

SYLLABUS FOR M.A. GEOGRAPHY

Under Choice Based Credit System,

DR. SHYAMA PRASAD MUKHERJEE UNIVERSITY, RANCHI

Introduction :

The University Grant Commission (UGC) has initiated several measures to bring equity, efficiency and excellence in the Higher Education system of the country. The measure include innovation and improvements in curriculum, teaching-learning process, examination. In this regards, Choice Based Credit System (CBCS) has been suggested by UGC for implementation in the Higher Education System in the country. The CBCS is expected to provided opportunity for the students to choose from the prescribed courses comprising core, elective/minor or skill based.

DR. SHYAMA PRASAD MUKHERJEE UNIVERSITY, Ranchi has decided to implement Choice Based Credit System at the Post Graduate level from Academic Session 2018-19. The Board of Studies of Department of Economics in its meeting held on 9th April, 2018 adopted the following as per UGC norms.

COURSE STRUCTURE

M.A. (Geography) is a full time two years Four Semester Course.

- **Core Course (C.C.)** : There may be Core Courses in every semester. This is the course which

Grade (G)	Grade Point (GP)	Percentage Equivalent of Marks Obtained
O (Outstanding)	10	100%
A (Excellent)	9.0	90% to 99.99%
A	8.0	80% to 89.99%
A	7.5	75% to 79.99%
B ⁺	7.0	70% to 74.99%
B	6.0	60% to 69.99%
C ⁺	5.5	55% to 59.99%
C	5.0	50% to 54.99%
P	4.5	45% to 49.99%
F	0.0	LESS THAN 45%
Ab.	0.0	

is to be **Compulsorily** studied by a student as a core requirement to complete the requirement of a programme in a said discipline of study.

- **Elective Course (E.C.)** : This is a course which can be chosen from a pool of papers.

GRADING SYSTEM

- a. Letter Grades and Grade Points** : The method of absolute grading system (AGS), based on a predetermined class interval of the marks obtained in a examination as specified in the following table shall be followed in awarding grades to the students. The marks obtained by them in a examination shall be converted in to grades on the basis of the following 10 point grading system or as decided by the Academic Council of DSPM, University, Ranchi.
- b. Computation of Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA)**
- c.** In order to pass in a Semester Examination the minimum SGPA required is 4.5 and minimum of 4.5 GP in individual theory, Practical and other credit components.
- d. Requirement for Promotion to Higher Semester** : A candidate shall be permitted to proceed from the First Semester to the 2nd, 3rd and 4th Semester provided he/she passed at least in 50% of the Courses in the respective Semester in theory and practical/project course separately.
- e.** A candidate who fails to clear a course/courses in any Semester, will have to clear the same in the succeeding relevant Semesters but he/she shall have to clear all the failed courses of a programme within three years from the year of Admission/Registration in the programme concerned.

Award of Degree

- A candidate shall be eligible for the award of degree only if, he/she has completed the prescribed courses of study in a Department of this University for all the Four Semesters.
- Has passed all the Examinations prescribed for all the Four Semesters.
Has secured the Total Number of credits including the Practical/Dissertation of the concerned programme.

Paper Code	Title of the Paper	Type	Instruction Hour per Week	Total No. of Hours	Duration of Exam	Mid Sem Marks	End Sem Marks	Total Marks	Credit
Semester-I									
GEO 101	Advance Geomorphology	Theory	04	52	03	30	70	100	04
GEO 102	Advance Geography of India	Theory	04	52	03	30	70	100	04
GEO 103	Geography of Jharkhand	Theory	04	52	03	30	70	100	04
GEO 104	Practical	Practical	04	52	04		100	100	04
Semester II									
GEO 201	Advanced Climatology	Theory	04	52	03	30	70	100	04
GEO 202	Economic Geography	Theory	04	52	03	30	70	100	04
GEO 203	Population Geography	Theory	04	52	03	30	70	100	04
GEO 204	Practical	Practical	04	52	04		100	100	04
Semester III									
GEO-301 Elective	Geography of Settlement / Social Geography of India	Theory	04	52	03	30	70	100	04
GEO 302 Elective	History of Geographical Thought/ Contemporary Human Geography	Theory	04	52	03	30	70	100	04

GEO 303 Elective	Regional Planning and Development/ Natural Resource Management	Theory	04	52	03	30	70	100	04
GEO 304	Practical (Field Study)	Practical	04	52	04		100	100	04
Semester IV									
GEO 401 Elective	Group I	Theory	04	52	03	30	70	100	04
GEO 402 Elective	Group II	Theory	04	52	03	30	70	100	04
GEO 403 Elective	Group III/ Group IV/ Group V	Theory	04	52	03	30	70	100	04
GEO 404	Dissertation	Practical	04	52	04		100	100	04
Total Credit									64

Groups for Specialization:

For Specialization Candidates are compulsorily **need to select one course out of Group I and Group II**. However, they have a choice to select one course out of the Three Groups (Having Four Courses each) offered by the department. Further **Course 404** is mandatory (Project Report/ Dissertation on a theme related to the area of Specialization). Dissertation paper is Compulsory.

Group I	Group II	Group III
<ul style="list-style-type: none"> • Urban Geography • Cultural Geography • Social Impact Assessment • Urban Development Management and Policy 	<ul style="list-style-type: none"> ▪ Political Geography ▪ World Regional Geography ▪ Geography of Federalism ▪ Political Geography of the Middle East 	<ul style="list-style-type: none"> • Environmental Geography • Natural Hazards Disaster Management • Biogeography • Terrain Analysis & Evolution
Group IV	Group V	
<ul style="list-style-type: none"> • Agricultural Geography • Geography of Energy • Dry land Farming • Food Security System 	<ul style="list-style-type: none"> • Historical Geography • Demography and Population Policy • Health Environment & Society • Geography of Social Well Being 	

The Master Programme of the DSPM University 16 courses spread over two years, 64 Credit each course maximum 100 Marks. The two years has 4 Semesters of 6 months each. And in each semester students will have four courses.

Out of 16 courses, 8 courses are compulsory covering core areas and 8 courses are optional leading to specialization. The Core Courses are on offer in the 1st and 2nd Semester, Optional Courses are in 3rd Semester : and Specialization courses in 4th Semester.

