(GY T:B)							
	Practical	DSC	04hrs	52	03hrs	10	40	50	02
		(GY Pr: B)							
	Theory	DSC	04hrs	60	03hrs	20	80	100	04
III		(GY T:C)							
	Practical	DSC	04hrs	52	03hrs	10	40	50	02
		(GY Pr: C)							
	Theory	DSC	04hrs	60	03hrs	20	80	100	04
IV		(GY T:D)							
	Practical	DSC	04hrs	52	03hrs	10	40	50	02
		(GY Pr: D)							
	*Theory	DSE							
V	P-I/P-II	(GY T:E-I)	04hrs	60	03hrs	20	80	100	04
		(GY T:E-II)	04hrs	60	03hrs	20	80	100	04
	Practical	DSE							
		(GY Pr-E)	04hrs	52	03hrs	10	40	50	02
	*Theory	DSF							
VI	P-I/P-II	(GY T:F-I)	04hrs	60	03hrs	20	80	100	04
		(GY T:F-II)	04hrs	60	03hrs	20	80	100	04
	Practical	DSE							
		(GY Pr-F)	04hrs	52	03hrs	10	40	50	02

\* Candidate shall choose either paper-I or Paper-II from DSE theory (V Sem) and DSE theory (Sem VI) but not both from DSE theory and DSE theory.

### SKILL ENHANCEMNET COURSE (SEC) for Geography as Discipline Specific Course (DSC)

Semester	Theory/	Subject	Instructi	Total	Duration	Internal	Sem.	Total	Total
	Practical	code	on hour	syllabus	of	Assessment	End	Marks	Credits
			per	Hrs/	Exam.	Marks	Exam.		
			week	Sem			Marks		
V	Theory	SEC:	02hrs	30	1.5hrs	10	40	50	02
		GY.E-III							
V	Theory	SEC:	02hrs	30	1.5hrs	10	40	50	02
		GY.E-IV							
VI	Practical	SEC	02hrs	30	1.5hrs	10	40	50	02
	/ Theory	(GY Pr. F:II)							
VI	Practical	SEC	02hrs	30	1.5hrs	10	40	50	02
	/ Theory	(GY Pr. F:III)							
Total			8hrs	120		40	160	200	08

# B.A – Semester I Discipline Specific Core -(DSC) Under CBCS GY-T A: PHYSICAL GEOGRAPHY

(WITH EFFECT FROM 2020-21 AND ONWARDS)

Credits: I. Theory : 04. Theory class 4hrs/week Total Theory: 60 Lectures Max. Marks 100. (80 Marks for Sem. end Examination and 20 marks IA) Duration of Examination 3 hrs

II. Practical: 02. Practical classes: 4hrs/week. Total Practical: 52 hrs. Max.50 Marks

### Total credits: 06: 4 Theory 2 Practical

Unit	Title	Sub-unit	Hrs
1	Introduction to Physical Geography	Meaning, Field and Scope	02
II	Origin of the earth	Nebular and Tidal Theory	02
		Interior of the earth.	
		Continental drift theory of Wegener and Plate tectonic	
III		theory.	
		Formations and types of Volcanoes, Earthquakes and	25
	Lithosphere	Rocks.	
		Geomorphic Agents and Process of Denudations:	
		River, Glacier Underground water and Winds.	
		Composition and Structure.	
		<b>Insolation:</b> Factors affecting the distribution of	
		atmospheric temperature.	
		Vertical and Horizontal distribution of atmospheric	
<b>TX</b> 7		temperature	
IV	Atmosphere	Atmospheric Pressure: Factors affecting the	
		atmospheric Pressure.	21
		Vertical and horizontal distribution of pressure and	
		World Pressure belts.	_
		Wind System: Planetary, Seasonal, Local and Variable	
		Winds (cyclones and anticyclones).	_
		<b>Precipitation:</b> Humidity and Types of Rainfall.	
		The Relief of the Oceans: Continental Shelf,	10
		Continental Slope, Deep –	
		xzA Sea Plain and Troughs.	
V	Hydrosphere	Tides and ocean currents: Indian, Pacific and Atlantic	
<b>v</b>		Salinity and temperature of Oceans: Atlantic, Pacific	
		and Indian.	

- 1. Conserva H.T (2004): Illustrated Dictionary of Physical Geography, Author House,
- Gabler R.E, Peterson J.F and Trapasso L.M (2007): Essentials of Physical Geography (8<sup>th</sup> edition) Thompson Books / Cole USA.
- 3. Garrett N (2000) Advanced Geography, Oxford University Press.
- 4. Goudie A (1984): The Nature of Environment: An advanced Physical Geography, Basil Husain M (2002): Fundamentals of Physical Geography, Rawat Publications, Jaipur.
- 5. Monkhouse F.J(2009): Principles of Physical Geography, Platinim Publishers,
- 6. Strahler A N and Strahler A H (2008): Physical Geography, John Wiley & Sons New
- I. ªÀÄ®è¥Àà : "sËwPÀ "sÀÆUÉÆÃ¼À±Á,ÀÛç
- qÁ. gÀAUÀ£ÁxÀ: ¥ÁæPÀÈwPÀ "sÀÆUÉÆÃ¼À±Á, ÀÛçzÀ ªÀÄÆ® vÀvÀéUÀ¼ÀÄ
- 9. qÁ. JA. ©. UËqÀgÀ: "sËwPÀ "sÀÆUÉÆÃ¼À±Á,ÀŰç
- 10. ¥ÉÆæ. r. J. PÉÆ<sup>-</sup> Áè¥ÀÄgÉ & ¥ÉÆæ. J,ï.J,ï.£ÁAdtÚ£ÀªÀgÀ: ªÁAiÀÄÄUÀÄt±Á,ÀÛç ªÀÄvÀÄÛ ªÀĺÁ,ÁUÀgÀ «eÁÕ£À

# B.A – Semester I Discipline Specific Core -(DSC) Under CBCS GY-Pr. A: SCALES AND MAPS (WITH EFFECT FROM 2020-21 AND ONWARDS) Practical-I

**Credits: 02** : Practical class 4hrs/week

Total Practical: 52 hrs

Max. Marks: 50. Internal Marks 10 & Sem. End Exam:40 Marks (Practical Sem. End Exam-30, Journal-05, Viva-Voce-05 marks) Duration of Examination 3hrs

Unit	Title	Sub-unit	Hrs
Ι	Scales and Maps	Scales and Maps as a tools in Geography	04
		Introduction: Definition, Types, Methods of	
		Representation and uses of scales.	
	Scales	Conversion of scales: Representative Fraction (RF)	
т		to Verbal scale and Verbal scale to Representative	28
II		Fraction (RF).	
		Construction of scales: Graphical (Plain),	
		Comparative, Pace, Time and Diagonal.	
		Introduction: Definition, Types and Importance of	
Ш	Maps	Maps.	20
		Enlargement and Reduction of Maps by Graphical	
1		method (02 exercise each).	

