M. Phil – GEOMP1

(As per Credit System w.e.f. the academic year 2017-18)

M.Phil. programme shall be of one year duration, comprising of two semesters. Semester I shall have two theory papers and one practical paper. This semester shall be common to M.Phil/Ph.D. course work. Semester II shall have seven optional papers of which a student will opt any of the three papers. In addition to the optional papers, students are required to do the dissertation work in Semester-II and submit the same within three months of the completion of Semester II theory examinations.

There shall be an internal assessment of 20 marks in each theory paper. The internal assessment in each paper shall be based on two assignments of 05 marks each and one seminar of 10 marks presented by each candidate and their participation.

Programme Specific Outcomes

Student will be able to:

PSO1: Develop a sound base in various aspects of research in geography and are able to identify a research problem and pursue scientific research and write dissertation and thesis.

PSO2: Become familiar with qualitative & quantitative methods of research and they are able to handle geo-spatial technologies like remote sensing, GIS and GPS in geographical research.

PSO3: Make use of various advanced computer based techniques in geographical research

PSO4: Develop an understanding of the process of reorganisation of space with emergence of urban settlements in India in past and are able to handle emerging issues of urban planning and management.

PSO5: Develop an understanding of gender, space and place. They are also able to develop measures of gender inequalities and women empowerment in Indian context.

PSO6: Understand the role of infrastructural development in rural areas and are able to execute effective research in the area of rural development.

PSO7: Understand the concept of sustainable development and the threats posed by climate change and natural resource degradation

PSO8: Acquaint with the issues of social concern for research in geography and are able to identify emerging research questions, prepare a research design and execute it in an effective manner.

SEMESTER- I:

There shall be three papers, including two theory papers and one practical paper. Each paper shall be of 100 marks. In the theory papers, the end semester examination shall carry 80 marks and 20 marks for internal assessment.

Sem.	Paper code	Nomenclature	Hrs/week L+T+P	Marks			Exam. hours	Credits L+T+P
				Internal Assessment	End Sem. Exam	Total		
I	17GEOMP11C1	Research Methodology in Geography	3+1+0	20	80	100	03	3+1+0
	17GEOMP11C2	Methods and Techniques in Geography	3+1+0	20	80	100	03	3+1+0
	17GEOMP11C3	Practical: Advanced Computer based Techniques in Geography	0+0+8	-	100	100	04	0+0+4
Credits (Sem.-I)			Total Credits = 12					

SEMESTER- II:

Sem.	Paper code	Nomenclature	Hrs/week L+T+P	Marks			Exam. hours	Credits L+T+P
				Internal Assessment	End Sem. Exam	Total		
II	17GEOMP12D1	Indian Cities: Past and Present	3+1+0	20	80	100	03	3+1+0
	17GEOMP12D2	Gender Issues in Geography	3+1+0	20	80	100	03	3+1+0
	17GEOMP12D3	Infrastructural Development in Rural India	3+1+0	20	80	100	03	3+1+0
	17GEOMP12D4	Urban Development in India	3+1+0	20	80	100	03	3+1+0
	17GEOMP12D5	Water Resources: Issues and Problems	3+1+0	20	80	100	03	3+1+0
	17GEOMP12D6	Environmental Issues	3+1+0	20	80	100	03	3+1+0
	17GEOMP12D7	Social Geography with special reference to India	3+1+0	20	80	100	03	3+1+0
	17GEOMP12C1	Dissertation	1	-	-	200	Viva Voce	8
Credits (Sem.- II)			Total Credits = 20					
Credits (Sem. I & II)			Total Credits = 12 + 20 = 32					

M.Phil. - GEOMP1 Sementer-1

January-December 2017 onwards

17GEOMP11C1 - RESEARCH METHODOLOGY IN GEOGRAPHY

Credit: 04 (3+1 +0)
End Semester Exam: 80 marks
Internal Assessment: 20 marks
Total: 100 marks
Time: 3 hrs

Course Outcomes:
Students would be able to:

CO1: Know fundamentals of research with a focus on raising geographic questions and parameters of geographic perspective.

CO2: Develop an understanding in identification and formulation of research problem on theme in geographic spirit and learn data management.