In 3rd Semester candidates will opt four out of eight optional courses in contemporary branches of Geography. The department will decide the courses that would be offered.

In 4th Semester all candidates will select one course out of the specialization group (Each group offers Four Courses) Group- I & II are compulsory from which two courses are to be selected respectively. Out of Group-III, IV & V one course needs to be opted. Course No. GEO-404 which is Dissertation paper, is compulsory.

Dr. Shyama Prasad Mukherjee University

M.A. Syllabus (Geography)

SEMESTER I

Advanced Geomorphology (GEO 101)

1. Methods and approaches to the study of landforms; Basic concepts in geomorphology: Structures, Processes and Scales (Stage/Time); Theories of landscape development.
2. Concept of Plate tectonics; Mass movement of rock waste and resultant landforms; Concept, Evolution and Classification slopes; Theories of slope development.
3. Fluvial (Process) Geomorphology – Morphometry of drainage basins; Profile of equilibrium; Channel morphology; Climatic Geomorphology and Morphogenetic regions.
4. Structural Geomorphology–Fold, Fault and Domal Structures and Landforms; Palaeo and Neo–Geomorphology – Denudation Chronology of peninsular India and Himalayas.

Recommended Readings:

- Bloom A. L., 2003: *Geomorphology: A Systematic Analysis of Late Cenozoic Landforms*, Prentice-Hall of India, New Delhi.
- Bridges E. M., 1990: *World Geomorphology*, Cambridge University Press, Cambridge.
- Christopherson, Robert W., (2011), *Geosystems: An Introduction to Physical Geography*, Ed., Macmillan Publishing Company
- Kale V. S. and Gupta A., 2001: *Introduction to Geomorphology*, Orient Longman, Hyderabad.
- Knighton A. D., 1984: *Fluvial Forms and Processes*, Edward Arnold Publishers, London.
- Richards K. S., 1982: *Rivers: Form and Processes in Alluvial Channels*, Methuen, London.
- Selby, M.J., (2005), *Earth's Changing Surface*, Indian Edition, OUP
- Skinner, Brian J. and Stephen C. Porter (2000), *The Dynamic Earth: An Introduction to physical Geology*, 4th Edition, John Wiley and Sons
- Thornbury W. D., 1968: *Principles of Geomorphology*, Wiley.
- Gautam, A (2010): *Bhautik Bhugol*, Rastogi Publications, Meerut
- Tikkaa, R N (1989): *Bhautik Bhugol ka Swaroop*, Kedarnath Ram Nath, Meerut
- Singh, S (2009): *Bhautik Bhugol ka Swaroop*, Prayag Pustak, Allahabad

Advanced Geography of India (GEO 102)

1. Physiographical & Structural Regions of India; Classification of Indian soil; Problems – soil erosion and conservation;
2. Indian Agriculture; Crop Production & Pattern; New Trends – Dry land farming, Green – White Revolutions, Eco-Farming; Agro-Climatic;
3. Conventional and Non-Conventional Energy – Production & Distribution; Distribution and Production of mineral resources; locational factors of Indian Industries; Industrial Regions.
4. Urban & Rural Settlements – Types, & Patterns; Urbanisation in India, Primate City, Functional Classification, Urban Morphology; Problems of Rural – Urban Settlements; National Policies & Programmes; Major Tribes – Distribution and Classification.
5. Five year planning in India: Achievements and Failures; Multi-Level Planning: Planning at National, State, District, Block and Panchayat level; Planning Regions – Bases of delimitation & Classification.

Recommended Readings :

- Deshpande C. D., 1992: *India: A Regional Interpretation*, ICSSR, New Delhi.
- Johnson, B. L. C., ed. 2001. *Geographical Dictionary of India*. Vision Books, New Delhi.
- Mandal R. B. (ed.), 1990: *Patterns of Regional Geography – An International Perspective. Vol. 3 – Indian Perspective*.
- Sdyasuk Galina and P Sengupta (1967): *Economic Regionalisation of India*, Census of India
- Sharma, T. C. 2003: *India - Economic and Commercial Geography*. Vikas Publ., New Delhi.
- Singh R. L., 1971: *India: A Regional Geography*, National Geographical Society of India.
- Singh, Jagdish 2003: *India - A Comprehensive & Systematic Geography*, Gyanodaya Prakashan, Gorakhpur.
- Spate O. H. K. and Learmonth A. T. A., 1967: *India and Pakistan: A General and Regional Geography*, Methuen.
- Tirtha, Ranjit 2002: *Geography of India*, Rawat Publs., Jaipur & New Delhi.
- Pathak, C. R. 2003: *Spatial Structure and Processes of Development in India*. Regional Science Assoc., Kolkata.
- Tiwari, R.C. (2007) *Geography of India*. Prayag Pustak Bhawan, Allahabad
- Sharma, T.C. (2013) *Economic Geography of India*. Rawat Publication, Jaipur

Geography of Jharkhand (GEO 103)

1. Physiographical & Structural Regions of Jharkhand; Forest products:
2. Classification of soils in Jharkhand; Problems – soil erosion and conservation; National Forest & Soil Policy.
3. White Revolutions and Blue Revolution in Jharkhand; Conventional and Non-Conventional Energy – Production & Distribution; Distribution and Production of mineral resources; locational factors of Industries; Industrial Regions.
4. Distribution and Socio- Economic Study of major Tribes of Jharkhand; Santhal, Munda, Oraon, Ho Tribes.
5. Tribal Welfare Programmes; Government Policies, Multi-Level Planning: Planning at National, State, District, Block and Panchayat level; Planning Regions in Jharkhand.

Reading List:

- Ahmad, E. (1965): Bihar: A Physical Economic and Regional Geography, Ranchi University, Ranchi.
- Sinha, V.N.P and Singh, L.K.P. (2003): Jharkhand Land and People, Rajesh Publication, New Delhi.
- Satpathi, D.D.P. (1981): An Outline of India geomorphology, Classical Pub. Company, New Delhi.
- Tiwari Ram Kumar(2010): Jharkhand ka Bhugol, Rajesh Publication New Delhi.
- Prasad,A.(1973):Chotanagpur: Geography of Settlements.” Ranchi University, Ranchi

Practical

Section A

1. Hypsometric Curb
2. Morphometric Stream Ordering
3. Bifurcation Ratio and Drainage Density
4. Slope Analysis: Wentworth's Method, Smith's Method
5. Block Diagrams – one point perspective
6. Block Diagrams – two point perspective
7. Geological Profile (Serial, Superimposed Profile, Projected, Compositing, Longitudinal Profile) of Cross Section (Sheet No. -6, 12, 16 & 17).

