APPENDIX - I

Choice Base Credit System

B.A./B.Sc. Geography

	CORE COURSE (12)	Ability Enhancement Compulsory	Skill Enhancement	Discipline Specific Elective DSE (4)	Generic Elective GE (2)
		Course (AECC) (2)	Course(SEC) (4)	Elective DSE (4)	GE (2)
I	English/MIL-1	(English/MIL			
	Physical Geography (GEOGP101CC)	Communication / Environmental			
	DSC- 2 A	Science			
II	English/MIL-1	Environmental			
	Human Geography (GEOGP202CC)	Science/ (English/MIL			
	DSC- 2 B	Communicatio			
III	English/MIL-2		Regional Planning and		
	General Cartography (Practical) (GEOGP303CC)		Development (GEOGP301SEC)		
	DSC- 2 C				
IV	English/MIL-2		Remote Sensing		
	Environmental Geography (GEOGP404CC) DSC- 2 D		and GPS (GEOGP402SEC)		
V			Geographic Information System (GEOGP503SEC)	Geography of India (GEOGP501- 1DSE) or Economic Geography (GEOGP501- 2DSE) DSE-2 A	GE-1 Disaster Risk Reduction (GEOGP501GE)
VI			Field Techniques and Survey based Project Report (Practical) (GEOGP604SE C)	Disaster Management (GEOGP602- 1DSE) or Geography of Tourism (GEOGP602- 2DSE) DSE-2 B	GE-2 Sustainability and Development (GEOGP602GE)

Note: Practical paper will not have tutorials.

Core Course (4 Compulsory Papers)

Semester I

1. Physical Geography

Semester II

2. Human Geography

Semester III

3. General Cartography (Practical)

Semester IV

4. Environmental Geography

Skill Enhancement Course (4 Compulsory Papers)

Semester III

1. Regional Planning and Development

Semester IV

2. Remote Sensing and GPS

Semester V

3. Geographic Information System

Semester VI

4. Field Techniques and Survey based Project Report (Practical)

Discipline Specific Elective Papers (2 Compulsory Papers)

Semester V

- 1. Geography of India
- 2. Economic Geography

SemesterVI

- 3. Disaster Management
- 4. Geography of Tourism

Generic Elective (2)

Semester V

1. Disaster Risk Reduction

Semester VI

2. Sustainability and Development

APPENDIX-II CORE COURSES

1. PHYSICAL GEOGRAPHY (GEOGP 101 CC)

Course Code	GEOGP	GEOGP 101 CC		
Credits-6	L	T	P	
	65	25	0	
Course Type	Core	·		
Lectures to be Delivered	90			

Continuous Comprehensive Assessment (CCA) Pattern: Maximum Marks Allotted: 30

Mid Term Test* (Marks)		Class Test/ Tutorials/Assignments (Marks)	Quiz/Seminars (Marks)	Attendance (Marks)	Total Marks
	15	5	5	5	
Total	15	5	5	5	30

^{*} The pattern of examination for conducting the Mid Term Test will be same as prescribed for the end semester examination.

End Semester Examination System:

Maximum Marks Allotted	Minimum Pass Marks	Time Allotted	
70	28	3.00 Hrs	

Paper Setting Scheme (Theory Paper)

Section	No of	Syllabus	Nature of Questions and Answers	Questions to be	Maximum
	Questions	Coverage		Attempted	Marks
A	10	Complete	Objective Type	10(1 mark each)	10
A	4	Complete	Short answer type (25-50 words)	4 (3 marks each)	12
В	2	Unit I	Choice based Long answer type	1(12 marks each)	12
C	2	Unit II	Choice based Long answer type	1(12 marks each)	12
D	2	Unit III	Choice based Long answer type	1(12 marks each)	12
Е	2	Unit IV	Choice based Long answer type	1(12 marks each)	12
				TOTAL	70

Unit	Торіс	All	otted T (Hours	
		L	T	P
I.	Introduction Definition and Scope Brief Introduction of Solar System, Origin of The Earth: Tidal Theory of Jeans and Jeffreys and Big Bang Theory Rocks: Classification and Their Characteristics	20	7	0
II.	Lithosphere Internal Structure of Earth, Theory of Plate Tectonics, Weathering-Definition, factors and types Fluvial Cycle of Erosion – Davis	15	6	0
III.	Atmosphere Structure and composition of atmosphere, Heat Balance, Pressure and wind systems, Origin of Tropical Cyclones, Monsoon, Climatic Classification (Koppen).		6	0
IV.	Hydrosphere Hydrological Cycle, Bottom Relief Features of Ocean, Tides and Currents.	15	6	0
	Total Hours	65	25	0

L-Lecture, T-Tutorials and P-Practical and Practices

Text Book(s):

- 1. Trewartha, G. T. 1968. An Introduction to Climate. McGraw-Hill Book Company, New York.
- 2. D.S.Lal. 1998. *Climatology*. Chaitanya Publishing House, Allahabad.