CO3: Familiarize with research writing process and produce a quality thesis.

Unit-I

Research: Nature, meaning and types; Geographic research and choice of approaches: Geographic perspective: nature of Geography, Geographic Questions and parameters of Geographic perspective; Research ethics

Unit-II

Issues pertinent to thesis in Geography: Research proposal: issues and formulation; Literature search and review of published research in relevant area

Unit-III

Significance of use of data in Geography; Data generation for quantitative analysis; Data production for qualitative analysis

Unit-IV

Data representation; Data Interpretation; Research writing; Plagiarism; Preparing for viva-voce

Note:

There will be eight questions in all, two from each unit. Candidates will be required to attempt four questions selecting one question from each unit. All questions will carry equal marks.

Recommend Readings:

1. Booth, Wayne C., Gregory G. Colomb, and Joseph M. Williams. 2008. **The Craft of**
2. Booth, Wayne C., Gregory G. Colomb, and Joseph M. Williams. 2013. **A Manual for**
3. Clifford, Nicholas J. and Gill Valentine eds. 2003. **Key Methods in Geography**. London: Sage.
4. Gunning, R. 1952. **The Technique of Clear Writing**. New York: McGraw-Hill.

5. Hart, John Fraser. 1976. “Ruminations of a Dyspeptic Ex-Editor". **The Professional**
6. Holloway, Sarah L. et. al. eds. 2003. **Key Concepts in Geography**. London: Sage.
7. Kitchin, Rob and Nicholas J. Tale. 2000. **Conducting Research into Human Geography**. Essex: Pearson Education.
8. Krishan, Gopal and Nina Singh. 2017. **Researching Geography: The Indian Context**. London:Routledge. (South Asian edn.)
9. Montello, Daniel R. and Paul C. Sutton. 2006. **Scientific Research Methods in Geography**.
10. Sharp, John A., and Keith Howard. 1996. **The Management of a Student Research Project**. 2nd edn. Aldershot, England: Gower Publishing Limited. Stoddart, D.R. ed. 1981. **Geography, Ideology and Social Concern**. Oxford: Basil Blackwell.
11. Strunk, William Jr., and E. B. White. 1979. **The Elements of Style**. New York: Macmillan Publishing Company. Unwin, Tim. 1992. **The Place of Geography**. Essex; Prentice Hall.
12. William, Robin. 2014. **The Non-Designer’s Design Book**. 4th edn. San Francisco, CA: Peachpit Press
13. Young, P.V. 2001. **Scientific Social Surveys and Research**. New Delhi: Prentice Hall of India.
14. Zinsser, William. 2006. **On Writing Well: The Classic Guide to Writing Nonfiction.** 7tedn. New York: Harper Collins Publishers.

M.Phil. - GEOMP1 Sementer-1
January-December 2017 onwards
17GEOMP11C2 - METHODS AND TECHNIQUES IN GEOGRAPHY

Credits: 4 (3+1+0)
Max. Marks: 100
End Semester Exam: 80
Internal Assessment: 20
Time: 3 Hours

Course Outcomes:
Students would be able to:

CO1: Appreciate the difference between qualitative and quantitative methods of research in geography.

CO2: Be aware of various types and sources of data, and they can prepare sampling design and sampling frame for collection of data. They are aware of the nature of research in qualitative mode in geography.

CO3: Explore spatial data visually, and apply geo-spatial technologies in geographical research.

Unit-I

Quantitative and Qualitative Research; quantitative and qualitative methods

Unit-II

Methods of Data Collection: Primary and secondary data sources; Methods of primary and secondary data collection; Sampling Methods-sampling size and sample frames.

Unit-III

Spatial Data: Types of Spatial data, Source of Spatial data, Exploring spatial data visually.

Unit-IV

Geospatial technology: GPS, GIS and Satellite image, Role of Geospatial technology in Geography,

Note: There will be eight questions in all, two from each unit. Candidates will be required to attempt four questions selecting one question from each unit. All questions will carry equal marks.

Recommended Readings:

1. Fortheringham, A.S, Brunsdon,C and Charlton, M.(2000) *Quantitative Geography*, Sage
2. Rogers, Peter A. (2009), *Statistical Methods for Geography*, Sage Publications, London.
3. Hammond,R.and McCullah,P (2009) Quantitative Techniques in Geography, Clarendon, Oxford.