Section B

1. Map Projection, Meaning and Classification
2. Theoretical and Conceptual basis of Projections.
3. Simple Conical one Standard and Two Standard Parallel: Bonne's, Polyconic and Mercator's
4. Zenithal Projection: Gnomonic Polar Zenithal Projections: Equal Area and Equal Distant, Natural and Simple Cylindrical Projection
5. Sinusoidal Projection: Mollweide's Projection, Gall's Projection and International Projection.

Recommended Readings :

1. Monkhouse F.J and Wilkinson HR (1952) Maps and Diagrams, their compilations and concentration, Muthuen & Co. London.
2. Harwel JD, Newson MD. (1973)- Techniques in Physical Geography, Mc. Millan Edu. Ltd. London.
3. Mishra RP. And Ramesh A (1968) – Fundamentals of Cartography, Prasaranga, University of Mysore, Mysore.
4. Robinson & Marison (1995), Elements of Cartography USA.
5. R.L. Singh (2010) Practical Geography, Sharada Pustak Bhavan, 11, University Road, Allahabad, UP - India

SEMESTER II

Advanced Climatology (GEO201)

1. Meaning and scope of Climatology; Composition and Structure of Atmosphere; Radiation Laws – Wave, Particle, Stefans- Boltzman & Weins Law; Solar Constant; Process of Precipitation; Adiabatic temperature change and Gas Law; Stability and instability; Theories of origin of precipitation and related forms;
2. Air masses – Origin, growth, classification and distribution. Fronts and frontogenesis; Cyclones and anticyclones – Theories about the origin of temperate cyclones;
3. Origin of Indian Monsoon; Upper air circulation and jet stream;
4. Climatic Classification of Koppen, Thornthwaite; Major climate types; Weather analysis and Weather forecasting; Weather and human behaviour;
5. Climatic change – Causes and theories; Global warming – Evidences, causes and effects; Atmospheric Hazards and Disasters – Tropical Cyclones, tornadoes, thunderstorms and cloud-bursts; El-Nino, La-Nina, Walker Circulation, Southern Oscillation.

Recommended Readings:

- Barry R. G. and Carleton A. M., 2001: *Synoptic and Dynamic Climatology*, Routledge, UK.
- Barry R. G. and Corley R. J., 1998: *Atmosphere, Weather and Climate*, Routledge, New York.
- Critchfield H. J., 1987: *General Climatology*, Prentice-Hall of India, New Delhi
- Lutgens F. K., Tarbuck E. J. and Tasa D., 2009: *The Atmosphere: An Introduction to Meteorology*, Prentice-Hall, Englewood Cliffs, New Jersey.
- Oliver J. E. and Hidore J. J., 2002: *Climatology: An Atmospheric Science*, Pearson Education, New Delhi.
- Trewartha G. T. and Horne L. H., 1980: *An Introduction to Climate*, McGraw-Hill.
- Gupta L S(2000): *Jalvayu Vigyan, Hindi Madhyam Karyanvay Nidishalya*, Delhi Vishwa Vidhyalaya, Delhi
- Lal, D S (2006): *Jalvayu Vigyan*, Prayag Pustak Bhavan, Allahabad
- Vatal, M (1986): *Bhautik Bhugol*, Central Book Depot, Allahabad
- Singh, S (2009): *Jalvayu Vigyan*, Prayag Pustak Bhawan, Allahabad

Economic Geography (GEO 202)

1. Sectors of Economy; Primary, Secondary, Tertiary and Quaternary; Natural Resource: Renewable and Non- Renewable
2. Measurement of Agricultural Productivity and Efficiency; Crop Combination and Diversification; Von Thunen's Model.
3. Classification of Industries: Weber's and Losch's approaches; Resource Base and Foot loose Industries.
4. Models of Transportation and Transport Cost: Accessibility and Connectivity.
5. Distribution and Utilisation of Minerals (Iron-Ore, Copper, Coal and Petroleum) in the world.

Recommended Readings:

1. Barbier, Edward B (2005) Natural Resources and Economic Development, Cambridge University Press.
2. Borton, I and R W Kates (1984) Readings in Resource Management and Conservation, University of Chicago Press, Chicago.
3. Bruce, Mitchell (1989) Geography and Resource Analysis, John Wiley and Son, New York.
4. Fabricius, C & Eddie Koch Eds. (2004) Rights, Resources and Rural Development: Community based Natural Resource Management in Southern Africa, Earthscan, London Sterling.
6. Das Gupta, Biplab (1979) the Environmental Debate, Economic and Political Weekly, Vol.13, No. 6/7, Annual Number (Feb., 1978), pp. 385-387+389+391+393+395+397-400.
7. Guha, J L and P R Chattroj (1994) Economic Geography- A Study of Resources, The World Press Pvt. Ltd. Calcutta
8. Kates, R.W. & Burton, I (eds): Geography, Resources and Environment, Vol I & II, University of Chicago Press, Chicago, 1986.
9. Martino, R L (1969) Resource Management. Mc Graw Hill Book Co., London.
10. Negi, B S (2000) Geography of Resources, Kedar Nath and Ram Nath, Meerut.
11. Owen, Oliver, S (1971) Natural Resource Conservation: A Ecological Approach, McMillan, New Delhi.
12. Raja, M (1989) Renewable Resources, Development, Concept Pub. New Delhi.
13. Ramesh, A (1984) Resource Geography (Ed.) R P Misra, Contribution to Indian Geography, Heritage Publishers, New Delhi.
14. UNDP & World Resource Institute (2005) The Wealth of the Poor—Managing Ecosystems to Fight Poverty, World Resources Institute, Washington, DC 20002
15. Zimmermann, E. W. (1951) World Resources and Industries, Harper and Brothers, New Delhi.