Suggested Readings:

- 3. Critchfield, J. Howard. 2012. *General Climatology*. 4thEdition (Reprinted). Phi Learning Pvt. Ltd., New Delhi.
- 4. Das, P. K. 2011. The Monsoons. National Book Trust, New Delhi
- 5. Conserva H. T., 2004: Illustrated Dictionary of Physical Geography, Author House, USA.
- 6. Gabler R. E., Petersen J. F. and Trapasso, L. M., 2007: *Essentials of Physical Geography* (8th Edition), Thompson, Brooks/Cole, USA.
- 7. Garrett N., 2000: Advanced Geography, Oxford University Press.
- 8. Goudie, A., 1984: *The Nature of the Environment: An Advanced Physical Geography*, Basil Blackwell Publishers, Oxford.
- 9. Hamblin, W. K., 1995: Earth's Dynamic System, Prentice Hall, N.J.
- 10. Husain M., 2002: Fundamentals of Physical Geography, Rawat Publications, Jaipur.
- 11. Monkhouse, F. J. 2009: Principles of Physical Geography, Platinum Publishers, Kolkata.
- 12. Strahler A. N. and Strahler A. H., 2008: *Modern Physical Geography*, John Wiley & Sons, New York.

2. HUMAN GEOGRAPHY (GEOGP 202 CC)

Course Code	GEOGP	GEOGP 202 CC		
Credits-6	L	L T P		
	65	25	0	
Course Type	Core			
Lectures to be Delivered	90			

Note: CCA and ESE scheme is same as in Paper GEOGP 101 CC

Course Content and Credit Scheme

Unit	Торіс	Al	Allotted Time		
			(Hours)		
		L	T	P	
I	Introduction	15	6	0	
	Definition, Nature, Major Subfields, Contemporary Relevance of				
	Human Geography				
II	Space and Society	20	7	0	
	Cultural Regions of the world				
	Human Races: Classification (Griffith Taylor) and world				
	distribution				
	Major Religions of the world and distribution				
	Major languages of the world and distribution				
III	Population	15	6	0	
	World Population Distribution, density and growth, Demographic				
	Transition Theory.				
IV	Settlements	15	6	0	
	Types and Patterns of Rural Settlements				
	Classification of Urban settlements				
	Trends and Patterns of World Urbanization				
	Total Hours	65	25	0	

L-Lecture, T-Tutorial and P-Practical and Practices

TextBook(s):

- 1. Husain, Majid. 2010. *Human Geography*. Reprinted. Rawat Publications, Jaipur. **Suggested Readings:**
- 2. Singh, R.L. 2012. Fundamentals of Human Geography. Sharda Publications, Varanasi, UP.
- 3. Pitzl, Gerald. R. 2007. *Encyclopedia of Human Geography*. Greenwood Publishing Group & Rawat Publications, Jaipur
- 4. Daniel, P.A. and Hopkinson, M.F. (1989) *The Geography of Settlement*, Oliver & Boyd, London.
- 5. Johnston R; Gregory D, Pratt G. et al. (2008) *The Dictionary of HumanGeography*, Blackwell Publication.
- 6. Jordan-Bychkov et al. (2006) *The Human Mosaic: A Thematic Introduction to Cultural Geography*. W. H. Freeman and Company, New York.
- 7. Kaushik, S.D. (2010) Manav Bhugol, Rastogi Publication, Meerut.
- 8. Maurya, S.D. (2012) Manav Bhugol, Sharda Pustak Bhawan. Allahabad.
- 9. Ghosh, S. (2015) *Introduction to settlement geography*. Orient Black Swan Private Ltd., Kolkata .

3.GENERAL CARTOGRAPHY -PRACTICAL (GEOGP 303 CC)

Course Code	GEOGP	GEOGP 303 CC		
Credits-6	L	T	P	
	25	0	130 (65*)	
Course Type	Core			
Lectures to be Delivered	90			

Continuous Comprehensive Assessment (CCA) Pattern:Maximum Marks Allotted: 30

Mid Term Test*	* (Marks)	Class Test/ Tutorials/Assignments (Marks)	Quiz/Seminars (Marks)	Attendance (Marks)	Total Marks
	15	5	5	5	
Total	15	5	5	5	30

^{*} The pattern of examination for conducting the Mid TermTest will be same as prescribed for the end semester practical examination.

