Approved in Under Graduate Board of Studies (BoS) Meeting in the Subject of Geography held on 30-06-2018, Faculty of Physical Sciences on 04/07/2018 1nd Academic Council Standing Committee on 10/07/2018

Annexure-I of UG BoS Meeting

<u>Choice Base Credit System</u> <u>B.A./B.Sc. Geography</u>

CORE COURSES (12)	Ability Enhancement Compulsory Course (AECC) (2)	Skill Enhancement Course (SEC) (4)	Discipline Specific Elective DSE (4)	Generic Elective GE (2)
English/MIL-1 Physical Geography (GEOGP101CC)	(English/MIL Communication) /			
DSC- 2 A	Science			
English/MIL-1 General Cartography (Practical) (GEOGP102 CC) DSC- 2 B	Environmental Science/ (English/MIL Communication)			
English/MIL-2 Human Geography (GEOGP201CC)		Regional Planning and Development (GEOGP203SEC)		
DSC- 2 C				
English/MIL-2 Environmental Geography (GEOGP202CC) DSC- 2 D		Remote Sensing and GPS (GEOGP204SEC)		
		Geographic Information System (Practical) (GEOGP301SEC)	Geography of India (GEOGP303- 1DSE) or Economic Geography (GEOGP303- 2DSE)	GE-1 Disaster Risk Reduction (GEOGP305- GE1)
		Field Techniques and Survey based Project Report (Practical) (GEOGP302SEC)	DSE-2 A Disaster Management (GEOGP304- 1DSE) or Geography of Tourism (GEOGP304- 2DSE) DSE-2 B	GE-2 Sustainability and Development (GEOGP306-GE2)
	COURSES (12) English/MIL-1 Physical Geography (GEOGP101CC) DSC- 2 A English/MIL-1 General Cartography (Practical) (GEOGP102 CC) DSC- 2 B English/MIL-2 Human Geography (GEOGP201CC) DSC- 2 C English/MIL-2 Environmental Geography	COURSES (12)Enhancement Compulsory Course (AECC) (2)English/MIL-1(English/MILPhysical Geography (GEOGP101CC)Communication) / Environmental ScienceDSC- 2 AScienceEnglish/MIL-1Environmental Science/ (English/MIL Communication)General Cartography (Practical) (GEOGP102 CC)Science/ (English/MIL Communication)DSC- 2 BEnglish/MIL Communication)DSC- 2 BDSC- 2 CEnglish/MIL-2Human Geography (GEOGP201CC)DSC- 2 CEnglish/MIL-2Environmental Geography (GEOGP202CC)Implication	COURSES (12)Enhancement Course (AECC) (2)Enhancement Course (SEC) (4)English/MIL-1(English/MIL (English/MIL DSC- 2 ACommunication) / Environmental Science	COURSES (12) Enhancement Compulsory (AECC) (2) Enhancement Course (SEC) (4) Specific Elective DSE (4) English/MIL-1 (English/MIL Physical Geography (GEOGP101CC) Communication) / Environmental Communication) / Science Image: Communication / English/MIL-1 Image: Communication / Environmental Image: Communication / Environmental Image: Communication / Communication / DSC-2 B Science Image: Communication / English/MIL-2 Image: Communication / English/MIL-2 Image: Communication / English/MIL-2 Regional Planning and Development (GEOGP201CC) Image: Communication / Environmental Geography (GEOGP201CC) Image: Communication / Environmental Geography Image: Communication / GEOGP203SEC) Image: Communication / Environmental Geography Image: Communication / GEOGP203SEC) Image: Communication / Environmental Geography Image: Communication / GEOGP203SEC) Image: Communication / GEOGP203SEC) Image: Communication / GEOGP203SEC) Image: Communication / GEOGP203SEC) Image: Communication / Communication / GEOGP203SEC) Image: Communication / Communication / GEOGP203SEC) Image: Communication / GEOGP203SEC) Image: Communication / Communication / GEOGP203SEC) Image: Communication / Communication / GEOGP203SEC) Image: Communication / Communication / Communication / GEOGP203SEC) Image: Communication / Communication / Communicatio / Communication / Communication / Communication / Commu

Note:

1. Practical paper will not have tutorials.

1.	I II I SICAL GEO	JUN			
Course Code		G	EOGP 101CC		
Credits-6			Т	F	
		65	5 25	0	1
Course Type		Core			
Lectures to be Deliver	ed	90			
Continuous Comprehe	nsive Assessment (CC	CA) Pa	ttern: Maxi	mum Marks A	llotted: 30
Mid Term Test*	Class Test/		Quiz/Seminars	Attendance	Total
(Marks)	Tutorials/Assignn	nents	(Marks)	(Marks)	Marks
	(Marks)				
	5 5		5	5	
Total	15 5		5	5	30

<u>CORE COURSES</u> 1. PHYSICAL GEOGRAPHY (GEOGP101CC)

 Total
 15
 5
 5
 5

 * The pattern of examination for conducting the Mid Term Test will be same as prescribed for Annual examination.

Annual Examination System:

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

Paper Setting Scheme (Theory Paper)

I aper be	Taper Setting Scheme (Theory Taper)							
Section	No of	Syllabus	Nature of Questions and Answers	Questions to be	Maximum			
	Questions	Coverage		Attempted	Marks			
٨	10	Complete	Objective Type	10(1 mark each)	10			
А	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			
С	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	A	lotted (Hour	
		L	Т	Р
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).	15	6	0
IV.	Hydrosphere Hydrological Cycle, Bottom Relief Features of Pacific Ocean, Tides and Currents.	15	6	0
	Total Hours	65	25	0

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

Text Book(s):

- 1. Trewartha, G. T. 1968. *An Introduction to Climate*. McGraw-Hill Book Company, NewYork.
- 2. D.S. Lal. 1998. *Climatology*. Chaitanya Publishing House, Allahabad.
- 3. Suggested Readings:
- Critchfield, J. Howard. 2012. *General Climatology*. 4th Edition (Reprinted). Phi Learning Pvt. Ltd., New Delhi.
- 5. Das, P. K. 2011. The Monsoons. National Book Trust, New Delhi
- 6. Conserva H. T., 2004: Illustrated Dictionary of Physical Geography, Author House, USA.
- 7. Gabler R. E., Petersen J. F. and Trapasso, L. M., 2007: Essentials of Physical
- 8. Geography (8th Edition), Thompson, Brooks/Cole, USA.
- 9. Garrett N., 2000: Advanced Geography, Oxford University Press.
- 10. Goudie, A., 1984: The Nature of the Environment: An Advanced Physical
- 11. Geography, Basil Blackwell Publishers, Oxford.
- 12. Hamblin, W. K., 1995: Earth's Dynamic System, Prentice Hall, N.J.
- 13. Husain M., 2002: Fundamentals of Physical Geography, Rawat Publications, Jaipur.
- 14. Monkhouse, F. J. 2009: Principles of Physical Geography, Platinum Publishers, Kolkata.
- 15. Strahler A. N. and Strahler A. H., 2008: Modern Physical Geography, John Wiley & Sons, New

2. GENERAL CARTOGRAPHY-PRACTICAL (GEOGP102CC)

Course Code	GEOGP102CC				
Credits-6			Т	ŀ)
		25	5 0	6	5
Course Type			ore		
Lectures to be Delivered 90					
Continuous Comprehens	ive Assessment (CCA)	Pa	ttern: Maxir	num Marks A	llotted: 30
Mid Term Test*	Class Test/		Quiz/Seminars	Attendance	Total
(Marks)	Tutorials/Assignmen	nts	(Marks)	(Marks)	Marks
	(Marks)				
15	5		5	5	

* The pattern of examination for conducting the Mid Term Test will be same as prescribed for the Annual examination (Practical Paper).

5

30

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Marks Allocation Scheme Annual Practical (AP) Examination System:

5

15

Total

Particulars	Maximum Marks	Minimum Pass Marks	Time Allotted
Written Lab Work	10		
Practical Record*	05	8	3.00 Hrs
Viva-Voce	05		
Total	20		

*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 (Theory Paper) Annual Examination System

Section	No of	Syllabus	Nature of Questions and Answers	Questions to be	Maximum
	Questions	Coverage		Attempted	Marks
	10	Complete	Objective Type	10 (1 Marks 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 (7 Marks each)	07
С	2	Unit II	Choice based Long answer type	1 (7 Marks each)	07
D	2	Unit III	Choice based Long answer type	1 (7 Marks each)	07
E	2	Unit IV	Choice based Long answer type	1 (7 Marks each)	07
				Total	50

Course Content and Credit Scheme

Unit	Торіс	Allo	tted Ti	ime (Hrs)
		L	Т	Р
I.	Introduction	6	0	10(5)*
	Cartography as a Science of Communication			
	Basics of Map Reading			
	Map- Definition, Classification and Significance of Map			
II.	Scale	6	0	30(15)*
	Definition, Importance and Types of Scale			
	Three exercises in practical record each on Plain, Comparative			
	and Diagonal Scale.			