M.Phil. - GEOMP1 Sementer-1

January-December 2017 onwards

17GEOMP11C3 - ADVANCED COMPUTER BASED TECHNIQUES IN GEOGRAPHY

Credits: 04(0+0+4)
Max. Marks: 100
End Semester Exam: 100
Distribution of marks:
Lab Test: 60 marks
Lab Record: 20 marks
Viva-Voce: 20 marks
Time: 4 Hours

Course Outcomes:
Students would be able to:

CO1: Demonstrate knowledge and understanding of: enter and edit data, format data cells and construct formulas.

CO2: Familiarize with basic SPSS functions and its tools.

CO3: Generate maps after conducting the simple spatial analysis with the help of secondary and remote sensing data.

Unit-I

Basics about Excel: Table, formatting, sorting and filtering; use of basic formulae; random number generator; statistical charts (line graphs, bar diagrams, scatter diagram, control charts, histogram etc.)

Unit-II

SPSS Environment: entering data into data editor; Pearson product moment correlation, Liner regression analysis and residual mapping through GIS; Factor analysis, naming of factors, factor score and plotting of factor score with GIS software.

Unit-III

Data for GIS: Data model and data structure. Spatial Statistics and Geostatistical Analysis – analyzing patterns, mapping clusters and spatial relationships with GIS software

Unit-IV

In Situ Data Collection: Introducing Remote Sensing, Data Acquisition through Remote Sensing technique; displaying Landsat/LISS imagery, creating a composite image from Landsat and LISS imageries, suitable band combinations for various uses with the help of Landsat/LISS imageries

Note:

1. There will be eight questions in all, two from each unit. Candidates will be required to attempt four questions selecting one question from each unit. All questions will carry equal marks.
2. The practical exam shall be conducted by a board of internal examiners comprising course-in charge and HOD/nominee of the department.

Recommend Readings:

1. A.Stewart Fotheringham (2000), Quantitative *Geography*, Sage, New Delhi.
2. J.R. Jensen and R.R. Jensen (2013), Introductory *Geographic Information System*, Pearson, Delhi.
3. Lo, C.P and Yeung, A.K.W (2005), *Concepts and Techniques of Geographic Information Systems*, API, New Delhi.
4. Schuurman, N. (2003), *GIS: A Short Introduction,* Oxford, Blackwell.

M.Phil. - GEOMP1 Semester-II

January-December 2017 onwards

17GEOMP12D1 - INDIAN CITIES: PAST AND PRESENT

Credit: 04 (3+1 +0)
End Semester Exam: 80 marks
Internal Assessment: 20 marks
Total: 100 marks
Time: 3 hrs

Course Outcomes:
Students would be able to:

CO1: Get expose to an understanding of urban places and areas at national and international level with a focus on urban research in India

CO2: Develop an insight into the evolving nature of urban places in India with focus on changing metropolitan form and metropolisation.

CO3: Get better equipped to figure out and tackle the issues of urban planning and management.

Unit-I

Definition of urban places and areas national and international– identification of urban places, spatial limits of urban areas, sources of data and issues in comparability, urban research in India.

Unit-II

The process and the patterns of the urbanization in India: colonial legacy, the post-independence characteristics; the origins and growth of cities in India; Changing metropolitan form and metropolitanization.

Unit-III

Cities, Suburbs, the region and Hinterland: internal structure of select towns; classification of urban places; urban fringe, rural- urban fringe; urban pathology: crime/violence; emerging typologies of cities.

Unit-IV

Urban planning and management in India: the urban planning machinery, urban development policies; implications of the 74^{th} Amendment Act; planning for urban growth.

Note: There will be eight questions in all, two from each unit. Candidates will be required to attempt four questions selecting one question from each unit. All questions will carry equal marks.

Recommend Readings:

1. Aggarwal, S.K. ed. 2007: **Urbanization Urban Development and Metropolitan Cities in India**. New Delhi: Concept Publications.
2. Diddee, Jaymala and Vimla Rangaswamy. 1993: **Urbanisation: Trends, Perspectives and Challenges**. Pune: Institute of Indian Geographers.