Marks Allocation Scheme End Semester Practical (ESP) Examination System:

Particulars	Maximum Marks	Minimum Pass Marks	Time Allotted
Theory Paper	40		3.00 Hrs
Written Lab work*	15	4 Numerical Grade	
Practical Record	10	OR	3.00 Hrs
Viva-Voce	05	as per University Rules	
Total	70	7	

^{*}Note: Use of non-programmable calculators and map stencils are allowed in the examination hall. The practical record may be evaluated on the parameters of Punctuality, Neatness, Entirety and indexing

Paper Setting Scheme for Written Lab Work

Section	No of	Syllabus	Nature of Questions and Answers	Questions to be	Maximum
	Questions	Coverage		Attempted	Marks
٨	10	Complete	Objective Type	10	10
A	4	Complete	Short answer type (25-50 words)	4	6
В	2	Unit I	Choice based Long answer type	1	6
C	2	Unit II	Choice based Long answer type	1	6
D	2	Unit III	Choice based Long answer type	1	6
E	2	Unit IV	Choice based Long answer type	1	6
		•		Total	40

Course Content and Credit Scheme

Unit	Topic	Allotted Time(Hrs)			
		L	T	P	
I.	Introduction Cartography as a Science of Communication Basics of Map Reading Map-Definition, Classification and Significance of Map	6	0	10(5)*	
II.	Scale Definition, Importance and Types of Scale Three exercises in practical record each on Plain, Comparative and Diagonal Scale.	6	0	30(15)*	
III.	Map projections Concept, Classification and Criteria for Choice of Projections; Attributes and Properties of: Cylindrical Equal Area, Mercator's Projection; Conical Projection with Two Standard Parallels and Zenithal Gnomonic & Stereographic (Polar Case)		0	40(20)*	
IV.	Representation of Data Line Graph, Bar Diagrams, Climograph and Hythergraph, Dot Method, Choropleth and Isopleth Methods,	6	0	50(25)*	
	Total Hours	25	0	130(65)*	

L-Lecture, T-Tutorial and P-Practical and Practices

- * As per the weightage assigned to the P (Practical and Practices) category in the CBCS regulations 2 hours practical work has been treated equal to1credit hour.
- 1. Dent B. D., 1999: Cartography: Thematic Map Design, (Vol.1), McGraw Hill.
- 2. Gupta K.K and Tyagi V.C., 1992: Working with Maps, Survey of India, DST, NewDelhi.
- 3. Mishra R.P.and Ramesh A., 1989: Fundamentals of Cartography, Concept Publishing.
- 4. Robinson A., 1953: Elements of Cartography, JohnWiley.
- 5. Sharma J. P.,2010: *Prayogic Bhugol*, Rastogi Publishers.
- 6. Singh R. L. and Singh R.P. B., 1999: Elements of Practical Geography, Kalyani Publishers
- 7. Singh R. L.,1998: Prayogic Bhoogol Rooprekha, Kalyani Publications.
- 8. Steers J.A.,1965: An Introduction to the Study of Map Projections, University of London

4. ENVIRONMENTAL GEOGRAPHY (GEOGP 404 CC)

Course Code	GEOGP 4	GEOGP 404 CC		
Credits-6	L	L T P		
	65	25	0	
Course Type	Core			
Lectures to be Delivered	90			

Note: CCA and ESE scheme is same as in Paper GEOGP 101 CC

Course Content and Credit Scheme

Unit	Topic	Al	Time s)	
		L	T	P
I.	Definition and Scope of Environmental Geography	17	7	0
	Meaning and Components of Environment			
	Ecosystem Concept, components and Functions			
II.	Human-Environment Relationship Environmental determinism and Possibilism Biomes- Definition, Mountain and Desert Regions	16	6	0
III.	Environmental Problems Their Causes Impacts and Management Air and water Pollution, Biodiversity Loss	16	6	0
IV.	Environmental Management Initiatives in India Environmental Protection Act, 1982, Environmental Policy of India(2006), Chipko Movement	16	6	0
	Total Hours	65	25	0

L-Lecture, T-Tutorial and P-Practical and Practices

- 1. Casper J.K.(2010) *Changing Ecosystems: Effects of Global Warming*. Infobase Pub .New York.
- 2. Hudson,T.(2011) *Living with Earth: An Introduction to Environmental Geology*, PHI Learning Private Limited, New Delhi.
- 3. Miller, G.T. (2007) *Living in the Environment: Principles, Connections, and Solutions*, Brooks/Cole Cengage Learning, Belmont.
- 4. Singh, R.B. (1993) *Environmental Geography*, Heritage Publishers, New Delhi.
- 5. UNEP(2007)Global Environment Outlook: GEO4: Environment For Development, United Nations Environment Programme. University Press, Cambridge.
- 6. Wright R.T and Boorse, D.F. (2010) Toward a Sustainable Future, PHILearning Pvt Ltd, New Delhi.
- 7. Singh,R.B.and Hietala, R.(Eds.)(2014) Livelihood security in Northwestern Himalaya: Case studies from changing socio-economic environments in Himachal Pradesh, India. Advances in Geographical and Environmental Studies, Springer
- 8. Singh, Savindra 2001. Paryavaran Bhugol, Prayag Pustak Bhawan, Allahabad. (in Hindi)

Skill Enhancement Course (4 Compulsory Papers)

1. REGIONAL PLANNING AND DEVELOPMENT (GEOGP 301 SEC)

Course Code	GEOGP	GEOGP 301 SEC		
Credits-4	L	T	P	
	44	16	0	
Course Type	Skill Enh	ancement		
Lectures to be Delivered	60	_		