Population Geography (GEO 203)

1. Nature, Scope and Recent Trends of Population Geography
2. Patterns of World Distribution, Growth and Density of Population
3. Policies Issues Pattern and Processes of Migration
4. Demographic Transition Theory Population Dynamics – Measurement of fertility and mortality; Migration – Causes, types, national and international patterns, rural and urban dimensions.
5. Population Resource Region.

Recommended Readings:

1. Bandarage, Asoka. (1998) *Women, Population and Global Crises: A Political Economic Analysis*, Zed Books, London.
2. Cadwell, John. (1982) *Theory of Fertility Decline*, Academic Press, New York.
3. Crook, Nigel.(1997) *Principles of Population and Development*, oxford university Press ,oxford.
4. Davis, Kinsley. (1949) *Human Society*, Macmillan. Co, New York.
5. Ehrlich Paul R.(1968) *The Population Bomb*, Ballentine Books, New York.
6. Ehrlich and Ehrlich. (1990) *The Population Explosion*, Simon and Schuster,New York.
7. Guilmoto, C.Z and Alian Vagnet. (2000) *Essays on Population and Space in India*, Institut de Pondichery, Pondicherry.
8. Herdt, Gilbert and Shirley Lindenbaum. (1992) Eds *The Time of AIDS: Social Analysis, Theory and Method*, Sage Publications, Newbury Park C A.
9. Johnson, Stanley, P. (1994) *World Population- Turning the Tide- Three Decades of Progress*, Kluwer Academic Publishers Group.
10. Mamdani, Mahmood. (1972) *The Myth of Population Control: Family, Caste and Class in an Indian Village*, Monthly Review Press, New York.
11. Parret, H.R., (1997) *Population Geography*, Oxford and Boyd, Oxford.
12. Preston, Samuel. et al. (2001) *Demography*, Blackwell publishers Inc, Massachusetts, USA.
13. Rao, Mohan. (2004) *From Population Control to Reproductive Health- the Malthusian Arithmetic*.
14. Ramachandralu, G and M.Prasada Rao. (2004) *Census 2001 and Human Development in India*, Serials Publication, New Delhi.
15. Siegal, Jacob,S. (2002) *Applied Demography*, Academic Press, New York.

Instrumental Survey (GEO 204)

1. Surveying – Introduction, Importance and Types
2. Plane Table Survey- Three Point Problem (Trail & Error Method), Two Point Problem and Basel's Method.
3. Prismatic Compass Surveying- Open and Close Traverse.
4. Dumpy Level Survey- (Contouring and Road Profile.)
5. Knowledge of Theodolite Surveying, Total Station – Surveying Area patterns

Recommended Readings:

1. Davis, Peter, (1974): Science in Geography Data Description & Presentation, Vol.3, Oxford University Press, London.
2. Hanwell, J.D. & Newson, M.D. (1973): Macmillan Education Ltd., London.
3. Mishra, R.P. (1973): Elements of Cartography. Prasaranga, University of Mysore.
4. Monkhouse, F.JR & Wilkinson, H.R: Maps and Diagrams, Mathwn& Company, London.
5. Robinson, A.H & Sale R.D.: Elements of Cartography. Johns House & Sons, London.
6. Sing R. L. (1996) : Map Work & Practical Geography, Central Book Dept. Allahabad.
7. Singh & Kanaujia (1973) : Map Work & Practical Geography, Central Book Dept. Allahabad.
8. N. N. Basak (1994): Surveying and Leveling, Tata McGraw Hill Publishing Company LTD., New Delhi.

SEMESTER III
ELECTIVE COURSE
Geography of Settlement (GEO 301)

1. Meaning, Nature and Scope of Settlement Geography, Sites and Situation of Settlements.
2. Types and Patterns of Settlement : Dispersed, Clustered and Compact
Rural Settlement: Linear, Radial, Star, Circular, Nebular, Fan, Rectangular and Triangular.
3. Morphology of Towns and Cities, Theories of Internal Structure of the Cities, Theories of Urban Growth.
4. Ecological Processes of Urban Growth; Urban Fringe, City region, Settlement Systems, Primate City.
5. Rank Size Rule; Settlement Hierarchy, Christaller's Central Place Theory; August Losh's Theory of Market Centre.

Recommended Readings:

1. Beaujeu-Garnier J. and Chabot G. (1967): *Urban Geography*, Longman.
2. Christaller W. (1933): *Central Places in Southern Germany*, Prentice-Hall International. (*in German*)
3. Dickinson R. E. (1964): *City and Region*, Routledge and Kegan Paul.
4. Geddes P. (1949): *Cities in Evolution*, Benn.
5. Gottman J. (1961): *Megalopolis*, Twentieth Century Fund, New York.
6. Hudson F. S. (1970): *A Geography of Settlements*, Macdonald & Evans, London.
7. Johnson J. H. (1967): *Urban Geography*, Pergamon.
8. Mayer H. M. and Kohn C. F. (1959): *Readings in Urban Geography*, University of Chicago.
9. Smailes A. E. (1953): *The Geography of Towns*, Hutchinson.
10. Taylor Griffith (1949): *Urban Geography*, Methuen.

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Social Geography of India (GEO 301)
ELECTIVE COURSE

1. Social Geography of India: Nature and Scope, Indian society - a study in unity and diversity: Centripetal and centrifugal forces, regional identities.
2. Historical Bases of Socio cultural regionalization of India: Elements in the development of socio cultural regions; continuity and change in the historically evolved regional structure; implications of emerging regional structure since independence.
3. Religion and Region in India: Religion and regional culture; Religious diversity and regional identity, Geographical factors explaining the distribution of the tribal religions, Hindus, Muslims, Christian, Buddhist, Jain and Sikh communities.
4. Geographic analysis of Caste and Tribe: *varna* and *jati*-pan Indian structure and regional specificity, Caste Regions, caste and settlement morphology, distribution of SC population, Tribes in India, dominance and dispersion of Tribal population, penetration of tribal regions.