Map projections Criteria for Choice of Projections; Attributes and Properties of: Zenithal Gnomonic Polar Case, Zenithal Stereographic Polar Case, Cylindrical Equal Area, Mercator's Projection and Conical Projection with Two Standard Parallel		0	40(20)*
Representation Of Data Line Graph, Bar Diagrams, Isopleth and Choropleth Maps, Dot method, Climograph and Hythergraph	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 to 1 credit 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, New Delhi.
- 3. Mishra R. P. and Ramesh A., 1989: Fundamentals of Cartography, Concept Publishing.
- 4. Robinson A., 1953: Elements of Cartography, John Wiley.
- 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.

Steers J. A., 1965: An Introduction to the Study of Map Projections, University of London

3. HUMAN GEOGRAPHY (GEOGP201CC)

Course Code	GEOG P	GEOG P201CC		
Credits-6	L	Т	Р	
	65	25	0	
Course Type	Core	·		
Lectures to be Delivered	90			

Note: CCA and Annual Examination scheme is same as in Paper GEOGP201CC

Unit	Торіс	Allotted T (Hours		
		L	Т	P
Ι	Introduction	15	6	0
	Definition, Nature, Major Subfields, Contemporary Relevance of			
	Human Geography			
II	Population	15	6	0
	World Population Distribution, density and growth, Demographic			
	Transition Theory.			
III	Space and Society	20	7	0
	Human Races: Classification(Griffith Taylor) and world			
	distribution			
	Major Religions of the world and distribution			
	Major languages of the world and distribution			
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

Text Book(s):

- 1. Husain, Majid. 2010. *Human Geography*. Repinted. 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
- 4. Publications, Jaipur
- 5. Daniel, P.A. and Hopkinson, M.F. (1989) The Geography of Settlement, Oliver & Boyd, London.
- 6. Johnston R; Gregory D, Pratt G. et al. (2008) The Dictionary of Human
- 7. Geography, Blackwell Publication.
- 8. Jordan-Bychkov et al. (2006) The Human Mosaic: A Thematic Introduction to
- 9. Cultural Geography. W. H. Freeman and Company, New York.
- 10. Kaushik, S.D. (2010) Manav Bhugol, Rastogi Publication, Meerut.
- 11. Maurya, S.D. (2012) Manav Bhugol, Sharda Pustak Bhawan. Allahabad.
- 12. Ghosh, S. (2015) Introduction to settlement geography. Orient Black Swan Private Ltd., Kolkata

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

4. ENVIRONMENTAL GEOGRAPHY (GEOGP 202CC)

Note: CCA and Annual Examination scheme is same as in Paper GEOGP101CC

Course Content and Credit Scheme

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

Unit	Торіс	A	Allotted Time (Hours)			
		L	Т	Р		
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: Air and water Pollution, Their Causes, Impacts and Management, 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		

- 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, PHI Learning Pvt Ltd, New Delhi.
- 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 203SEC)					
Course Code	rse Code (GEOGP 203SEC)				
Credits-4	L T P				
	45	15	0		
Course Type	Skill Enh	ancement			
Lectures to be Delivered	60				

Note: CCA and Annual examination scheme is same as in Paper GEOGP 101CC)