Note: CCA and ESE scheme is same as in Paper GEOGP 101 CC

Course Content and Credit Scheme

Unit	Topic	A	Allotted Time			
			(Hours)			
		L	T	P		
I.	INTRODUCTION	11	4	0		
	Concept, Need and Types of regional Planning					
	Characteristics and Delineation of Planning Region					
II.	Regionalization	11	4	0		
	Regionalization of India for Planning					
	Agro Ecological regionalization in India					
III.	MODELS FOR REGIONAL PLANNING:	11	4	0		
	Growth PoleTheory and					
	CorePeripheryModel					
IV.	REGIONAL DEVELOPMENT INITIATIVES:	11	4	0		
	The Success Story andthe Failures of					
	Integrated tribal development programme (ITDP)					
	Integrated Watershed Development programmes (IWDP: DDP, DPAP)					
	Border area development programme(BADP)					
	Damodar Valley Corporation(DVC)					
	Total Hours	44	16	0		

L-Lecture, T-Tutorial and P-Practical and Practices

- 1. Blij H.J.De,1971: *Geography:Regions and Concepts*, John Wiley and Sons. ClavalP.1,1998: *An Introduction to Regional Geography*, Blackwell Publishers, Oxford and Massachusetts.
- 2. Friedmann J. and Alonso W.(1975): *Regional Policy-Readingsin Theory and Applications*, MIT Press, Massachusetts.
- 3. Gore C. G., 1984: Regions in Question: Space, Development Theory and Regional Policy, Methuen, London.
- 4. Gore C. G., Köhler G., Reich U-P. and Ziesemer T., 1996: *Questioning Development; Essays on the Theory, Policies and Practice of Development Intervention*, Metropolis- Verlag, Marburg.
- 5. HaynesJ., 2008: Development Studies, Polity Short Introduction Series.
- Johnson E.A.J., 1970: The Organization of Spacein Developing Countries, MIT Press, Massachusetts.
- 7. Peet R., 1999: *Theories of Development*, The Guilford Press, New York.
- 8. UNDP 2001-04: Human Development Report, Oxford University Press.
- 9. World Bank 2001-05: World Development Report, Oxford University Press, New
- 10. Mohan, Krishna (2005). Addressing Regional Backwardness: An Analysis of Area Development Programmes in India. Manak Publications New Delhi.

2. REMOTE SENSING AND GPS (GEOGP 402 SEC)

		`	,		
Course Code	GEOGP	GEOGP 402 SEC			
Credits-4	L	T	P		
	15	0	90(45)*		
Course Type	Skill Enl	nancement	·		
Lectures to be Delivered	60	•			

Continuous Comprehensive Assessment (CCA) Pattern: Maximum Marks Allotted: 30

Mid Term Test* (Marks)	Test* Class Test/ Tutorials/Assignments (Marks)		rks) Tutorials/Assignm		Quiz/Seminars (Marks)	Attendance (Marks)	Total Marks
	15	5	5	5			
Total	15	5	5	5	30		

^{*} The pattern of examination for conducting the Mid Term Test will be same as prescribed for the end semester practical examination.

Marks Allocation Scheme End Semester Practical (ESP) Examination System:

Particulars	Maximum Marks	Minimum Pass Marks	Time Allotted
Theory Paper	40		3.00 Hrs
Written Lab work*	15	4 Numerical Grade	
Practical Record	10	OR	3.00 Hrs
Viva-Voce	05	as per University Rules	
Total	70]	

^{*}Note: Use of non-programmable calculators and map stencils are allowed in the examination hall. The practical record may be evaluated on the parameters of Punctuality, Neatness, Entirety and indexing

Paper Setting Scheme for Written Lab Work

Section	No of Questions	Syllabus Coverage	Nature of Questions and Answers	Questions to be Attempted	Maximum Marks
4	10	Complete	Objective Type	10	10
Α	4	Complete	Short answer type (25-50 words)	4	6
В	2	Unit I	Choice based Long answer type	1	6
С	2	Unit II	Choice based Long answer type	1	6
D	2	Unit III	Choice based Long answer type	1	6
Е	2	Unit IV	Choice based Long answer type	1	6
				Total	40

Course Content and Credit Scheme

Unit	Topic	Allotted Time (Hours)			
		L T P			
I.	Remote Sensing: Definition, Development, Platforms and Types	3	0	10(5)*	
II.	Aerial Photography:Principles,Typesand Geometry	4	0	20(10)*	
	Satellite Remote Sensing: Principles, EMR Interaction with Atmosphere and Earth Surface; Satellites (Landsat and IRS) and Sensors.	4	0	30(15)*	
IV.	Visual Interpretation of Remote Sensing images: Land use/ LandCover, Global Positioning System(GPS)-Principles and Uses	4 0 30(20)*		30(20)*	
	Total Hours	15	0	90(45)*	

L-Lecture, T-Tutorial and P-Practical

Practical Record: A project file consisting of any five exercises will be done from aerial photos/satellite images (scale, orientation and interpretation).