3. _____ ed. 1997: **Indian Medium Towns: An Appraisal of their Role as Growth Centres**. Jaipur: Rawat Publications.
4. Kant, Surya and Nina Singh. 2015. **Geography Development Public Policy.** New Delhi: RKBooks.
5. National Institute of Urban Affairs. 1988. **State of India's Urbanization.** New Delhi.
6. Raj Bala. 1986. **Trends in Urbanization in India** 1901-1981. Jaipur: Rawat Publications.
7. Ramachandran, R.1989. **Urbanization and Urban Systems in India**. Delhi: Oxford University Press.
8. Singh, Kulwant and Florian Steinberg eds. 1996. **Urban India in Crisis.** New Delhi: New Age International Publishers.
9. Singh, Nina. 2016. Mapping Urban Primacy Patterns in India: 2011. **Annals of the National Association of Geographers, India**. Vol. XXXVI, No. 2.
10. Singh, Nina. 2013. "Trends and Pattern of Metropolisation in India". **Population Geography**. 35(1&2):15-30.
11. Sivarsmakrishnam, K.C., Amitabh Kundu and B.N. Singh. 2005. **Handbook of Urbanization in India**. New Delhi: Oxford University Press.

M.Phil. - GEOMP1 Semester-II

January-December 2017 onwards

17GEOMP12D2 - GENDER ISSUES IN GEOGRAPHY

Credit: 04 (3+1 +0)
End Semester Exam: 80 marks
Internal Assessment: 20 marks
Total: 100 marks
Time: 3 hrs

Course Outcomes:
Students would be able to:

CO1: Develop the understanding of growth and development of feminist geography
CO2: Comprehend gendered geographies of India.
CO3: Identify the measures and undertake research in the area of gender inequality.

Unit-I

Background to cultural turn in geography; Feminist geographies; Conceptualization of Gender; Space, and Place.

Unit-II

Importance of the study of gender issues in geography; Emergence of the gender issues as an important area of concern; The making of gendered geography of India.

Unit-III

International and National experience- Development trajectory: from WI (Women in Development) - WAD (Women and Development) - GAD (Gender and Development). Empowerment- concept, definitions and measurements; various indicators and their limitations; Gender sensitive development.

Unit-IV

Gender inequalities-GDI, HDI and MPI; Some case studies on gender issues in North-West India.

Note: There will be eight questions in all, two from each unit. Candidates will be required to attempt four questions selecting one question from each unit. All questions will carry equal marks.

Recommend Readings:

1. Agnes, Flavis. 2000. **Law and Gender Inequalities: The Policies of Women's Right in India**. Oxford, New Delhi.
2. Bandhopadhyay, D. 2000. "Gender and Governance in India." **Economic and Political Weekly**, 35 (31):2696-2699.
3. Bhasin, K.2000. **Understanding Gender**. New Delhi: Kali for Women Publishers.
4. Hall, Jennifer. 2002. "The Next Generation: Can There Be a Feminist Geography without Gender?"**The Great Lakes Geographer** 9(1):19-27.

5. Raju, Sarawati. 2006. “Contextualizing Gender Empowerment at the Grassroots: A Tale of Two Policy Initiatives.” **GeoJouranl** 65:287-300.
6. Raju, Sarawati. 2011. **Gendered Geographies: Space and Place in South Asia**. New Delhi:
7. Rose, G. 1993. **Feminism and Geography: The Limits of Geographical knowledge**. University of Minnesota Press: Minneapolis.
8. Singh, Nina. 2012. “Son Preference in a Patriarchal Setting in North-West India: Some Observations from Rural Haryana.” **Population Geography** 34 (1&2): 1-18.
9. Singh, Nina.2014. "Rising Sons and Disappearing Daughters: Emerging Pattern in Haryana". **Maharshi Dayanand University Research Journal (Arts).** 2014, Vol. 13, No 1, pp.1-14.
10. UNDP. Human Development Reports (Various issues).
11. UNDP. **World Development Reports** (Various issues).