Course Content and Credit Scheme

Unit	Торіс	A	Allotted Tim (Hours)		
		L	P		
I.	INTRODUCTION Concept, Need and Types of regional Planning Characteristics and Delineation of Planning Region	11	4	0	
II.	Regionalization: Concept, Hill Region: Case study of Himachal Pradesh(Physical and Cultural aspects)	11	4	0	
III.	MODELS FOR REGIONAL PLANNING: Growth Pole Theory and Core Periphery Model	11	4	0	
IV.	Regional Development Initiatives: Case Studies Integrated tribal development programme (ITDP) Damodar Valley Corporation(DVC)	11	4	0	
	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.
- 2. Claval P.I, 1998: An Introduction to Regional Geography, Blackwell Publishers, Oxford and Massachusetts.
- 3. Friedmann 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. 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.
- 6. Haynes J., 2008: Development Studies, Polity Short Introduction Series.
- 7. Johnson E. A. J., 1970: The Organization of Space in Developing Countries, MIT Press, Massachusetts.
- 8. Peet R., 1999: *Theories of Development*, The Guilford Press, New York.
- 9. UNDP 2001-04: *Human Development Report*, Oxford University Press.
- 10. World Bank 2001-05: World Development Report, Oxford University Press, New

REMOTE SENSING AND GPS (GEOGP 204SEC)

Course Code (GEOGP 204SEC)							
	Credits-4						Р
			<u>15</u>		1		90(45)*
Course Type			-	xill Enhancen	U hont		90(4 3)*
~ * *	Course Type				lent		
Lectures to be Delivered 60							
Continuous Compreh	iensi	ve Assessment (CCA)	Pa	ttern:	Ma	ximum Mark	s Allotted: 30
Mid Term Test*		Class Test/		Quiz/Semina	ars	Attendance	Total
(Marks)		Tutorials/Assignment	ts	(Marks)		(Marks)	Marks
	(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 Annual examination.

Marks Allocation Scheme Annual Practical Examination System:

Particulars	Maximum Marks	Minimum Pass Marks	Time Allotted
Written Lab Work	10		
Practical Record*	05	8	3.00 Hrs
Viva-Voce	05		
Total	20		

*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 (Theory Paper) Annual Examination

Section	No of	Syllabus	Nature of Questions and Answers	Questions to be	Maximum
	Questions	Coverage		Attempted	Marks
٨	10	Complete	Objective Type	10 (1 Marks each)	10
А	4	Complete	Short answer type (25-50 words)	4 (3 Marks each)	12
В	2	Unit I	Choice based Long answer type	1 (7 Marks each)	07
С	2	Unit II	Choice based Long answer type	1(7 Marks each)	07
D	2	Unit III	Choice based Long answer type	1(7 Marks each)	07
Е	2	Unit IV	Choice based Long answer type	1(7 Marks each)	07
				Total	50

Course Content and Credit Scheme

Unit	Торіс	Allotted Time			
			(Hours)		
		L	Т	Р	
I.	Remote Sensing:	3	0	10(5)*	
	Definition, Development, Platforms and Types				
II.	Aerial Photography: Definitions, Principles, Types and 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.	Bases of Visual Interpretation of Remote Sensing images: Land use/ Land Cover, Fundamentals of Global Positioning System (GPS) – Principles and Uses		0	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) and GPS field survey.

- 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. Lillesand 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, 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 Dewitt B. A., 2000: Elements of Photogrammetry: With Applications in GIS, McGraw-Hill.

GEOGRAPHIC INFORMATION SYSTEM (GEOGP 301SEC)

Course Code	(GEOG	(GEOGP 301SEC)				
Credits-4	L	ТР				
	15	0	90(45)*			
Course Type	Skill Enh	ancement				
Lectures to be Delivered	60					

Note: The CCA and Annual Examination (Theory Paper) & Annual Practical Examination is same as in paper GEOGP204SEC

Course Content and Credit Scheme

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

- 1. Bhatta, B. (2010) Analysis of Urban Growth and Sprawl from Remote Sensing, Springer, Berlin Heidelberg.41
- 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 302SEC)

Course Code	(GEOG	(GEOGP 302SEC)				
Credits-4	L	L T P				
	15	0	90(45)*			
Course Type	Skill Enh	ancement				
Lectures to be Delivered	60					

Note: The CCA, Annual Theory Paper and Annual Practical Examination is same as in paper GEOG204 SEC

Course Content and Credit Scheme

Unit	Торіс	Allotted Time (Hrs)			
		L	Т	P/FW	
I.	Introduction Field Work in Geographical Studies – Role, Value and Ethics of Field-Work, Defining the Field and Identifying the Case Study – Rural / Urban / Physical /	3	0	10(5)*	
II.	Human / Environmental. Field Techniques Merits, Demerits and Selection of the Appropriate Technique; Observation (Participant / Non Participant).	4	0	20(10)*	
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 Aims and Objectives, Methodology, Analysis, Interpretation and Writing the Report.	4	0	30(20)*	
	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. One copy of the report on A 4 size paper should be submitted in soft 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, New Delhi.
- 3. Evans M., 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: with 100 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. Pryczak and 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 303-1DSE)