- 1. CampbellJ. 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. Lilles and T.M., Kiefer R.W. and Chipman J.W., 2004: *Remote Sensing and Image Interpretation*, Wiley. (Wiley Student Edition).
- 5. Nag P. and Kudra, M., 1998: Digital Remote Sensing, Concept, NewDelhi.
- 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 Dewitt B.A., 2000: Elements of Photogrammetry: With Applications in GIS, McGraw-Hill.

3. GEOGRAPHIC INFORMATION SYSTEM (GEOGP 503 SEC)

Course Code	GEOGP	GEOGP 503 SEC			
Credits-4	L	L T P			
	15	0	90(45)*		
Course Type	Skill Enl	nancement	·		
Lectures to be Delivered	60	60			

Note: The CCA and ESE & ESP is same as in paper GEOGP 402 SEC

Course Content and Credit Scheme

Unit	Торіс	A	Allotted Time		
			(Hours)		
		L	T	P	
I.	Introduction	3	0	10(5)*	
	Meaning and Scope of GIS, Components of GIS, History of				
	Geographic Information System(GIS)				
II.	Data Types	4	0	20(10)*	
	GIS Data Structures: Types (Spatial and Non-Spatial), Raster and				
	Vector Data Structure.				
III.	Spatial referencing system	4	0	30(15)*	
	Concept of Georeferencing, Editing and				
	attribute data integration				
IV.	GIS based Exercises on	4	0	30(20)*	
	Georeferencing, Subsetting, Extraction of Land Use/Land Cover				
	layers of any area and thematic mapping				
	Total Hours	15	0	90(45)*	

Practical Record: The course teacher can use Survey of India toposheets/satellite images/Google images of any area of his/her choice for practical exercises. A project file consisting of any 5 exercises will be prepared.

- 1. Bhatta, B. (2010) *Analysis of Urban Growth and Sprawl from Remote Sensing*, Springer, Berlin Heidelberg.
- 2. Burrough, P.A., and McDonnell, R.A. (2000) *Principles of Geographical Information System-Spatial Information System and Geo-statistics*. Oxford University Press
- 3. Chauniyal, D.D. (2010) *Sudur Samvedan evam Bhogolik Suchana Pranali*, Sharda Pustak Bhawan, Allahabad
- 4. Heywoods, I., Cornelius, S and Carver, S. (2006) *An Introduction to Geographical Infromation System*. Prentice Hall.
- 5. Jha, M.M. and Singh, R.B. (2008) *Land Use: Reflection on Spatial Informatics Agriculture and Development*, New Delhi: Concept.
- 6. Nag, P. (2008) *Introduction to GIS*, Concept India, New Delhi.
- 7. Sarkar, A. (2015) *Practical geography: A systematic approach*. Orient Black Swan Private Ltd., New Delhi
- 8. Singh, R.B. and Murai, S. (1998) Space *Informatics for Sustainable Development*, Oxford and IBH, New Delhi.

4. FIELD TECHNIQUES & SURVEY BASED PROJECT

REPORT (GEOGP 604 SEC)

Course Code	GEOGP	GEOGP 604 SEC			
Credits-4	L	T P			
	15	0	90(45)*		
Course Type	Skill Enl	nancement	1 2 (2)		
Lectures to be Delivered	60				

Note: The CCA and ESE & ESP is same as in paper GEOGP 402 SEC

Course Content and Credit Scheme

Unit	Торіс	Allotted Time(Hrs)		me(Hrs)
		L	T	P/FW
I.	Introduction	3	0	10(5)*
	Field Work in Geographical Studies-Role, Value and Ethics of Field-Work,			
	Defining the Field and Identifying the Case Study–Rural /Urban/Physical			
	/Human/ Environmental.			
II.	Field Techniques	4	0	20(10)*
	Merits, Demerits and Selection of the Appropriate Technique;			
	Observation(Participant/Non Participant).			
III.	Questionnaires (Open/Closed/ Structured/Non-Structured); Interview with Special Focus on Focused Group Discussions; Space Survey (Transects and Quadrants, Constructing a Sketch).	4	0	30(15)*
IV.	Designing the Field Report	4	0	30(20)*
	Aims and Objectives, Methodology, Analysis, Interpretation and Writing			, ,
	the Report.			
	Total Hours	15	0	90(45)*

FW-Field Work

Practical Record

- 1. Each student will prepare an individual report based on primary and secondary data collected during field work.
- 2. The duration of the field work should not exceed 10 days.
- 3. The word count of the report should be about **8000 to 12,000** excluding figures, tables, photographs, maps, references and appendices.
- 4. Onecopy of the report on A4 size paper should be submitted in soft/spiral binding.