M.Phil. - GEOMP1 Semester-II

January-December 2017 onwards

17GEOMP12D3 - INFRASTRUCTURAL DEVELOPMENT IN RURAL INDIA

Credits: 04 (3+1 +0)
End Semester Exam: 80 marks
Internal Assessment: 20 marks
Total: 100 marks
Time: 3 hrs

Course Outcomes:
Students would be able to:

CO1: Know the historical perspectives of road development and development of railways in India.

CO2: Develop the understanding of economic and social infrastructure.

CO3: Enhance their knowledge of infrastructure like rail and road transport network, drinking water, sanitation, electrification and various types of building materials used in households in rural India.

Unit –I: Meaning and Classification of Infrastructure

Meaning of Infrastructure, Classification of Infrastructure (Economic and Social Infrastructure), Reinforcing Rural Infrastructure in India.

Unit –II: Road and Rail Transport Network Development

Factors Affecting Transport Network; Road Development- A Historical Perspective of Road Development in India, Types of Roads, National Highways, State Highways, PWD and Other Roads, Project Roads; Road Development under Five Year Plans.

Development of Railways in India: Electrification, Broad Gauge, Meter Gauge, Development of Railways during the Five Years Plans.

Unit –III: Drinking Water and Sanitation Infrastructure

Drinking water: Availability of Drinking Water; Various Sources and Location of Drinking Water in Rural India (Within the Premises, Near the Premises, Away from the Premises), Regional Variation in Availability of Drinking Water in Rural India.

Sanitation: Latrine Facility in Rural India, Type of Latrine Facility within the Premises; Flush/Pour Flush Latrine, Pit Latrine, Night Soil Disposed into Open Drainage, Service Latrine, No Latrine Facility within the Premises and Alternative Sources.

Unit –IV: Electrification and Housing Infrastructure in Rural India

Rural Electrification: Concept of Rural electrification, Progress of Rural electrification in India, Rural electrification during Five year Plans, Electrification in Rural India.

Rural Housing Infrastructure: Concept and Importance of House, Uses of Houses in Rural India, Rural Households by Building Material of Wall, Roof and Floor in India. Regional variations in use of Building Materials in Rural India. Rural housing and role of Indira Awas Yojna.

Note: There will be eight questions in all, two from each unit. Candidates will be required to attempt four questions selecting one question from each unit. All questions will carry equal marks.

Recommend Readings:

1. Bamford, C.G. and Robinson, H. (1978), **Geography of Transport**, Macdonald and Evans, London. Bhaduri, S. (1992), **Transport and Regional Development**, Concept Publishing Company, New Delhi.
2. Census of India (2011) House List of India, DDW-HH0101-100, Table-HH-1, HH-2A, HH-2B, New Delhi.
3. Hoyle, B. and Knowles, R. (2000), **Modern Transport Geography**, John Wiley and Sons, New York
4. Kumar, A and Das, K.C. (2014) "Drinking Water and Sanitation Facility in India and Its Linkages with Diarrhoea among Children under Five: Evidences from Recent Data" **International Journal of Humanities and Social Science Invention,** Vol.3 Issue 4, pp. 50-60.
5. Raza, M. and Aggrawal, Y.P. (1985), **Transport Geography of India**, Concept Publishing Company, New Delhi
6. Siddaraju, V.G. and Ramesh (2014) **Rural Development and Inclusive Growth, Linkage and Implications**, Kalpaz Publications, Delhi.
7. Singh, J. (1994) **India: A Comprehensive Systematic Geography,** Radha Publication, New Delhi.
8. Vaidya, B.C. (1998), **Readings in Transport Geography**, Devika Publications, Delhi.
9. Vaidya, B.C. (2003), Development **Readings in Transport Geography**, Devika Publications, Delhi.
10. Tripathy, K.K. (2012), "Government Intervention in Rural Infrastructure: A Review of Bharat Nirman Programme", ***Kurukshetra, A Journal on Rural Development,*** Vol.60, No.12, pp. 3-6.

M.Phil. - GEOMP1 Semester-II
January-December 2017 onwards
17GEOMP12D4 - URBAN DEVELOPMENT IN INDIA

Credits: 04 (03+01+0)
Max. Marks: 100
End Semester Exam: 80
Internal Assessment: 20
Time: 3 Hours

Course Outcomes:
Students would be able to:

CO1: Know the basic concepts and processes of urbanization with special reference to India.