Note: \* Each practical batch consists of 15 students with one in-charge teacher. In case the student number is less than 10 is also considered as one batch with one teacher in-charge.

\* Certification of journal by the in-charge teacher is must and submits the same in the Sem. End practical exam, failing that such candidate will lose journal marks i.e. 05 marks

- 1. Gopal Singh: Map work and Practical Geography, 3<sup>rd</sup> ed. Vikas Publishing Houde, New Delhi.
- 2. Gupta K and Tyagi V.C : Working with Maps, Survey of India, Dept. of Sci. and Technology, Govt. of India, Dehra Dun 1992.
- John and Keats: Cartographic design and production, 2<sup>nd</sup> ed. 1989, John wiley, New York.
- 4. Mishra R.P: Fundamentals of Cartography, 1969, Prasaranga, University of Mysore.
- Monkhouse F.J and : Maps and Diagrams, Wilkinson H.RMathuen and Co. Ltd. London, 1952
- 6. Phyllis Dink: Map work, 10<sup>th</sup> ed. Atma Ram and Sons, Delhi 1969.
- 7. Raisz E: Genera; I Geography, 1948, Tata, Mc-Grow-Hill New York.
- 8. Ranganath : An introduction to practical Geography, Vidyanidhi Publication, Gadag.
- 9. Singh R.L: Elements of Practical Geography, Kalyani Publishers, New Delhi.
- 10. qÁ. gÀAUÀ£ÁxÀ: ¥ÁæAiÉÆÃVPÀ "sÀÆUÉÆÃ¼À±Á,ÀÛç.
- 11. qÁ. J,ï.J,ï.£ÀAdtÚ£ÀªÀgÀ & qÁ. JA. J¥sï. PÀgÉtÚªÀgÀ: ¥ÁæAiÉÆÃVPÀ ¨sÀÆUÉÆÃ¼À±Á,ÀÛç.

# B.A – Semester II Discipline Specific Core -(DSC) Under CBCS GY-T B: HUMAN GEOGRAPHY

### (WITH EFFECT FROM 2020-21 AND ONWARDS)

Credits: I. Theory: 04. Theory class 4hrs/week

Total Theory: 60 Lectures

Max. Marks 100. (80 Marks for Sem. end Examination and 20 marks IA) Duration of Examination 3 hrs

**II. Practical: 02**. Practical class: 4hrs/week. Total Practical: 52 hrs. Max. 50 Marks

Unit	Title	Sub-unit	Hrs
1	Introduction to Human	Introduction: Definition, Field and Scope of Human	08
	Geography	Geography. Branches of Human geography	
II	Conceptual approaches	Environmental determinism, Possibilism and Neo-	02
	of Man-Environmental	determinism	
	Relationship		
III	Social and Cultural	Major races of the world: Classification and distribution of Caucasoid, Mangoloid, Negroid and Australoid. Culture and Religion of the World.	
	Geography	Settlements: Types and Patterns of Rural settlements. Definition of urban places. The origin of towns and functional classification of towns.	23
		<b>Urbanization:</b> Trends and Patterns of World Urbanizations	
IV	Tribes: Habitat and Economy	Major tribes of the world (Primitive people): Pygmies,Bushman, Eskimos, Semang and sakais.Major Indian Tribes: Todas, Bills, Gondas, Nagas and	19
		Santals.	
V	Population Geography	Growth and distribution of world population.	08
D . f		<b>Population composition:</b> Sex-ratio and Literacy rate.	

### Total credits: 06 : 4 Theory 2 Practical

- 1. Dickens and Pitts: Introduction to Human Geography, 1963.
- 2. Harm D. Blij: Human and Economic Geography, Mac Millan, New York, 1992.
- 3. Husain M: Human Geography, Rawat Publications, Jaipur, 2003.
- 4. Nellson, Gabler & Vining Human: Human Geography, People, Culture and Land
- 5. Peter Danials, MichaelBradshaw Denis Shaw, James Sidaway: Human Geography, Issues for the 21<sup>st</sup> Century, Pearson, 2003.
- 6. Norris and Haring: Political Geography, Charles E. Merrill Publishing Company.
- 7. Ranganath: Principals of Human Geography (Kan Var) Vidyanidhi , Gadag, 2002.
- 8. Rubenstein J.M: An Introduction to Human Geography, MacMillon Publishing
- 9. ¦. ªÀÄ®è¥Àà: ªÀiÁ£ÀªÀ "sÀÆUÉÆÃ¼À±Á,ÅÛç
- 10. qÁ. gÀAUÀ£ÁxÀ: ªÀiÁ£ÀªÀ "sÀÆUÉÆÃ¼Å±Á ÅÛç
- 11. ¥ÉÆæ. J,ï.J,ï.£ÀAdtÚ£ÀªÀgÀ: ªÀiÁ£ÀªÀ ¨sÀÆUÉÆÃ¼À±Á,ÀÛç
- 12. qÁ. JA.©. UËqÀgÀ: ªÀiÁ£ÀªÀ "sÀÆUÉÆÃ¼À±Á, ÀÛç

# B.A – Semester II Discipline Specific Core -(DSC) Under CBCS GY-Pr. B: GENERAL CARTOGRAPHY & IMD WEATHER MAP (WITH EFFECT FROM 2020-21 AND ONWARDS)

#### **Practical-II**

Credits: 02 : Practical class 4hrs/week Total Practical: 52 hrs Max. Marks: 50. Internal Marks 10 & Sem. End Exam:40 Marks (Practical Sem. End Exam-30, Journal-05, Viva-Voce-05 marks) Duration of Examination 3hrs

Unit	Title	Sub-unit	Hrs
		Single and double Line graph.	12
		Single and double Bar graph.	
Ι	Construction of Graphs	Climograph.	
		Hyther Graph.	
		Ergo Graph.	
II	Diagrams and Thematic	Pie, Traffic-flow, Spheres and Wind-Rose	12
	Maps	Choropleth and Dot Maps	
		<b>Thermometer</b> – Wet Bulb and Dry Thermometer.	12
		Barometer – Aneroid Barometer.	
III	Weather Instruments and	Rain gauge and Cup Anemometer	
	IMD Weather Maps	Weather Signs and Symbols	04
		Interpretation of Indian Daily Weather Report – 4	12
		exercises (One exercise from each season).	