- 1. Creswell J., 1994: Research Design: Qualitative and Quantitative Approaches Sage Publications.
- 2. Dikshit,R.D.2003.The Art and Science of Geography: Integrated Readings.Prentice-Hall of India, NewDelhi.
- 3. EvansM.,1988: "Participant Observation: The Researcher as Research Tool" in *Qualitative Methods in Human Geography*, eds. J.Eyles and D.Smith, Polity.
- 4. Mukherjee, Neela 1993. Participatory Rural Appraisal: Methodology and Application. Concept Publs. Co., New Delhi.
- 5. Mukherjee, Neela 2002. Participatory Learning and Action: with100 Field Methods. Concept Publs.Co., New Delhi
- 6. Robinson A.,1998: "Thinking Straight and Writing That Way", in Writing Empirical Research Reports: A Basic Guide for Students of the Social and Behavioural Sciences, eds. by F. Pryczakand R.Bruce Pryczak, Publishing: Los Angeles.
- 7. Special Issue on "Doing Fieldwork" *The Geographical Review* 91:1-2 (2001).
- 8. Stoddard R.H.,1982: Field Techniques and Research Methods in Geography, Kendall/Hunt.
- 9. Wolcott, H.1995. The Art of Fieldwork. Alta Mira Press, Walnut Creek, CA.

Discipline Specific Elective Papers (2 Compulsory Papers)

1. **GEOGRAPHY OF INDIA** (GEOGP 501-1 DSE)

Course Code	GEOGP	GEOGP 501-1 DSE		
Credits-6	L	T	P	
	64	26	0	
Course Type	Discipline	e Specific Electiv	ve	
Lectures to be Delivered	90	90		

Note: CCA and ESE scheme is same as in Paper GEOGP 101 CC

Course Content and Credit Scheme

Unit	Торіс	Allotted Time (Hours)		e
		L	T	P
I	Physical Setting	16	6	0
	Location, Major physiographic region of India			
	Climate – Factors, Characteristics, Soils of India			
II	Population	16	6	0
	Size and Growth since 1901, Population Distribution and Density,			
	Literacy, Sex Ratio			
III	Settlement System	16	6	0
	Rural Settlement Types and Patterns, Urban Settlement Types and			
	Pattern.			
IV	Resource Base	16	8	0
	Power (Coal and hydroelectricity), Minerals (iron ore and			
	bauxite). Economy–Agriculture (Rice, Wheat)			
	Industries (Cotton Textile, Iron & Steel)			
	Total Hours	64	26	0

L-Lecture, T-Tutorial and P-Practical and Practices

- 1. Hussain M., 1992: Geography of India, Tata McGraw Hill Education.
- 2. Mamoria C.B.,1980: Economic and Commercial Geography of India, Shiva Lal Agarwala.
- 3. Miller F. P., Vandome A. F. and McBrewster J.,2009: *Geography of India: Indo-Gangetic Plain,Thar Desert, Major Rivers of India, Climate of India, Geology of India*, Alphascript Publishing.
- 4. Nag P. and Sengupta S.,1992: Geography of India, Concept Publishing.
- 5. Pichamuthu C.S.,1967: Physical Geography of India, National Book Trust.
- 6. Sharma T.C. and Coutinho O.,1997: *Economic and Commercial Geography of India*, Vikas Publishing.
- 7. Singh Gopal,1976: A Geography of India, Atma Ram & Sons.
- 8. Spate O.H.K.and Learmonth A.T.A., 1967: *India and Pakistan: A General and Regional Geography*, Methuen.
- 9. Rana, Tejbir Singh, 2015, Diversity of India, R.K.Books, Delhi.

2. ECONOMIC GEOGRAPHY (GEOGP 501-2 DSE)

Course Code	GEOGP	GEOGP 501-2 DSE			
Credits-6	L	T	P		
	64	26	0		
Course Type	Discipline	Discipline Specific Elective			
Lectures to be Delivered	90	90			

Note: CCA and ESE scheme is same as in Paper GEOGP 101 CC

Course Content and Credit Scheme

Unit	Торіс	Allotted Time (Hours)		me
		L	T	P
I.	Introduction Definition, Approaches and Fundamental Concepts of Economic Geography. Locational Theories – Agriculture (Von Thunen) and Industrial (Weber).	16	6	0
	PrimaryActivities Intensive Subsistence Farming, Commercial Grain Farming, Plantation, Commercial Dairy Farming, and Mining (Coal and petroleum).	16	6	0
	Secondary Activities Major Industries: Iron and Steel, Cotton Textile Major Industrial Regions: Eastern North American Region, Western European Region	16	6	0
	Tertiary and Quaternary Activities Major Oceanic Routes: Atlantic, Pacific and Indian Ocean International Trade: Concept, Volume and Direction	16	8	0
	Total Hours	64	26	0

L-Lecture, T-Tutorial and P-Practical and Practices

- 1. Alexander J.W., 1963: *Economic Geography*, Prentice-Hall Inc., Englewood Cliffs, New Jersey.
- 2. Bagchi-Sen S. and Smith H.L.,2006: *Economic Geography: Past, Present and Future*, Taylor and Francis.
- 3. Coe N.M., Kelly P.F. and Yeung H.W., 2007: *Economic Geography: A Contemporary Introduction*, Wiley-Blackwell.
- 4. Combes P., Mayer T. and Thisse J.F.,2008: *Economic Geography: The Integration of Regions and Nations*, Princeton University Press.
- 5. Durand L., 1961: Economic Geography, Crowell.
- 6. Hodder B.W. and Lee R., 1974: *Economic Geography*, Taylor and Francis.
- 7. Wheeler J. O.,1998: Economic Geography, Wiley.
- 8. Willington D.E., 2008: Economic Geography, Husband Press.