CO2: Understand various processes behind patterns of urbanization at global level with special reference to urbanization of India.

CO3: Have the understanding and evaluating spatio-temporal dimensions of urban policies and programmes in India.

Unit-I

Basic urban processes: Spatial and temporal dimensions of urbanisation in India

Unit-II

Urban expansion and urban sprawl in India-case study of Rohtak City.

Problems of urban India; Rural-urban fringe; National Capital Region (NCR) and metropolitan planning.

Unit-III

Policies of urban development**:** Jawaharlal Nehru National Urban Renewal Mission (JNNURM); Atal Mission for Rejuvenation and Urban Transformation (AMRUT); Urban infrastructure development in satellite towns / counter magnets of million plus cities; Smart cities.

Unit-IV

National urban sanitation policy; Swachh Bharat Urban; Urban governance (74^{th} amendment); National urban information system (NUIS): introduction, objectives and implementation; Applications of Remote Sensing, GIS and GPS in urban studies.

Note: There will be eight questions in all, two from each unit. Candidates will be required to attempt four questions selecting one question from each unit. All questions will carry equal marks.

Recommended Readings:

1. Aijaz , Rumi .*Democracy and Urban Governance in India.* New Delhi : Academic Foundation. 2012. Print.
2. Bhatt, L.S. *Regional Planning in India.* Calcutta: Statistical Publishing Society. 1972. Print.

3. Chand, M and Puri,V.K. *Regional Planning in India*. New Delhi: Allied Pub. Pvt. Ltd..1985.Print.
4. Coates, B.R. and Johnston,R.J. *Geography and Inequality*. Oxford: Oxford University Press.1977. Print.
5. Dhaliwal, S.S. *Urban Infrastructure Development in Small and Medium Towns.* New Delhi: Deep & Deep. (2004). Print.
6. Dickinson, R.E. *City and Region*. London: Routledge. 1964. Print.
7. Holloway, Sarah L. et. al. (eds.). *Key Concepts in Geography*. London: Sage. (2003). Print.
8. Kulshrestha, S.K. *Urban and Regional Planning in India: A Handbook for Professional Practice*. New Delhi: Sage India.2012.Print.
9. Kundu, Amitabh. *Urban Development and Urban Research in India.* New Delhi : Khanna Publication 1992. Print.
10. Ramachandran, R. *Urbanisation and Urban Systems in India.* New Delhi: Oxford .1989.Print.
11. Singh, K. and Steinberg, F. (eds.). *Urban India in Crisis*. New Delhi: New Age International. 1987. Print.

M.Phil. - GEOMP1 Semester-II

January-December 2017 onwards

17GEOMP12D5 - WATER RESOURCES: ISSUES AND PROBLEMS

Credits: 4(03+01+0)
Max. Marks: 100
End Semester Exam: 80
Internal Assessment: 20
Time: 3 Hours

Course Outcomes:
Students would be able to:

CO1: Have understanding of: water resource analysis in spatial context, linkage between development and water resources different problem relating to surface and groundwater in India, selected international and national water disputes.

CO2: Know those challenges and issues require proper understanding of site specificity.

CO3: Manage the available water resource and water demands within the constraints set by technical, social, political and economic drivers.

Unit-I

Resource Analysis: nature of natural resources; water resource analysis-spatial analysis, ecological analysis, regional analysis.

Unit-II

Water and Development: Water and Sustainable Development, Integrated water resources management.

Unit-III

Issues: water scarcity, water security, water productivity, virtual water, green water and blue water.

Unit-IV

Problems special reference to India: water quality, water availability water, depletion, water conflicts.

Note: There will be eight questions in all, two from each unit. Candidates will be required to attempt four questions selecting one question from each unit. All questions will carry equal marks.

Recommend Readings:

1. Agnew,A. and Woodhouse, P. (2011) Water Resources and Development, Routlege, London.
2. Dave, T. (2008) Fundamentals of Hydrology, Routlege, London.
3. Lautze,J (2014) Key Concepts in Water Resources Management,Routlege, London.
4. Jeet,I (2005) Groundwater Resources of India, Mittal Publications, New Delhi.