Reading List

1. Ahmed A (1999) Social Geography, Rawat publications, Jaipur.
2. Ahmad A (1993) (ed) Social Structure and regional Development: A Social Geography Perspective, Rawat Publications, Jaipur.
3. Crane Robert I (1973), Regions and Regionalism in South Asian Studies: An Exploratory Study, Duke University Durham.
4. Dutt NK.,(1986), *Origin and Growth of Caste in India*, Firma Kin, Calcutta
5. Khubchandani ML, (1988) *Language in a Plural Society*, Indian Institute of Advanced Study, Shimla.
6. Kosambi DD (1962) Myth and Reality: Studies in the Formation of Indian Culture, Popular Prakashan, Bombay.
7. Pain R, M. Barke, D Fuller, J Gough, R MacFarlane, G Mowl, (2001), *Introducing Social Geographies*, Arnold Publishers, London.
8. Pannikar K.M. (1959) '*Geographical Factors in Indian History*', Bharatiya Vidya Bhavan, Bombay.
9. Singh K.S.(1993) People of India Vol I to XI, Oxford University Press, New Delhi.
10. Raza M and Ahmad A (1990) An Atlas of Tribal India, Concept Publishing Co, Delhi.
11. Registrar General of India, (1972) , *Economic and Socio cultural Dimensions of Regionalization of India*, Census Centenary Monograph No 7, New Delhi
12. Schwartzberg J.(1978), *A Historical Atlas of South Asia*, University of Chicago Press, Chicago.

History of Geographical Thought (GEO 302)
ELECTIVE COURSE

1. Development of Geography in second half of the 20th century; Concept of Paradigm; Paradigm shift, Positivism & Logical Positivism, Quantitative Revolution, Models, System Analysis in Geography.
2. Reactions to Quantitative Revolution, Behavioural Geography – Cognition, Perception, Mental Maps, Decision making and Behaviour, Time – Space Geography, Humanistic Geography – Idealist & Phenomenological Approaches.
3. Radical Geography, Structuralism, Realism, Functionalism, Welfare Geography, Post – Modernism.
4. Modern Developments, Applied Geography and Relevance Debate, Spatial Inequality and Regional Imbalances, Geographers and Policy, Regional Planning, Feminist Geography, Future of Geography.

Recommended Readings:

1. Bhaskar, R (1978) *A Realist Theory of Science*, Hassocks, Sussex
2. Bhaskar, R (1989) *Reclaiming Reality: A Critical Introduction to Contemporary Philosophy*, London, Verso.
3. Bunge, W (1966) *Theoretical Geography*. 2nd Edn. Lund Studies in Geography Series C. no.1, Lund: C.W.K. Gleerlup
4. Buttimer, A and D.Seamon (eds) (1980); *The Human Experience of Space and Place*, London, Croonhelm
5. Castells, M (1978) *City, Class and Power*, New York, St. Martins Press
7. Castree, R, A. Rogers and D. Sherman (2005) *Questioning Geography*. Fundamental Debates. Oxford:Blackwell.
8. Clifford, N.J. (2002) *The Future of Geography: when the whole is less than the sum of its parts*. *Geoforum*, Vol 33 431-436.
9. Cloke, Philo and Sadler
10. Haggett, P and A.D Cliff and A Frey (1977) *Locational Analysis in Human Geography*. London: Arnold
11. Hartshorne R (1939) *The Nature of Geography*. Association of American Geographers
12. Harvey, D (1969) *Explanation in Geography*. London:Arnold.
13. Harvey, D (1973) *Social Justice and the City*, Baltimore, John Hopkins University, Baltimore
14. Holt- Jensen Arild (1999), *Geography -History and Concepts* , Sage Publications, London, Thousand Oaks, Delhi

Contemporary Human Geography (GEO 302)

ELECTIVE COURSE

1. Human Geography: changing nature or perspectives, issues and debates.
2. Human Geography and Social Sciences: Critical understanding of social theory and human Geography
3. Conceptualizing space and place: Structure and dynamics of space; relational framework of space and place; social construction of space and time; ethics of space and place
4. Geography of difference and exclusion: Geographies of identity and difference related to class, religion, caste, gender and location; social justice and political geography of difference.
5. Geographical organisation of power: Spatial meaning and definitions of power; dynamics of spatio-social interactions and power; geopolitics of power-territoriality and globalization.
6. Geography of development: meaning, definitions and approaches; construction of development indicators; linking globalization and new forms of development; local initiatives towards development.

Recommended Readings:

1. Agnew, J.A and Corbridge, S. 1995: *Mastering Space: Hegemony, Territory and International Political Economy*, Routledge, London.
2. Benko, G. and Strohmayr, U. 1997: *Space and Social Theory: Interpreting Modernity and Postmodernity*, London : Blackwell Publishers, Oxford, London.
3. Bhabha, H., 1994: *The Location of Culture*, Routledge, London and New York.
4. Corbridge, S., Martin, R. and Thrift, N., 1997: *Money, Power and Space*, Blackwell, Oxford.
5. Derek, G., Martin,R., and Smith, G., 1994 : *Human Geography: Society, Space and Social Science*. Macmillan publishers, Cambridge.
6. Johnston, R.J., 1991: *A Question of Place: Exploring the Practice of Human Geography*. Blackwell Publishers, Cambridge.
7. Harvey, D., 1996: *Justice, Nature and Geography of Difference*, Blackwell Publishers, Cambridge.
8. Massey, D., 1998: *Space, Place and Gender*, Polity Press, Cambridge.
9. Massey, D., Allen, J., and Sarre, P., 1999: *Human Geography today* , Blackwell Publishers, Cambridge.
10. Morley, D. and Robins, K., 1995 : *Spaces of Identity: Global Media, Electronic landscapes and Cultural Boundaries*, Routledge , London.
11. Redcliff, M., and Benton, T., 1994 : *Social Theory and Global Environment*, Routledge , London and New York.
12. Rogers, A. and Vertovec, S., 1995: *The Urban Context*. Berg, Oxford.
13. Sack, R.D., 1997: *Homo Geographicus : A framework for Action, Awareness, and Moral Concern*. The John Hopkins University Press, London.
14. Sibley, D., 1995: *Geographies of Exclusion: Society, and Difference in the West*, Routledge , London.