3. **DISASTER MANAGEMENT** (GEOGP 602-1 DSE)

Course Code	GEOGP	GEOGP 602-1 DSE		
Credits-6	L	T P		
	64	26	0	
Course Type	Disciplin	Discipline Specific Elective		
Lectures to be Delivered	90	90		

Note: CCA and ESE scheme is same as in Paper GEOGP 101 CC

Course Content and Credit Scheme

Unit	Topic	Allotted Time		
		L	T	P
I.	Introduction Definition and Concepts.: Hazards, Risk, Vulnerability and Disasters	16	6	0
II.	Disasters in India: Causes, Impact, Distribution: Landslide, Earthquake, and Cyclone	16	6	0
III.	Human Induced Disasters: Causes, Impact, Distribution: Forest Fire, Road Accidents	16	6	0
IV.	Response and Mitigation to Disasters: Mitigation and Preparedness, NDMA and NIDM Indigenous Knowledge and Community-Based Disaster Management. Do's and Don'ts During Disasters	16	8	0
	Total Hours	64	26	0

L-Lecture, T-Tutorial and P-Practical and Practices

TextBook(s):

- 1. Government of India.(1997) Vulnerability Atlas of India.New Delhi, Building Materials & Technology Promotion Council, Ministry of Urban Development, Government of India.
- 2. Kapur, A.(2010) Vulnerable India: A Geographical Study of Disasters, Sage Publication, New Delhi.
- 3. Modh, S. (2010) Managing Natural Disaster: Hydrological, Marine and Geological Disasters, Macmillan, Delhi.
- 4. Singh, R.B. (2005) Risk Assessment and Vulnerability Analysis, IGNOU, New Delhi. Chapter 1, 2 and 3
- 5. Singh, R.B.(ed.),(2006) Natural Hazards and Disaster Management: Vulnerability and Mitigation, Rawat Publications, New Delhi.
- 6. Sinha, A.(2001). Disaster Management: Lessons Drawn and Strategies for Future, New United Press, New Delhi.
- 7. Stoltman, J.P.etal.(2004) International Perspectives on Natural Disasters, Kluwer Academic Publications.Dordrecht.
- 8. Singh Jagbir(2007) "Disaster Management Future Challenges and Oppurtunities", 2007. Publisher-I.K.International Pvt. Ltd. S-25, Green Park Extension, Uphaar Cinema Market, New Delhi, India.

4. GEOGRAPHY OF TOURISM (GEOGP 602-2 DSE)

Course Code	GEOGP	GEOGP 602-2 DSE			
Credits-6	L	T	P		
	64	26	0		
Course Type	Discipline	e Specific Electiv	ve .		
Lectures to be Delivered	90				

Note: CCA and ESE scheme is same as in Paper GEOGP 101 CC

Course Content and Credit Scheme

Unit	Topic	Allotted Time		ime
			(Hours)	
		L	T	P
I.	Introduction	16	6	0
	Concept, Nature and Scope			
	Geographical Parameters of Tourism by Robinson.			
	Types of Tourism: Nature Tourism, Cultural Tourism,			
	Medical Tourism, Pilgrimage			
II.	Recent Trends of Tourism	16	6	0
	International and Regional; Domestic(India); Eco- Tourism,			
	Sustainable Tourism			
III.	Impact of Tourism on	16	6	0
	Economy, Environment, Society			
IV.	Tourism in India:	16	8	0
	Tourism Infrastructure: A Case Study of Himachal Pradesh			
	National Tourism Policy			
	State Tourism Policy of Himachal Pradesh			
	Total Hours	64	26	0

L-Lecture, T-Tutorial and P-Practical and Practices

Text Book(s):

- 1. Dhar, P.N. (2006) *International Tourism: Emerging Challenges and Future Prospects*. Kanishka, New Delhi.
- 2. Hall, M. and Stephen, P. (2006) *Geography of Tourism and Recreation Environment, Place and Space*, Routledge, London.
- 3. Kamra, K. K. and Chand, M. (2007) *Basics of Tourism: Theory, Operation and Practise*, Kanishka Publishers, Pune.
- 4. Page, S. J. (2011) *Tourism Management: An Introduction*, Butterworth-Heinemann- USA. Chapter 2.
- 5. Raj, R. and Nigel, D. (2007) *Morpeth Religious Tourism and Pilgrimage Festivals Management: An International Perspective* by, CABI, Cambridge, USA.
- 6. Tourism Recreation and Research Journal, Center for Tourism Research and Development, Lucknow
- 7. Singh Jagbir (2014) "Eco-Tourism" Published by I.K. International Pvt. Ltd. S-25, Green Park Extension, Uphaar Cinema Market, New Delhi, India.