M.Phil. - GEOMP1 Semester-II

January-December 2017 onwards

17GEOMP12D6 - ENVIRONMENTAL ISSUES

Credits: 04 (03+01+0)
Max. Marks: 100
End Semester Exam: 80
Internal Assessment: 20
Time: 3 Hours

Course Outcomes:
Students would be able to:

CO1: Demonstrate critical thinking skills in relation to environmental issues.

CO2: Understand key concepts and acquire ability to write effectively in a variety of contexts.

CO3: Demonstrate an ability to integrate many disciplines and fields that intersect with environmental concerns.

CO4: Demonstrate an integrative approach to environmental issues with a focus on sustainability.

Unit- I: Global Climate Change

Introduction; Greenhouse Effect; Ozone Depletion; Climate Change and Biological Diversity; Developing Countries and Climate Change; Global Warming and its effects; Historical Meets / Conventions.

Unit -II: Degradation of Natural Resources: An Indian Perspective-I

Land: Land Degradation; Soil Erosion and Erosion Hazards; Conservation and Management of Land Resources. Water: Major Water Pollutants; Heating of Rivers; Eutrophication; Dams-Emerging problems; Wetland Degradation; Marine Pollution; Water Conservation techniques.

Unit-III: Degradation of Natural Resources: An Indian Perspective-II

Air: Gaseous Effluents; Effects of Air Pollution on Biotic Resources; Airborne Disaster; Conservation Strategies. Forest and Wildlife: Endangered Flora and Fauna; Depletion of Genetic Resources.

Unit - IV: Sustainable Development

Sustainable Development; Future Prospects of Sustainability; Environmental Debt; Environmental Impact Assessment of major projects; Role of Geo-informatics in Identification, Monitoring and Mitigation of problems related to Climate Change and Natural Resources.

Note: There will be eight questions in all, two from each unit. Candidates will be required to attempt four questions selecting one question from each unit. All questions will carry equal marks.

Recommend Readings:

1. Ajai 2004. Remote Sensing, GIS Application in Monitoring and Assessment of Environment. in Proceeding of the Symposium on Geoinformatics Application for Sustainable Development,IARI,New Delhi,pp.23-40.

2. Ahmed, S. Iftikhar and Singh, T A. 2005. Disappearing Wetlands: A Threat to Biodiversity, Geographical Review of India, 67(1):96-99.
3. Bannerjee, A., 2006. Urban Challenges in 21st Century India: Urbanization and its impacts on environment and infrastructure. Annals of NAGI, 26(1):48-56.
4. Convention on Biological Diversity, 2006.Guidance for Promoting Synergy among Activities Addressing Biological Diversity. Desertification, Land Degradation and Climate Change, Monterial, Technical Series No.25: 1-43.
5. Forest Survey of India, 2005. State of forests Report. Forest Survey of India, Ministry of Environment and Forest, Dehradun.
6. Jensen, J.R.2000, Remote Sensing of the Environment: An Earth resource Perspective, Prentice Hall.
7. Jha, A.K. and Parihar, R., 2007. Growing Human Population and Its Impact on Environment and Development in India. Journal of Human Welfare and Ecology, 1(1):108-115.
8. Joshi P.C.and Joshi, N., 2004. Biodiversity and Conservation. APH Publishing Corporation, New Delhi.
9. Mohammad, N. and Sekhri, N., 2006. Agricultural Modernization and Groundwater Depletion in Ludhiana District, Punjab, Geographical Review of India, 68(1):12-29.
10. Sen Roy, S. and Singh, R.B., 2002. Climate Variability, Extreme Events and Agricultural Productivity in Mountain Region, Oxford and IBH Pub., New Delhi.
11. Sharma, H.S. and Khan, T.I., 2004. Ozone Depletion and Environmental Consequences, Aviskar Pub. Jaipur.
12. Singh M., 2007. Soil Erosion Risk Mapping Using Remote Sensing and GIS. A Case Study of Bangla Rao Sub Watershed of East Doon Valley. A Project Report submitted in IIRS, (NRSC) Department of Space, GOI, Dehradun, India.
13. Singh M, Kumar S, Singh, R.B. and Parasad J, 2007. Estimation of Soil Erosion by Using RUSLE and GIS for a Himalayan Sub-Watershed in India, Annals of the National Association of Geographers,India (NAGI),Vol.27.No.2:1-11.
14. Singh R.B. and Singh M. 2010. Agriculture, Environment and Problems. In Haryana Encyclopedia-2, Bhoogol Khand Part- 2, K.K.Khandelwal (ed), Vani Parkashan, New Delhi.pp. 189-196.
15. Singh R.B. and Singh M, 2008. Geographical Analysis of Waterlogging Induced Land Degradation in Karnal District of Haryana. In Perspectives in Resource Management in developing Countries,Vol.3.B.Thakur (ed),Concept Pub.,New Delhi,pp,196-211.
16. Singh S, 1991, Environmental Geography, Prayag Pustak Bhawan, Allahabad.
17. Rajput.S, 2005. Population, Development and Environment: The South Asian Scenario, Geographical Review of India, 67(1):44-54.
18. Reddy A.M., 2004. Geoinformatics for Environmental Management, B.S.Publications, Delhi.
19. Trivedi, P.R., 2004. Natural Resource Conservation, APH Publishing Corporation, New Delhi.
20. United Nations Environment Programme, (UNEP) 2007, Global Environment Outlook Geo 4, Nairobi.