Course Code	(GEOG	(GEOGP 303-1DSE)			
Credits-6	L	Т	Р		
	65	25	0		
Course Type	Disciplin	Discipline Specific Elective			
Lectures to be Delivered	90				

Note: CCA and Annual Examination ESE scheme is same as in Paper GEOGP 101 CC Course Content and Credit Scheme

Unit	Торіс	Allotted Time (Hours)		
		L	Т	Р
Ι	Physical Setting	16	6	0
	Location, Major physiographic region of India			
	Climate – Factors, Characteristics, Soils of India			
II	Population Size and Growth since 1901, Population Distribution and Density, Literacy, Sex Ratio	16	6	0
III	Settlement System Rural Settlement Types and Patterns, Urban Settlement Types and Pattern.	16	6	0
IV	Resource Base Power (Coal and hydroelectricity), Minerals (iron ore and bauxite). Economy – Agriculture (Rice, Wheat) Industries(Cotton Textile, Iron-Steel)	16	8	0
	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.
- 8. Spate O. H. K. and Learmonth A. T. A., 1967: *India and Pakistan: A General and Regional Geography*, Methuen.
- 8. Rana, Tejbir Singh, 2015, Diversity of India , R.K. Books, Delhi.

2. ECONOMIC GEOGRAPHY (GEOGP 303-2DSE)

Course Code	(GEOG	(GEOGP 303-2DSE)			
Credits-6	L	Т	Р		
	65	25	0		
Course Type	Disciplin	e Specific Electiv	ve		
Lectures to be Delivered	90				

Note: CCA and Annual Examination scheme is same as in Paper GEOGP 101CC Course Content and Credit Scheme

Unit	Торіс		Allotted Time (Hours)		
		L	Т	Р	
I.	Introduction Definition, Approaches and Fundamental Concepts of Economic Geography. Locational Theories – Agriculture (Von Thunen) and Industrial (Weber).	16	6	0	
II.	Primary Activities Intensive Subsistence Farming, Commercial Grain Farming, Plantation, Commercial Dairy Farming, and Mining (Coal and petroleum).	16	6	0	
III.	Secondary Activities Major Industries : Iron and Steel, Cotton Textile Major Industrial Regions: Eastern North American Region, Western European Region	16	6	0	
IV.	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 304-1DSE)

Course Code	GEOGP	GEOGP 304-1DSE)			
Credits-6			Р		
	65	25	0		
Course Type	Disciplin	e Specific Electiv	ve		
Lectures to be Delivered	90				

Note: CCA and Annual Examination scheme is same as in Paper GEOGP101 CC

Course Content and Credit Scheme Unit Topic Allotted Time L Т Р I. Introduction 16 6 0 Definition and Concepts.: Hazards, Risk, Vulnerability and Disasters II. Disasters in India: 0 16 6 Causes, Impact, Distribution: Landslide, Earthquake, and Cyclone Human Induced Disasters: 16 0 III. 6 Causes, Impact, Distribution: Forest Fire, Road Accidents 8 0 IV. **Response and Mitigation to Disasters:** 16 Mitigation and Preparedness, NDMA and NIDM Community Based Disaster Management Do's and Don'ts During Disasters **Total Hours** 64 26 0

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

Text Book(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. et al. (2004) International Perspectives on Natural Disasters, Kluwer Academic Publications. Dordrecht.
- 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 (<u>www.ikbooks.com</u>).

2. GEOGRAFHI OF TOURISM (GEOGF 504-2DSE)					
Course Code	(GEOG	(GEOGP 304-2DSE)			
Credits-6	L	Т	Р		
	65	25	0		
Course Type	Disciplin	e Specific Electiv	ve		
Lectures to be Delivered	90				

2. GEOGRAPHY OF TOURISM (GEOGP 304-2DSE)

Note: CCA and Annual Examination 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 Concept, Nature and Scope Types of Tourism: Nature Tourism, Cultural Tourism, Medical Tourism, Pilgrimage	16	6	0	
II.	Recent Trends of Tourism International and Regional; Domestic (India); Eco- Tourism, Sustainable Tourism	16	6	0	
III.	Impact of Tourism on Environment and Society	16	6	0	
IV.	Tourism in India: Tourism Infrastructure: A Case Study of Himachal Pradesh State Tourism Policy of Himachal Pradesh	16	8	0	
	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, www.cabi.org.
- 6. Tourism Recreation and Research Journal, Center for Tourism Research and Development, Lucknow
- Singh Jagbir (2014) "Eco-Tourism" Published by I.K. International Pvt. Ltd. S-25, Green Park Extension, Uphaar Cinema Market, New Delhi, India (www.ikbooks.com).