- 1. Gopal Singh: Map work and Practical Geography, 3<sup>rd</sup> ed. Vikas Publishing Houde, New Delhi.
- 2. Gupta K and Tyagi V.C : Working with Maps, Survey of India, Dept. of Sci. and Technology, Govt. of India, Dehra Dun 1992.
- 3. Jacki Smith B.A (ed): Dictionary of Geography, Cosmo Publications, New Delhi 1983.
- 4. John and Keats: Cartographic design and production, 2<sup>nd</sup> ed. 1989, John wiley.
- 5. Mishra R.P: Fundamentals of Cartography, 1969, Prasaranga, University of Mysore.
- 6. Monkhouse F.J and : Maps and Diagrams, Wilkinson H.R.Mathuen and Co. Ltd. London,
- 7. Phyllis Dink: Map work, 10<sup>th</sup> ed. Atma Ram and Sons, Delhi 1969.
- 8. Raisz E: Genera; I Geography, 1948, Tata, Mc-Grow-Hill New York.
- 9. Ranganath : An introduction to practical Geography, Vidyanidhi Publication, Gadag.
- 10. Singh R.L: Elements of Practical Geography, Kalyani Publishers, New Delhi.
- 11. qÁ. gÀAUÀ£ÁxÀ: ¥ÁæAiÉÆÃVPÀ "sÀÆUÉÆÃ¼À±Á,ÀÛç.
- 12. qÁ. J,ï.J,ï.£ÀAdtÚ£ÀªÀgÀ & qÁ. JA. J¥sï. PÀgÉtÚªÀgÀ: ¥ÁæAiÉÆÃVPÀ "sÀÆUÉÆÃ¼À±Á,ÀÛç.

# B.A – Semester III Discipline Specific Core -(DSC) Under CBCS GY-T C: REGIONAL GEOGRAPHY OF KARNATAKA (WITH EFFECT FROM 2020-21 AND ONWARDS)

WITH EFFECT FROM 2020-21 AND ONW

Credits: I. Theory: 04. Theory class 4hrs/week Total Theory: 60 Lectures

Max. Marks 100. (80 Marks for Sem. end Examination and 20 marks IA) Duration of Examination 3 hrs

II. Practical: 02. Practical class: 4hrs/week. Total Practical: 52 hrs. Max. 50 Marks

Total credits: 06 : 4 Theory 2 Practical

Unit	Title	Sub-unit	Hrs
Ι	Physical Aspects	Location, Size, Extent	
		Physiographic divisions.	16
		Climate, Rivers, Soils and Vegetation.	
		River Valley Projects: Krishna, Malaprabha,	
		Ghataprabha, Tunga Bhadra	
		and Cauvery Rivers.	
		River Water Dispute: Cauvery, Krishna and	
п	Agriculture and Diver Valley	Kalasa Banduri.	22
11	Agriculture and River Valley	Irrigation: Sources and Types	
	Projects	Types of Agriculture.	
		Cultivation, Distribution and Production of	
		major Crops: Food crops: Paddy Ragi, Jowar	
		and Wheat. Commercial crops: Cotton, Sugar	
		Cane, Tobacco,	
		Chilli. Horticulture Crops : Coffee and Tea.	
		<b>Distribution and Production of Mineral</b>	
	Mineral Resources and	Resources: Iron ore, Manganese	
III	Industries	Bauxite and Gold.	10
		Distribution and Production of major	
		industries: Iron and Steel, Sugar, Cotton textile	
		and Cement Industries.	
IV	Transportation	Patterns of Road and Railway, Ports and	05
		Harbours.	
V	Population	Growth and distribution, Density, Sex-ratio and	
		Literacy.	07
		Process of urbanization and trends.	

- 1. Karnatak State Gazetter, 2 Volume.
- 2. Mallappa: Geography of Karnataka
- 3. Misra R.P: Geography of Karnataka State
- 4. NBK Reddy & Murthy G.S: Regional Geography of Mysore State
- 5. Dr. Ranganath: Regional Geography of Karnataka, Mysore Book House, Mysore
- ¥ÉÆæ. r. J. PÉÆ<sup>-</sup> Áè¥ÀÄgÉ & ¥ÉÆæ. J,ï.J,ï.£ÀAdtÚ£ÀªÀgÀ:À Regional Geography of Karnataka
- 7. S.S.Nanjannavar & M.N.Meeranaik: Geography of Karnataka
- 8. qÁ. JA.©.UËqÀgÀ: Regional Geography of Karnataka

# B.A – Semester III Discipline Specific Core -(DSC) Under CBCS GY-Pr. C: INTERPRETATION OF SOI TOPOGRAPHICAL MAPS (WITH EFFECT FROM 2020-21 AND ONWARDS) Practical-III

Credits: 02 : Practical class 4hrs/week Total Practical: 52 hrs Max. Marks: 50. Internal Marks 10 & Sem. End Exam:40 Marks (Practical Sem. End Exam-30, Journal-05, Viva-Voce-05 marks) Duration of Examination 3hrs

Unit	Title	Sub-unit	Hrs
		Methods of Representation of Relief Features	04
		Hill, Types of slopes-Convex, Concave,	
Ι	Representation of relief features	Undulating and Uniform slopes. Saddle,	
	r	Plateau, Escarpment, Spur, Gorge, U & V	08
		Shaped valleys, Pars	
		and Water Falls.	
		Arrangement and marginal information of	04
	Marginal information of SOI Topographical Maps	SOI Topographical Maps	
II		Conventional Signs and Symbols and Colours	
		convention used in SOI	08
		Topographical Maps	
		Relief Features	
		Drainage Patterns	
III	Interpretation of Indian	Vegetation Distribution	24
	Topographical Maps	Settlement types and Distribution	
	F - 8 F F -	Land-Use Patterns	
		Transport and Communication	
		Cross Section:	04