Regional Planning and Development (GEO 303)
ELECTIVE COURSE

1. Concept of regional planning; Types of regional planning; City as unit of regional planning; Approaches to regional planning;
2. Methodology and techniques of regional planning; Analytical techniques and procedural techniques; Indicators of development and their data sources; Measures of regional development and regional disparities;
3. Planning processes- Sectoral and spatial planning; short-term and long-term perspective planning; Multi regional and multilevel Planning.
4. Regional development strategies: Growth poles and growth centres in regional development; Industrial dispersal and backward area development; Identification of planning regions; Regional planning strategies for backward areas—drought prone area, hill area, tribal area and rural area.
5. Role of Urban centres in Regional planning; Urban scenario in India; City regions and city problems; Strategies for urban planning; Metropolitan planning, preparation of master plans, city region planning

Recommended Readings :

1. Boudeville J. R. (1966): *Problems of Regional Economic Planning*, Edinburgh Univ. Press, Edinburgh.
2. Friedmann J. (1966): *Regional Development Policy: A Case Study of Venezuela*, MIT Press, Massachusetts.
3. Friedmann J. (1973): *Urbanization, Planning and National Development*, Sage Pub., London.
4. Friedmann J. and Alonso W. (1966): *Regional Development and Planning: A Reader*, MIT Press, Massachusetts.
5. Friedmann J. and Alonso W. (1975): *Regional Policy: Readings in Theory and Applications*, MIT Press, Massachusetts.
6. Friedmann J. and Weaver C. (1979): *Territory and Function: The Evolution of Regional Planning*, Edward Arnold, London.
7. Hirschman A. O. (1958): *The Strategy of Economic Development*, Yale Univ. Press, New Haven.
8. Johnson E. A. J. (1970): *The Organization of Space in Developing Countries*, MIT Press, Massachusetts.
9. Myrdal G. (1957): *Economic Theory and Underdeveloped Regions*, Duckworth, London.
10. Ohlin B. (1933): *Interregional and International Trade*, Harvard Univ. Press, Massachusetts.
11. Richardson H. W. (1978): *Regional and Urban Economics*, Penguin, Harmondsworth.
12. Rondinelli D. A. and Ruddle K. (1978): *Urbanization and Rural Development: A Spatial Policy for Equitable Growth*, Praeger
13. Rostow W. (1960): *The Stages of Economic Growth: A Non-Communist Manifesto*, Cambridge Univ. Press, Cambridge.
14. Stohr W. B. and Taylor D. R. F. (1981): *Development from Above or Below? The Dialectics of Regional Planning in Developing Countries*, John Wiley, Chichester.

Natural Resource Management (GEO 303)
ELECTIVE COURSE

1. Concept, models and approaches to natural resource management.
2. Utilisation, Conservation and Management of Resources
3. Problems of Resource Utilization
4. Resource Appraisal: Ground, remote sensing and G.I.S.
5. Sustainable Resource Development: Concept, method and dimensions, creating sustainable systems.
6. Integrated Resource Development: Ecological, economic and social aspects; problems of river basin development.
7. Institutions and Policy Making : Institutional arrangements; policy models; policy making and resource management.
8. Utilization, management problems and policies of natural resources in India.

Recommended Readings:

1. Adams, W.M., 1990: Green Development: Environment and Sustainability in the Third World, Routledge and Chapman Hall, New York.
2. Berkes, F.,(ed.),1989 : Common Property Resources: Ecology and Community Based Sustainable Development, Belhaven Press London.
3. Mather, A.S. and Chapman, K., 1995: Environmental Resources, Longman, Harlow, England.
4. McClay, K.R., 1995: Resource Management Information System : Process & Practice, Taylor Francis, London.
5. Mitchell B., 1988: Geography and Resources Analysis, 2nd edition, Longman, London.
6. Mitchell,B., 1997 : Resource and Environmental Management, Longman, Harlow, England.
7. Newson, M.D., 1991 : Land, Water and Development: River Basin Systems and Management, Routledge,London.
8. Owen, S. and Owens, P.L.,1991: Environment ,Resources and Conservation, Cambridge University Press, New York.
9. Redclift, M., 1987: Sustainable Development: Exploring the Contradictions, Methuen, London.
10. Rees, J., 1990: Natural Resources: Allocation, Economics and Policy, Routledge, London.
11. Saha, S.K., and Barrow, C.J., (ed.), 1981 : River Basin Planning : Theory and Practice, John Wiley and Sons, New York

Field Study / Excursion (GEO 304)

Note: The students will have to write a project report based on field survey which shall be duly supervised by the teacher(s).

Group - A

Objective: The objective of the course is to teach the techniques and tools used in the analysis of socio-economic data by applying them on the data collected through field survey and drawing inferences and interpretations.

Outcome: The writing of the project report shall train the students in analysis and interpretation of socio-economic data obtained from the field.

Group-B

- Geographical data: Discrete and continuous series, scales of measurements, frequency distribution, construction of ogive curves
- Central tendency – concept; arithmetic mean, mode, median for ungrouped and grouped data
- Measures of dispersion: absolute and relative measures; range, standard deviation (grouped and ungrouped data), variance, quartile deviation, coefficient of variability, Correlation. Geometric mean, harmonic mean, quadratic mean

Recommended Readings:

1. Davis, Peter, (1974): Science in Geography Data Description & Presentation, Vol.3, Oxford University Press, London.
2. Hanwell, J.D. & Newson, M.D. (1973): Macmillan Education Ltd., London.
3. Mishra, R.P. (1973): Elements of Cartography. Prasaraanga, University of Mysore.
4. Monkhouse, F.JR & Wilkinson, H.R: Maps and Diagrams, Mathwn& Company, London.
5. Robinson, A.H & Sale R.D.: Elements of Cartography. Johns House & Sons, London.
6. Sing R. L. (1996) : Map Work & Practical Geography, Central Book Dept. Allahabad.
7. Singh & Kanaujia (1973) : Map Work & Practical Geography, Central Book Dept. Allahabad.
8. N. N. Basak (1994): Surveying and Leveling, Tata McGraw Hill Publishing Company LTD., New Delhi.