M.Phil. - GEOMP1 Semester-II

January-December 2017 onwards

17GEOMP12D7 - SOCIAL GEOGRAPHY (WITH SPECIAL REFERENCE TO INDIA)

Credits: 04 (03+01+0)
Max. Marks: 100
End Semester Exam: 80
Internal Assessment: 20
Time: 3 Hours

Course Outcomes:
Students would be able to:

CO1: Have knowledge about conceptual base of social geography.
CO2: Understand the theoretical, philosophical concept of society in geography and able to evaluate the different social groups in India.
CO3: Make a good human being in India.

Unit-I

Philosophical bases of Social geography, Social Geography in the realm of Social Sciences, Concepts and theme in Social Geography: Social Space, Social Segregation, Social Justices and Social well - being.

Unit-II

Indian Society: Origin of Caste, Caste Hierarchy, Social Structure. Distribution of Religion, Ethnicity, and Concept of Dialects in Contemporary Indian rural society.

Unit-III

Women Empowerment: Status and Position of Women in India, Women Empowerment in India , National mission for empowerment of women.

Unit-IV

Scheduled Castes and Scheduled Tribes in Rural India: Distribution of Scheduled Castes and Tribes, Work Participation Rate, Literacy Rate, Educational Attainment Level, Sex ratio, Housing conditions. Availability of Drinking Water and Sanitation Facilities.

Note: There will be eight questions in all, two from each unit. Candidates will be required to attempt four questions selecting one question from each unit. All questions will carry equal marks.

Recommend Readings:

1. Aijazuddin, A. (1999) : Social Geography, Rawat Publications, New Delhi
2. Bulsara, J. F. (1970) : Patterns of Social Life in Metropilitan Areas, Popular Prakashan, Bombay.
3. Census of India (1974) : Economic and Socio-Cultural Dimensions of Rationalization Census Centenary,
4. Census of India (2011) Primary Census Abstract, New Delhi.

5. Census of India (2011) House List of India, DDW-HH0101-100, Table-HH-1, New Delhi.
6. Census of India (2011) Sanitation facilities of India, DDW-HH2808, HH2908, HH3008T, New Delhi.
7. Coates, B. E. et. al. (1977) : Geography and Inequality, Oxford University Press, London
8. Blij, H.J. (1995): The Earth-An introduction to its Physical and Human Geography, John Wiley & Sons,inc; New York.
9. Cater, Hohn & Jones, Trevor (1989): Social Geography-An Introduction to Contemporary Issues, Arnold Publishers, New Delhi.
10. Jones, Emrys & Eyles, John (1977): An Introduction to Social Geography, Oxford University Press, Oxford.
11. Tripathi, R.S. & Parmar, S.B.Singh: Social and Economic Development in India, Ashish Publishing House New Delhi, PP 451-454.
12. Hussain, Majid (1994): Human Geography, Rawat Publications, Jaipur.
13. Soffer, David E. (ed.) (1980): An Exploration of India: Geographical Perspectives on Society and Culture.