- 1. Gopal Singh: Map work and Practical Geography, 3<sup>rd</sup> ed. Vikas Publishing Houde, New Delhi.
- 2. Gupta K and Tyagi V.C : Working with Maps, Survey of India, Dept. of Sci. and Technology, Govt. of India, Dehra Dun 1992.
- 3. Jacki Smith B.A (ed): Dictionary of Geography, Cosmo Publications, New Delhi
- 4. John and Keats: Cartographic design and production, <sup>2nd</sup> ed. 1989, John wiley, NY
- 5. Mishra R.P: Fundamentals of Cartography, 1969, Prasaranga, University of Mysore.
- 6. Monkhouse F.J and : Maps and Diagrams, Wilkinson H.R.Mathuen and Co. Ltd. London,
- 7. Phyllis Dink: Map work, 10<sup>th</sup> ed. Atma Ram and Sons, Delhi 1969.
- 8. Raisz E: Genera; I Geography, 1948, Tata, Mc-Grow-Hill New York.
- 9. Ranganath : An introduction to practical Geography, Vidyanidhi Publication, Gadag.
- 10. Singh R.L: Elements of Practical Geography, Kalyani Publishers, New Delhi.
- 11. qÁ. gÀAUÀ£ÁxÀ: ¥ÁæAiÉÆÃVPÀ "sÀÆUÉÆÃ¼À±Á ÀÛç.
- 12. qÁ. J,ï.J,ï.£ÀAdtÚ£ÀªÀgÀ & qÁ. JA. J¥sï. PÀgÉtÚªÀgÀ: ¥ÅæAiÉÆÃVPÀ ¨sÀÆUÉÆÃ¼À±Á,ÀÛç.

### **B.A Semester-IV**

# Discipline Specific Core -(DSC) Under CBCS

**GY-T D: ENVIRONMENTAL GEOGRAPHY** 

(WITH EFFECT FROM 2020-21 AND ONWARDS)

Credits: I. Theory : 04. Theory class 4hrs/week Total Theory: 60 Lectures Max. Marks 100. (80 Marks for Sem. end Examination and 20 marks IA)

Duration of Examination 3 hrs

II. Practical: 02. Practical class: 4hrs/week. Total Practical: 52 hrs. Max. 50 Marks Total credits: 06: 4 Theory 2 Practical

Unit	Title	Sub-unit	Hrs
Ι	Introduction	Meaning and components of environment. Field and	05
		scope of environmental Geography	
II	Ecosystem	Types, Structure and Functions - Productivity, Food-	20
		chain, Food-Web, Ecological Pyramid. Bio-Geo-	
		Chemical cycle – Hydrological, Carbon, Nitrogen	
		Oxygen and Energy flow in the eco- system.	
III	<b>Bio-Diversity</b>	Types and Uses of Bio-Diversity, Threats to Bio-	13
		Diversity. Endangered Species of India. Conservation	
		of Bio-Diversity.	
IV	Global Warming and	Green House effects. Ozone layer depletion- Causes,	05
	Environmental	Consequences and protection	
	Pollution		
		Causes, Effects and Measures to control the pollution :	12
		Air, Water Soil and Solid waste.	
V	Conservation and	National and International: Policies, Rio Summit,	05
	Management of	Kyoto Declaration and Swatch Bharat Abhiyan	
	Environment		

### **References:**

- 1. Agarawal K.C: Environmental Biology, Nidhi Pub. Bikaner, 2001.
- 2. Chausasia B.P: Environmental Pollution, Consequences and Measures.
- 3. Mathur H.S: Environmental Resources, The Crises of Development.
- 4. Odum E.P: Fundamentals of Ecology, WBSaunders Co. London, 1971.
- 5. Saxena H.M: Environmental Geography, Rawat Pub. Jaipur, 1999.
- 6. Sharma P.D: Ecology and Environment: Rastogi Pub. New Delhi, 1999.
- 7. Strahler and Strahler: Geography and Mans Environment, John Wiley New York,
- 8. Heywood V.H. & Warson R.T: Global Bio-Diversity Assessment, CUP, 1995.
- 9. Darsh M.C: Fundamentals of Ecology, Tata McGrow Hills New Delhi, 2002.
- 10. qÁ. J⁻ï.n.£ÁAiÀÄPÀ: ¥Àj,ÀgÀ ¨sĂÆUÉÆÃ¼À±Á,ÀÛç
- 11. qÁ. JA.©.UËqÀgÀ: ¥Àj,ÁgÀ sÀÆUÉÆÃ¼À±Á,ÀÚç

12 ¥ÉÆæ. r. J. PÉÆ̈́ Áè¥Á̈́Äğ́É & ¥ÉÆæ. J,ï.J,ï.£ÅAdtÚ£ÀªÀgÀ:À¥Àj,ÀgÀ ¨sÀÆUÉÆÃ¼À±Á,ÀÛç

# B.A – Semester IV Discipline Specific Core -(DSC) Under CBCS GY-Pr. D: MAP PROJECTIONS (WITH EFFECT FROM 2020-21 AND ONWARDS) Practical-IV

Credits: 02 : Practical class 4hrs/week

Total Practical: 52 hrs

Max. Marks: 50. Internal Marks 10 & Sem. End Exam:40 Marks (Practical Sem. End Exam-30, Journal-05, Viva-Voce-05 marks) Duration of Examination 3hrs

Unit	Title	Sub-unit	Hrs
Ι	Introduction of Map	Meaning, Classification, importance,	04
	projection	Properties and Uses of Map Projections.	
		Cylindrical Projections: Simple	12
		Cylindrical, Cylindrical – equal area	
Π	Map Projections: Properties,	Mercator's Projection.	
	Uses and Graphical Construction	Conical Projections : Conical Projection	12
	-	with one standard parallels	
		Bonne's Projection.	
		Zenith Projections: Polar Zenith equal	12
		area, Gnomonic Stereographic and	
		Orthographic	
III	Conventional Projections	Sinusoidal Projection and Millweids	12
		Projection	