SEMESTER IV

Group-I (GEO 402)

- I. Urban Geography
- II. Cultural Geography
- III. Social Impact Assessment
- IV. Urban Development Management & Policy

Urban Geography (GEO 401)

1. Meaning, scope, approaches of study & Development of Urban Geography: Theories of urban origin: early urban hearths,; Urban development model - cycle and stages; Types of urbanised regions.
2. National urban systems; Functional typology; Central place theory; urban settlement spread theories; Urban hierarchy, Rank size rule and its applicability.
3. Ecological models of Burgess, Hoyt, Harris and Ullman, Manu, Vance and White; Internal structure of city in South Asia; Rural – urban fringe; Concept of city region and its delimitation
4. Third world urbanization and Theories of urbanization, peripheral, Urban economy and informal sector in Third world city; Third world urban problems, Concept of garden city and new town.
5. Slums and Blights, Problems of urbanisation with reference to Indian urban System. New Urban Renewal Policies, Concept of Smart Cities and its feasibility in Indian Context.

Recommended Readings:

1. Beaujeu-Garnier J. and Chabot G. (1967): *Urban Geography*, Longman.
2. Christaller W. (1933): *Central Places in Southern Germany*, Prentice-Hall International. (*in German*)
3. Dickinson R. E. (1964): *City and Region*, Routledge and Kegan Paul.
4. Geddes P. (1949): *Cities in Evolution*, Benn.
5. Gottman J. (1961): *Megalopolis*, Twentieth Century Fund, New York.
6. Hudson F. S. (1970): *A Geography of Settlements*, Macdonald & Evans, London.
7. Johnson J. H. (1967): *Urban Geography*, Pergamon.
8. Mayer H. M. and Kohn C. F. (1959): *Readings in Urban Geography*, University of Chicago.
9. Smailes A. E. (1953): *The Geography of Towns*, Hutchinson.
10. Taylor Griffith (1949): *Urban Geography*, Methuen.

Cultural Geography (GEO 401)

1. Nature of Cultural Geography: Environmental Determinism; Carl Sauer and the Cultural Theory; the Morphology of Landscape; Superorganicism, its critique and the birth of New Cultural Geography; Post Modernism and the Cultural Turn.
2. Reading Culture: Meaning, Sign, Reading, Textuality, Aesthetics, Ideology and Representation and the Production of Cultural Spaces.
3. Cultural Politics of Spatial Dominance: Creating Hegemonic Cultures and Stereotypes-Mediums, Tactics and Strategies.
4. Cultural Politics of Spatial Resistance: Reassertion of Marginal Groups in everyday life Worlds, the emergence of Alternative and Resistant Cultures.
5. Globalisation of Cultures: Deterritorialisation of Spaces and Cultures, Role of Global Capital and Media in Hybridization of the World.

Recommended Readings:

1. Baker Alan and C, Biger (1992) Eds. *Ideology and Landscape in Historical Perspective*, Cambridge University Press, Cambridge.
2. Blunt, Alison and C. McEwan (2002) *Post Colonial Geographies*, Continuum, London.
3. Castells, Manuel (1996) *The Network Society*, Blackwell, Oxford
4. Cavallaro Davi (2001) *Critical and Cultural Theory: Thematic Variations*, Athlone Press, London and New Brunswick, NJ.
5. Cosgrove Denis (1984) *Social Transformation and Symbolic Landscape*, Croom Helen, London.
6. Crang, Mike (1998) *Cultural Geography*, Routledge, London.
7. Cresswell, Tim (1996) *In Place / Out of Place: Geography, Ideology and Transgression*, University of Minnesota press, Minneapolis.
8. Donald, James (1999) *Imagining the Modern City*, Athlone Press, London.
9. Duncan, James and Duncan, N (1988) "(Re) Reading the landscape", *Environment and Planning D: society and Space*, 6, 117-26.
10. Glenn, Jordon (1995) *Cultural Politics*, Blackwell Oxford (UK) and Cambridge (USA).
11. Highmore Ben (2002) *Everyday Life and Cultural Theory*, Routledge, London and New York.
12. Hubbard, Phil et.al (2005) *Key Thinkers on Space and Place*, Sage Publications, London, Thousand Oaks, New Delhi.
13. Leighly, John. (1963) Eds. *Land and Life: a Selection of writings of Carl Ortwin Sauer*, University of California, Berkeley.
14. Massey, Doreen (1994) *Space, Place and Gender*, University of Minnesota Press, Minneapolis.
15. Miller, Daniel et.al. (1998) *Shopping, Place and Identity*, Routledge, London and New York.

Social Impact Assessment (GEO 402)

1. Fundamentals of Social Impact Assessment: Concept; scope and need: goals, evolution; typology.
2. Development, process and Social Impacts: Process of socio-economic development; major development types, transport and communication, river valley projects; irrigation projects; industrial development, urban development; social risks in development projects.
3. Displacement and Resettlement Planning: Relocation, resettlement and involuntary migration; resettlement area development planning; project management; resettlement monitoring and evaluation; development of Management Information System (MIS) for resettlement.
4. Techniques and Methods of SIA: Delphi technique, Cost-benefit analysis, Checklist methods, matrix method, linear graphs and network analysis, GIS, Expert system.
5. Social Impact Assessment (SIA) : SIA process-screening, scoping, base-line and census surveys; identification and measurement of impacts; public consultation process; mitigation and avoidance of impacts; preparation of resettlement action plan.
6. Case Studies on SIA: Road construction, dams, irrigation projects, new town development; industrial relocation; urban development projects; hazards and disasters.
7. Social Impact Assessment and related policies and legislation in India

Recommended Readings:

1. Asian Development Bank, 1991: Guidelines for Social Analysis of Development Projects, Asian Development Bank, Manila.
2. Becker Henk 1997: Social Impact Assessment: Method and experience in Europe, North America and the Developing World. UCL Press, London.
3. Blaikie P. et al. 1994: Natural Hazards, People's Vulnerability and Disasters. Rutledge, London.
4. Cernea, M.M. 1988: Involuntary Resettlement in Development Projects. World Bank Technical Paper 80. World Bank, Washington D.C.
5. Dreze Jean, Meera samon and Satyajit Singh, 1997: The Dam and the Nation: Displacement and Resettlement in the Narmada Valley. Oxford University Press, New Delhi.
6. Graham S., 1994: Impact Assessment and Sustainable Resource Management. Longman, Harlow.
7. Hansen A. and Oliver-Smith A. 1982: Involuntary Migration and Resettlement: The Problems and Responses of Displaced People, Westview, Colorado.
8. Horlick-Jones et al. 1995: Natural Risk and Civil Perception, Chapman and Hall, London.
9. Hough Michael. 1990: Out of Place; Restoring Identity to the Regional Landscape. Yale University Press, Princeton.
10. Kumar, K. 1993 : Rapid Appraisal Methods. World Bank Regional and Sectoral Studies Series. World Bank, Washington D.C.
11. Thukral E. G., 1992: Big Dams Displaced People: Rivers of Sorrow, Rivers of Change. Sage Publication, New Delhi.
12. Vanclay, F. and Bronstein, D.A., 1995: Environmental and Social Impact Assessment. Wiley, New York.