Generic Elective (2) 1. DISASTER RISK REDUCTION (GEOGP 305-GEI)

Course Code	(GEOGP 305-GEI)			
Credits-6	L	Т	Р	
	65	25	0	
Course Type	Generic 1	Elective		
Lectures to be Delivered	90			

Note: CCA and Annual Examination scheme is same as in Paper GEOGP101 CC

Course Content and Credit Scheme	
Торіс	Allotted Time
	(Hours)

		(Hours)		
	L	Т	P	
Introduction	16	7	0	
Hazards, Risk, Vulnerability and Disasters: Definition and				
Concept.				
Disasters in India:	16	6	0	
Causes, Impact and Distribution of Flood and Flash Flood,				
Earthquake and Cyclone				
Human Induced Disasters	16	6	0	
Causes, Impact, Distribution and Mapping.				
Disaster Risk Reduction	17	6	0	
Mitigation and Preparedness				
NDMA and NIDM				
Community-Based Disaster Management				
Do's and Don'ts During Disasters				
Total Hours	65	25	0	
	 Hazards, Risk, Vulnerability and Disasters: Definition and Concept. Disasters in India: Causes , Impact and Distribution of Flood and Flash Flood, Earthquake and Cyclone Human Induced Disasters Causes, Impact, Distribution and Mapping. Disaster Risk Reduction Mitigation and Preparedness NDMA and NIDM Community-Based Disaster Management Do's and Don'ts During Disasters 	Introduction16Hazards, Risk, Vulnerability and Disasters: Definition and Concept.16Disasters in India: Causes, Impact and Distribution of Flood and Flash Flood, Earthquake and Cyclone16Human Induced Disasters Causes, Impact, Distribution and Mapping.16Disaster Risk Reduction Mitigation and Preparedness NDMA and NIDM Community-Based Disasters Do's and Don'ts During Disasters17	LTIntroduction Hazards, Risk, Vulnerability and Disasters: Definition and Concept.167Disasters in India: Causes , Impact and Distribution of Flood and Flash Flood, Earthquake and Cyclone166Human Induced Disasters Causes, Impact, Distribution and Mapping.166Disaster Risk Reduction Mitigation and Preparedness NDMA and NIDM Community-Based Disasters176	

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

Reading List

Unit

- 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. et al. (2004) International Perspectives on Natural Disasters, Kluwer Academic Publications. Dordrecht.
- 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 (www.ikbooks.com).

2. SUSTAINABILITY AND DEVELOPMENT (GEOGP 306-GE2)

Course Code	(GEOC	(GEOGP 306-GE2)			
Credits-6	L	L T P			
	65	25	0		
Course Type	Generic	Elective			
Lectures to be Delivered	90				

Note: CCA and Annual Examination scheme is same as in Paper GEOGP101 CC

Course Content and Credit Scheme

Unit	Торіс	A	Allotted Time (Hours)		
		L	Т	Р	
I.	Introduction	16	7	0	
	Sustainability: Concept, Components				
II.	The Millennium Development Goals:	16	6	0	
	National Strategies and International Experiences				
	Sustainable Development: Need and its realization in Indian				
	context				
III.	Inclusive Development:	16	6	0	
	Education, Health				
	Role of higher education in achieving sustainability				
	Policies and Global Cooperation for Climate Change				
IV.	Sustainable Development Policies and Programmes:	17	6	0	
	Rio+20, Financing for Sustainable Development; National				
	Environmental Policy				
	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: Earthscan. (Introduction and conclusion.).
- 2. Ayers, Jessica and David Dodman (2010) "Climate change adaptation and development I: 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 et al (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, pp 1-25.)
- 8. Osorio, Leonardo et al (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.