- 1. Salar Masood M: Map Projections, Rao and Raghavam Co. Mysore.
- 2. Ranganath : Map Projections (Kan. Ver.) Chetana Book House, Mysore.
- 3. Ervin Raisz: General Cartography, Mc Graw Hill Book Company,
- 4. Singh R.L: Elements of Practical Geography, Allahabad.
- 5. George P. Kellaway: Methuen & Co. Ltd. London.
- 6. Gopal Singh: Map work and Practical Geography, Surjeet Pub. New Delhi.
- 7. S.S.Nanjannavar & M.F.Karennavar: Practical Geography.
- 8. Dr. S.S.Kadaramandalagi: Practical Geography.
- 9. Prof. P.Mallappa :Map Projections. Chetana Book House, Mysore

# B.A Semester- V Discipline Specific Elective -(DSE) Under CBCS GY-T E: I - REGIONAL GEOGRAPHY OF INDIA (WITH EFFECT FROM 2020-21 AND ONWARDS)

Credits: I. Theory : 04. Theory class 4hrs/week Total Theory: 60 Lectures Max. Marks 100. (80 Marks for Sem. end Examination and 20 marks IA) Duration of Examination 3 hrs

II. Practical: 02. Practical class: 4hrs/week. Total Practical: 52 hrs. Max. 50 MarksTotal credits: 06: 4 Theory 2 Practical

Unit	Title	Sub-unit	Hrs
		Location, Size and Extant and Land Frontiers	
Ι	Location and Physical Aspects	Physiographic Divisions.	18
		Drainage, Climate, Soils and Natural	
		Vegetations	
		Growth, Distribution and Density of	10
II	Population	Population	
		Sex-ratio and Literacy.	
		Types of agriculture.	17
III	Agriculture	Cultivation, Distribution and production :	
		<i>Food crops</i> - Rice and Wheat.	
		Commercial Crops - Sugar Cane and Cotton.	
		<i>Plantation Crops</i> - Tea, Coffee and Rubber.	
		Distribution and Production: Iron ore,	05
IV	Minerals and Industries	Manganese, Bauxite, Coal, and Petroleum	
		Location factors of Industries	01
		Distribution and Production: Sugar, Cotton	07
		Textile, Iron and Steel, Aluminium, Paper and	
		Cement Industries.	
V	Transport	<b>Road:</b> National High ways and Quadrangle	02
		Corridor	
		Railway: Railway Zone	

Note: \* Students can choose any one from the discipline specific elective paper either Regional Geography of India or Geography of Settlements

- 1. Gopal Singh: A Geography of India, Atmaram & Sons New Delhi.
- 2. ICAR: Croping pattern in India, 1974.
- 3. Mathus S.M: Physical Geography of India, NBT, 1991.
- 4. Ranganath : "sÁgÀvÀzÀ DyðPÁ ªÀÄvÀÄÛ ªÁtÂdå "sÀÆUÉÆÃ¼À±Á,ÀÛç
- 5. Ranjit Thirtha: Geography of India, Raniat, Jaipur, 1996.
- 6. Khullar D.R: India A Comprehensive Geography, Kalyani Pub. Ludhiana, 2000.
- 7. Tiwari R.C: Geography of India, Prayag Pustak Bhavan, Allahabad, 2003.
- qÁ. DAiÀiï. J. ªĂÄÄ<sup>-</sup>Áè: "sÁgÀvÀzÀ "sÀÆUÉÆÃ¼À±Á,ÀÛç & qÁ. J,ï.J,ï.£ÀAdtÚ£ÀªÀgÀ
- qÁ. JA.©.UËqÀgÀ: sÁgÀvÀzÀ DyðPÀ AÄvÀÄÛ AtÂdå sÀÆUÉÆÃ¼À±Á,ÀÛç.
- 10. ¦. ªÀÄ®è¥Àà: ¨sÁgÅvÀzÅ DyðPÀ ªÀÄvÀÄÛ ªÁtÂdå ¨sÀÆUÉÆÃ¼À±Á¸ÀÛç

# **B.A Semester-V Discipline Specific Elective -(DSE) Under CBCS GY-T E: II - GEOGRAPHY OF SETTLEMENTS**

(WITH EFFECT FROM 2020-21 AND ONWARDS)

Credits: I. Theory : 04. Theory class 4hrs/week Total Theory: 60 Lectures Max. Marks 100. (80 Marks for Sem. end Examination and 20 marks IA) Duration of Examination 3 hrs

Total Practical: 52 hrs. Max. 50 Marks II. Practical: 02. Practical class: 4hrs/week. Total credits: 06 : 4 Theory 2 Practical

Unit	Title	Sub-unit	Hrs
Ι	Introduction	Meaning, Definition, Scope and Nature of Settlement	08
		Geography	
		Factors affecting the distribution of rural settlements.	
		Origin and evolution of rural settlements.	
II	<b>Rural Settlements</b>	Types and Patterns of Rural Settlements.	20
		Size and spacing of Rural settlements.	
		Morphology of Rural settlements – Physical,	
		Functional and social.	
		Rural problems and planning.	
III	Govt. Recent Policies	Sanitation and Water supply Program, Pradhana	
	and Programmes for	Mantri Grama Sadak Yojana, Pradhana Mantri	05
	Rural Development	Grameena Avasa Yojana, Pradhana Mantri	
		Ujvala Yojana and Deen Dayal Upadhya Grameena	
		Koushlya Yojana	
	Definition of urban places, origin of towns and		
		functional classification of towns.	
	Urban settlements	Theories of Urban Land use: Concentric Zone	
IV		theory, Multi Nuclei theory and Sector Theory	20
		Urban Hierarchy, Primate City concept, Central place	
		theory of Christller	
		Rural – Urban Continuum. Characteristics and	
		development of Urban.Fringe and Urban Slums.	
V	Govt. Recent PoliciesSmart City Mission, National Urban Livelihood		
	and Programmes for Mission, National Heritage City Development &		
	Urban DevelopmentAngementation Yojana (HRIDAY), Swatch Bhara		07
	Mission, Amruta urban development scheme.		
		Urban problems and planning.	