Generic Elective (2)

1. DISASTER RISK REDUCTION (GEOGP 501GE)

Course Code	GEOGP	GEOGP 501GE		
Credits-6	L	T	P	
	65	25	0	
Course Type	Generic 1	Elective		
Lectures to be Delivered	90	90		

Note: CCA and ESE scheme is same as in Paper GEOGP 101 CC

Course Content and Credit Scheme

Unit	Topic	A	Allotted Time (Hours)	
		L	T	P
I.	Understanding Risk, Concepts and Elements Disaster Management Cycle, Risk Perception, and Types of Risk	16	7	0
II.	Risk Reduction, Risk Analysis Techniques Participatory Risk Assessment	16	6	0
III.	Risk Reduction Measures, Risk Assessment, Risk Transfer	16	6	0
IV.	Major National Initiatives/Programmes Targets for Risk Reduction for Specific hazards	17	6	0
	Total Hours	65	25	0

L-Lecture, T-Tutorial and P-Practical and Practices

- 1. Government of India.(1997) *Vulnerability Atlas of India*. New Delhi, Building Materials & Technology Promotion Council, Ministry of Urban Development, Government of India.
- 2. Kapur, A. (2010) *Vulnerable India: A Geographical Study of Disasters*, Sage Publication, New Delhi.
- 3. Modh, S. (2010) *Managing Natural Disaster: Hydrological, Marine and Geological Disasters*, Macmillan, Delhi.
- 4. Singh, R.B. (2005) *Risk Assessment and Vulnerability Analysis*, IGNOU, New Delhi. Chapter 1, 2and 3
- 5. Singh, R.B.(ed.),(2006) *Natural Hazards and Disaster Management: Vulnerability and Mitigation*, Rawat Publications, New Delhi.
- 6. Sinha, A.(2001). *Disaster Management: Lessons Drawn and Strategies for Future*, New United Press, New Delhi.
- 7. Stoltman, J.P. et al. (2004) *International Perspectives on Natural Disasters*, Kluwer Academic Publications. Dordrecht.
- 8. Singh Jagbir (2007) "Disaster Management Future Challenges and Oppurtunities", 2007. Publisher-I.K.International Pvt. Ltd.S-25, Green Park Extension, Uphaar Cinema Market, New Delhi, India.

2. SUSTAINABILITY AND DEVELOPMENT (GEOGP 602GE)

Course Code	GEOGP	GEOGP 602GE			
Credits-6	L	T	P		
	65	25	0		
Course Type	Generic 1	Generic Elective			
Lectures to be Delivered	90	90			

Note: CCA and ESE scheme is same as in Paper GEOGP 101 CC

Course Content and Credit Scheme

Unit	Торіс	Allotted Time (Hours)		
		L	T	P
	Introduction Sustainability: Concept, Components, Millennium Development Goals, Sustainable Development Goals.	11	7	0
II.	The Millennium Development Goals: National Strategies and International, Experiences Sustainable Development Need and examples from different Ecosystems.	18	6	0
	Inclusive Development: Education, Health; Climate Change The role of higher education in sustainability Sustainable Livelihood Model Policies and Global Cooperation for Climate Change	18	6	0
	Sustainable Development Policies and Programmes: Rio+20,Financing for Sustainable Development; National Environmental Policy, Clean Development Mechanism (CDM).	18	6	0
	Total Hours	65	25	0

L-Lecture, T-Tutorial and P-Practical and Practices

- 1. Agyeman, Julian, Robert D. Bullard and Bob Evans (Eds.) (2003) *Just Sustainabilities: Development in an Unequal World. London: Earth scan.*(Introduction and conclusion.).
- 2. Ayers, Jessica and David Dodman(2010) "Climate change adaptation and development: the state of the debate". *Progress in Development Studies* 10 (2):161-168.
- 3. Baker, Susan (2006) *Sustainable Development*. Milton Park, Abingdon, Oxon; New York, N.Y.: Routledge.(Chapter 2, "The concept of sustainable development").
- 4. Brosius, Peter (1997) "Endangered forest, endangered people: Environmentalist representations of indigenous knowledge", Human Ecology 25:47-69.
- 5. Lohman, Larry (2003)"Re-imagining the population debate". Corner House Briefing 28.
- 6. Martínez-Alier, Joan etal (2010) "Sustainable de-growth: Mapping the context, criticisms and future prospects of an emergent paradigm" Ecological Economics 69: 1741-1747.
- 7. Merchant, Carolyn(Ed.) (1994) Ecology. *Atlantic Highlands*, N.J. Humanities Press. (Introduction,pp1-25.)
- 8. Osorio, Leonardo etal (2005)"Debates on sustainable development: towards a holistic view of reality". Environment, Development and Sustainability 7:501-518.
- 9. Robbins, Paul (2004) Political Ecology: A Critical Introduction. Blackwell Publishing.