Note: \* Students can choose any one theory paper from the discipline specific elective paper either Regional Geography of India or Geography of Settlements **Reference:** 

- 1. Husain M: Human Geography, Rawat Pub. Jaipur, 2003.
- 2. Nellson, Gabler & Vining: Human Geography, People Culture and Landscapes, 1995.
- 3. Norris and Haring: Political Geography, Charles E. Merill Pub. Co.
- 4. Dr. Ranganath: Principles of Human Geography (Kan. Ver.) Vidyanidhi, Gadag,
- 5. Singh R.Y: Geography of Settlements, Rawat Pub. New Delhi, 2007.
- 6. Harold Carter: The study of Urban Geography, 1982.
- 7. qÁ. J<sup>−</sup>ï.n.£ÁAiÀÄPÀ: Settlement Geography

8. qÁ. JA.©.UËqÀgÀ: Settlement Geography

# B.A – Semester V Discipline Specific Elective -(DSE) Under CBCS GY-Pr. E: BASIC STATISTICS (WITH EFFECT FROM 2020-21 AND ONWARDS)

Practical-V

Credits: 02 : Practical class 4hrs/week

Total Practical: 52 hrs

Max. Marks: 50. Internal Marks 10 & Sem. End Exam:40 Marks (Practical Sem. End Exam-30, Journal-05, Viva-Voce-05 marks) Duration of Examination 3hrs

Unit	Title	Sub-unit	Hrs
Ι	Introduction	Meaning, Importance and Limitations	04
II	Methods of Samplings,	Sampling : Definition and Types	
	Sources of Data and	Sources of Data : Primary and Secondary Data	
	Frequency Distribution	and Data Tabulation	24
		Frequency Distribution : Histogram, Frequency	
		Polygon, Frequency Curve and Ogive Curves	
III	Measures of Central	Measures of Central Tendency: Mean, Median	
	Tendency and Dispersion	and Mode	24
		Measures of Dispersion : Range, Quartile	
		Deviation and Standard Deviation	

- 1. Singh R.L: Elemets of Practical Geography, Kalyani Publishers, New Delhi, 1979.
- 2. Gopal Singh: Map Work and Practical geography, 2<sup>nd</sup> ed. Vikas Pub. New Delhi.
- 3. Mishra R.P: Fundamentals of Cartography: Prasaranga, Mysore University, 1969.
- 4. Zamir Alvi: Statistical geography, Methods and applications, Rawat Pub. Jaipur, 1995.
- 5. D.V. Jangannavar: Elements of statistics[

# B.A – Semester V Specific Elective Core -(SEC) Under CBCS GY-T E III SEC: REGIONAL PLANNING& DEVELOPMENT (WITH EFFECT FROM 2020-21 AND ONWARDS)

Credits: 02. Theory class 02hrs/week Total Theory: 30 Lectures Max. Marks: 50. Internal Marks 10 & Sem. End Exam:40 Marks Duration of Examination 1.5 hrs

Unit	Title	Sub-unit	Hrs
Ι	Introduction	Concept, Need for regional planning and	08
		Types of Planning	
II	Regions	Concept, Types and delineation of Regions:	04
		Formal and Functional Regions	
III	Models of Regional	Models of Regional Planning: Growth Pole	04
	Planning	Theory and growth foci concept in Indian	
		context.	
IV	Backward regions and	Planning for Tribal area Development,	10
	regional plans	Planning for agriculture regions, planning for	
		Drought prone area and DVC.	
V	NITI Aayoga	The success story and the failures; NITI	04
		Aayoga.	

- 1. Blij H.J. De, 1971: Geography: Regions and concepts, John Wiley and Sons
- 2. Claval P.I., 1998: An Introduction to Regional Geography, Black Well Publishers, Oxford and Massachusetts.
- 3. Fried Mann J. and Alonso W. (1975): Regional Policy Readings in Theory and Applications, MIT Press, Massachusetts.
- 4. Gore C.G, 1984: Regions in Question space, Development Theory and Regional Policy, Methuen, London.
- 5. D.N.Nath (2009) :Regional Planning in India
- 6. Mahesh Chand and Vinay kumar Puri. (1983): Regional Planning in India
- 7. Johnson E.A.J. 1970: The organization of space in development countries, MIT Press
- 8. Peet R., 1999 : Theories of Development, The Guilford Press, New York.
- 9. Ray Choudhari (2001): An Introduction to Development and Regional Planning with special reference to India
- 10. R.P.Misra, K.V.Sundaram and V.L.S. Prakasa Rao: (1976) Reigional Planning In India
- 11. R.P.Misra, D.V.Urs and V.K.Natraj: 1978 Regional planning and National Developmnet
- 12. gÁ. J<sup>-</sup>ï.n.£ÁAiÀÄPÀ: ¥ÁæzÉòPÀ AiÉÆÃd£ÉAiÀÄ ªÀÄÆ® vÀvÀéUÀ¼ÀÄ
- 13. qÁ. JA.©.UËqÀgÀ: ¥ÁæzÉÃ2PÀ AiÉÆÃd£ÉAiÀÄ aÀÄÆ® vÀvÀéUÀ¼ÀÄ

# B.A – Semester V Generic Elective -(GE) Under CBCS GY-T E GE: ELEMENTS OF PHYSICAL GEOGRAPHY (WITH EFFECT FROM 2020-21 AND ONWARDS)

#### (OTHER THAN GEOGRAPHY STUDENTS)

Credits: 02. Theory class 02hrs/week Total Theory: 30 Lectures Max. Marks: 50. Internal Marks 10 & Sem. End Exam:40 Marks Duration of Examination 1.5 hrs

Unit	Title	Sub-unit	Hrs
Ι	Origin of the Earth	Nebular Theory, Latitudes and Longitudes,	06
		Longitude and Time, International Date Line.	
II	Lithosphere	The interior of the earth, Wegener's theory of continental drift. Formation, types and characteristics of Rocks	06
		Formation, Types and distribution: Earthquakes	
		and Volcanoes.	
III	Atmosphere	Structure and composition of the Atmosphere and Atmospheric heat budget. Mechanism of Monsoon Winds. Cyclones and Anti-Cyclones.	08
IV	Greenhouse effect	Global warming and Ozone layer depletion	05
V	Oceanography	Configuration of Oceans. Distribution of Temperature and salinity of the Indian and Pacific ocean	05

- 1. Conserva H.T (2004): Illustrated Dictionary of Physical Geography, Author House, USA.
- 2. Gabler R.E , Peterson J.F and Trapasso L.M (2007): Essentials of Physical Geography (8<sup>th</sup> edition) Thompson Books / Cole USA.
- 3. Garrett N (2000) Advanced Geography, Oxford University Press.
- 4. Goudie A (1984): The Nature of Environment: An advanced Physical Geography, Basil Blackwell Publishers, Oxford.
- 5. Humblin W.K (1995): Earths Dynamic system, Prentice Hall, N.J.
- 6. Husain M (2002): Fundamentals of Physical Geography, Rawat Publications, Jaipur.
- 7. Monkhouse F.J(2009): Principles of Physical Geography, Platinim Publishers, Kolkata.
- 8. Strahler A N and Strahler A H (2008): Physical Geography, John Wiley & Sons New Yo
- 9. qÁ. ¦. ªÀÄ®è¥Àà : "sËwPÀ "sÀÆUÉÆÃ¼À±Á,ÅÛç
- 10. qÁ. gÀAUÀ£ÁxÀ: ¥ÁæPÀÈwPÀ "sÀÆUÉÆÃ¼À±Å,ÀÛçzÀ ªÀÄÆ® vÀvÀéUÀ¼ÀÄ
- 11. qÁ. JA. ©. UËqÀgÀ: "sËwPÀ "sÀÆUÉÆÃ¼À±Á,ÀÛç

### **B.A Semester-VI**

# Discipline Specific Elective -(DSE) Under CBCS GY-T F: I - ECONOMIC GEOGRAPHY OF THE WORLD (WITH EFFECT FROM 2020-21 AND ONWARDS)

Credits: I. Theory : 04. Theory class 4hrs/week Total Theory: 60 Lectures Max. Marks 100. (80 Marks for Sem. end Examination and 20 marks IA) Duration of Examination 3 hrs

II. Practical: 02.Practical class: 4hrs/week.Total Practical: 52 hrs.Max. 50 MarksTotal credits:06 : 4 Theory 2 Practical

Unit	Title	Sub-unit	Hrs
Ι	Economic Geography: An	Definition, Scope and Nature of economic	
	introduction	Geography	10
		Approaches, Recent trends in Economic	
		Geography.	
II	Physical Aspects and	Physiographic divisions, Drainage, Climate,	20
	Natural Regions of the	and Natural Vegetation.	
	world	Natural Regions of the World: Equatorial,	05
		Monsoon, Desert, Grassland and Tundra.	
III	Agriculture	Types of farming :Shifting cultivation,	03
		Subsistence and Commercial	
		farming	
IV	Population	Growth, Distribution and Density	06
		Sex-ratio and Literacy.	
V	Mineral Resources,	Production and Distribution: Iron Ore,	06
	<b>Industries</b> and <b>Transport</b>	Manganese, Gold, Coal, Petroleum, Natural	
	-	Gas.	
		Vocational factors of Industries	01
		Distribution and Production of major	03
		industries: Iron and Steel, Cotton	
		Textile.	
		Ocean Transport: North Atlantic Route, Suez,	06
		Asiatic Route, The cape of Good	
		Hope and the Panama Canal Route.	

Note: Students can choose any one from the Discipline Specific Elective paper either Economic Geography of the world or Population Geography

- 1. Alexander and Hartshorne: Economic Geography, Prentice Hall, 2<sup>nd</sup> Edition, 2000.
- 2. Guha and Chattoraj: A New Approach to Economic Geography.
- 3. Khanna and Gupts: World Resources and Trade, S. Chand & Co. New Delhi.
- 4. Mallappa: Economic Geography, (Kan Ver.) Chetana Book House, Mysore, 2001
- 5. qÁ. gÀAUÀ£ÁxÀ: ¥Àæ¥ÀAZÀzÀ DyðPÀ & ªÁtÂdå "sÀÆUÉÆÃ¼À±Á,ÀÛç
- 6. ¥ÉÆæ. J,ï.J,ï.£ÀAdtÚ£ÀªÀgÀ: ¥Àæ¥ÀAZÀZÀ DyðPÀ & ªÁtÂdå ¨sÀÆUÉÆÃ¼À±Á,ÀÛç

7. qÁ. JA.©.UËqÀgÀ: Economic Geography of the World

# B.A Semester- VI Discipline Specific Elective -(DSE) Under CBCS GY-T F: II - POPULATION GEOGRAPHY

(WITH EFFECT FROM 2020-21 AND ONWARDS)

Credits: I. Theory: 04. Theory class 4hrs/week Total Theory: 60 Lectures Max. Marks 100. (80 Marks for Sem. end Examination and 20 marks IA) Duration of Examination 3 hrs

**II. Practical: 02**. Practical class: 4hrs/week. Total Practical: 52 hrs. Max. 50 Mark

Total credits: 06: 4 Theory 2 Practical

Unit	Title	Sub-unit	Hrs
Ι	Introduction to Population	Definition, Nature and Scope. Approaches	10
	Geography	and sources of Population data.	
Π	Population growth and Distribution	Growth, Distribution and Density of World Population, with special Reference to India. Factors affecting the distribution of population. Demographic Transition. Fertility and Mortality: Factors affecting, Cause and Consequences.	22
III	Population Composition	Sex-Ratio and Literacy	
		Migration: Causes, Types and Consequences.	18
IV	Population Theories	Malthus and Karl Henrich Marx	05
V	Government Policies	India's Population Policies	05

- 1. Narris and Haring: Political Geography, E. Merill Pub. Co.
- 2. Dixit R.D: Political Geography, PHI, New Delhi, 2008.
- 3. Dr. Ranganath: Principals of Human Geography, Vidyanidhi, Gadag, 2008.
- 4. Chandana R.C: Geography of Population, Kalyani Pub. New Delhi,2008.
- 5. Mohammad & Izhar Hasan: Population Geography, New Delhi, 2008.
- 6. Sudeepta Adhikari: Political Geography of India, Sharada, Allahabad, UP.

# B.A – Semester VI Discipline Specific Elective -(DSE) Under CBCS GY-Pr. F: FIELD BASED PROJECT REPORT (WITH EFFECT FROM 2020-21 AND ONWARDS) Practical-VI

Credits: 02 : Practical class 4hrs/week

Total Practical: 52 hrs

Max. Marks: 50. Internal Marks 10 & Sem. End Exam:40 Marks (Practical Sem. End Exam-30, Journal-05, Viva-Voce-05 marks) Duration of Examination 3hrs

Unit	Title	Sub-unit	Hrs
Ι	Field work in geographical	Role, values and ethics of field work.	04
	studies		
II	Selection and definition of the	Rural / Urban / Physical / Human /	04
	problem	Environmental.	
III	Field Techniques and	Sources of data: Secondary data -	20
	collection of data	published and un-published	
		Primary data – Observation and questioner	
		and interview. Sampling	
		Designing and field report: Aims and	24
		Objectives, Methodology, Analysis.	
		Interpretation and Report writing.	

**Note:** \* Each batch consists of 15 students and students have to collectively prepare a project report under a staff in charge (respective batch teacher)based on primary/secondary data collected from the Govt. / Non- Govt. Offices or /and during field survey.

\* The duration of the field work should not exceed 10 days.

\* The finally prepared one hard bound copy of the project report with Aims and objectives, Methodology, data base, Analysis, cartographic work, interpretation and references should be submitted to the Dept/College before the sem. end exam stares.

- \* Students must bring the project report at the time of sem. end exam, failing that such students will not be allowed to appear the practical exam.
- \* Due to technical reasons the student who has not appeared for sem. end practical exam and wish to appear in the subsequent year can bring his/ her earlier project report and appear the practical exam.

- 1. Cresswell J., 1994, Research Design, Qualitative and Quantitative approach, Sage Publications.
- 2. Dikshit R.D: 2003, The Art and Science of Geography, Integrated readings, Prentice Hall of India, New Delhi.
- 3. Evans M: 1988, Participant Observation, The Researcher as a Research Tool, in Qualitative Methods in Human Geography, 2<sup>nd</sup> ed. Eyles and Smith, Polity.
- 4. Mukharjee, Neela: 1993, Participatory Rural appraisal, Methodology, and application concept, Publs Co. New Delhi.
- 5. Mukharjee, Neela: 2002, Participatory learning and action, with 100 field methods Concept Pub. New Delhi.

6. Special Issues on Doing Field work, The Geographical Review 91:1.2,2001

### B.A – Semester VI Specific Elective Core -( SEC) Under CBCS GY-T F-III SEC- BASICS OF REMOTE SENSING (WITH EFFECT FROM 2020-21 AND ONWARDS)

Credits: 02.

Theory/Practical class 02hrs/week Total Theory: 30 Lectures Max. Marks: 50. Internal Marks 10 & Sem. End Exam:40 Marks

Duration of Examination 1.5 hrs

Unit	Title	Sub-unit	Hrs
Ι	Remote Sensing	Definition, Development, Platforms and	06
		Types	
II	Arial Photography	Principles, Types and Geometric	06
III	Satellite Remote Sensing	Principles, EMR Interaction with	10
		atmosphere and Earth surface; Satellites	
		(Land sat and IRS) and Sensors	
IV	Interpretation and Application	Land-use /Land Cover	06
	of Remote Sensing		
V	Global Positioning System	Principles and Uses	02
	(GPS)		

**Practical Record:** A project file consisting of 5 exercises will be done from Arial Photos, Satellite Image (Scale, Orientation and Interpretation) and GPS field survey.

# **Reading List:**

- 1. Campbell J. B, 2007: Introduction to Remote sensing, Guildford press
- 2. Jensen J. R, 2004: Introductory digital image processing: A Remote sensing perspective prentice hall.
- 3. Joseph G, 2005: Fundamentals of Remote sensing, United Press, India.
- 4. Lilley SandT.M. Kiefer R.W and Chipman J.W. 2004: Remote sensing and image interpretation, Wiley.
- 5. Nag P. and Kudra, M. 1998: Digital Remote Sensing, Concept, New-Delhi.
- 6. Rees W.G., 2001: Physical Principles of Remote Sensing, Cambridge University Press.
- 7. Singh R.B. and Murai S. :1998: Space Informatics for sustainable development, Oxford and IBH Pub.
- 8. Wolf P.R. and Dewit B.A., 2000: Elements of Photogrammetry : With applications in GIS Mc Graw Hills
- 4. aÀÄ®è¥Àà & qÁ. Dgï ,É®égÁdÄ: "sËUÉÆÃ½PÀ aÀiÁ»w aÀaaÀ,ÉÜAiÀÄ aÀÄÆ® vÀvÀéUÀ¼ÀÄ,2019.

# B.A – Semester VI Generic Elective -(GE) Under CBCS GY-T F GE-IV : PHYSICAL GEOGRAPHY OF INDIA (WITH EFFECT FROM 2020-21 AND ONWARDS)

#### (OTHER THAN GEOGRAPHY STUDENTS)

Credits: 02. Theory class 02hrs/week Total Theory: 30 Lectures Max. Marks: 50. Internal Marks 10 & Sem. End Exam:40 Marks Duration of Examination 1.5 hrs

Unit	Title	Sub-unit	Hrs
Ι	Spatial and space Relations	Location, Size, Extent and Land and	02
		Water frontiers of India	
II	Physical features	Physiographic Divisions, Drainage,	18
		Climate, Soils and Natural Vegetation.	
III	<b>Climatic Regions of India</b>	Climatic regions of India according to	01
		Koppen's scheme	
IV	River Water Dispute	Krishna, Cauvery and Kalasa banduri	02
V	Natural Hazards and Disaster	Earth Quakes, Cyclones, Floods,	07
		Droughts, Landslides and Disaster	
		Management	

- 1. Gopal Singh: A Geography of India, Atmaram & Sons New Delhi.
- 2. ICAR: Croping pattern in India, 1974.
- 3. Mathus S.M: Physical geography of India, NBT, 1991.
- 4. Ranganath : Regional and Economic Geography of India, (Kan. Ver.) Vidyanidhi Prakashan Gadag,2006.
- 5. Ranjit Thirtha: Geography of India, Raniat, Jaipur, 1996.
- 6. Khullar D.R: India A Comprehensive Geography, Kalyani Pub. Ludhiana, 2000.
- 7. Tiwari R.C: Geography of India, Prayag Pustak Bhavan, Allahabad, 2003.
- qÁ. DAiÀiï. J. ªÀÄÄ<sup>-</sup> Áè: "sÁgÀvÀzÀ "sÀÆUÉÆÃ¼À±Á,ÀÛç & qÁ. J.ï.J.ï.£ÀAdtÚ£ÀªÀgÀ
- qÁ. JA.©.UËqÀgÀ: "sÁgÀvÀzÀ DyðPÀ ªÀÄvÀÄÛ ªÁtÂdå "sÀÆUÉÆÃ¼À±Á,ÀÛç.
- 10. ¦. ªÀÄ®è¥Àà: "sÁgÁvÀźÀ DyðPÀ ªÀÄvÀÄÛ ªÁtÂdå "sÀÆUÉÆÃ¼À±Á,ÀÛç