Urban Development – Management and Policy (GEO 402)

1. Urban Issues: Problems and challenges of urbanization; urbanization trends, patterns and impacts; urban economy; urban poverty; social & physical infrastructure; urban environment
2. Components of Urban Management: Scope for urban management decentralization and local autonomy; intersectoral linkages; public-private partnership; capacity building - resource mobilization and institutional strengthening; civic engagement; information base and governance.
3. Environmental Planning and Management: Environmental indicators and mapping; wastewater management; solid waste management; control of air pollution; planning for disaster mitigation.
4. Land Management: Importance of land in urban development; land use and planning; land regulation and policies; land values and prices; land market assessment; land development strategies.
5. Slum Improvement and Upgradation: Evaluation of slum improvement programmes and schemes; resettlement and rehabilitation actions; slum development through participation of slum dwellers; security of land tenure; infrastructure development in slums.
6. Infrastructure Management: Traffic and transport management; healthcare services; water resources and supply management; power supply, financing urban services; integrated infrastructure development planning.
7. Urban Poverty Alleviation: City as an economic space; urban basic services for the poor; participation of poor in governance of poverty; access to urban land; expanded employment opportunities; environmentally sound shelter, supportive government policies, Management Towards Sustainable and Safer Cities

Recommended Readings:

1. Atkinson, A. et al., 1999: The Challenges of Environmental Management in Urban Areas, Ashgate pub. Co., Sydney.
2. Centre for Policy Research. The Future of Urbanization. New Delhi June 2000.
3. Gilbert, R., Stevenson, G. H. and Stren, R., 1996 : Making Cities Work, Earthscan Publications, London.
4. Hardoy, J.E., Mitlin, D. and Satterthwaite, D., 1992: Environmental Problems in Third World Cities, Earthscan, London.
5. India Human Settlement Program .Integrated Urban Infrastructure Development, Seminar Papers. Human settlement Management Institute ,New 1995
6. Maitra, A. K., 2000: Urban Environment in Crisis, New Age International Publishers, New Delhi.
7. Pugh C., 1996: Sustainability, the Environment and Urbanization, Earthscan Publications , London.

Group-II (GEO 402)

I. Political Geography

II. Political Geography of Central Asia

III. Geography of Federalism

IV. Political Geography of Middle East

Political Geography (GEO 402)

1. Meaning, scope, approaches of study & Development of Political Geography; Major schools of thought; Concept of state and nation;
2. Spatial factors of state; Buffer state, core area, ecumene, capital city, frontiers and boundaries.
3. Concepts of geo-strategy; World geopolitics in changing perspectives- colonialism to federalism; Geostrategic ideas of Mahan, Mackinder, Spyman, Cohen and Seversky and their relevance in the modern world.
4. Geopolitical significance of the Indian Ocean; Role of third world countries; Political geography and regional co-operation; Geopolitical study of USA, S. W. Asia and S. Asia
5. Nature and scope of electoral geography; Geography of elections with special reference to India; Changing political map of India; Interstate issues; Insurgency in border states; Emergence of new states.

Recommended Readings:

1. Adhikari S, 1997, Political Geography, Rawat publications, Jaipur and Delhi
2. Bandhopadhyaya J, 1991 'The Making of India's Foreign Policy, Allied Pub, Delhi
3. Bhambri, C.P.: 1991 : Political Process in India, Vikas, New Delhi
4. Brass, P.R., 1990 : The Political Economy of India Since Independence, Cambridge University Press, New Delhi.
5. Brass P.R, 1983, Caste, Faction and Party in Indian Politics, Vol I and II, chankya Pub, Vdelhi
6. Brass P R 2003 The production of Hindu Muslim Violence in Contemporary India, Oxford University Press, Delhil
7. Basu, S., 1992: Regional movement: Ethnicity identity, IIAS, Simla.
8. Deshpande, C.D., 1992: India: A Regional Interpretation, I.C.S.S.R, New Delhi.
9. Harrisson S et al(eds) 1999, India and Pakistan: the first fifty years, Woodrow Wilson Centre and Cambridge Univ Press
10. Oommen T.K., 1990 : Protest and Change Studies in Social Movements, Sage, New Delhi
11. Pannikar KN, 1955, Geographical Factors in India's History, Bharatiya Vidya Bhavan, Bombay
12. Rudo0lph and Rudolph 1987, In pursuit of Lakshmi
13. Schwartzberg J, 1989, A Historical Atlas of South Asia
14. Weiner M and J Osgoodfield (eds) 1975 and various years, Electoral Politics in the Indian States, Centre for International Studies, MIT

Political Geography of Central Asia (GEO 402)

1. Central Asia in Global Perspectives: Central Asia and the world, external links, political alignment and geopolitics.
2. Physical Environment: Relief, landscape, temperature, pressures and winds directions, water balance and environmental hazards.
3. Economic Structure: Natural resources, livestock, crops, agricultural regions and evolution of economic regions.
4. Cultural Landscape: Ethno- linguistic regions, human development, rise of great powers, region in the period of Bolshevik revolution.
5. Political Systems: Political parties, extremist politics, radical movements and foreign policy.
6. Transport and Communication: Railways, roads, airways and international tourism.
7. Perspective and Linkages of the Region with Russia and its Southern Neighbours.

Recommended Readings:

1. Adshead, S.A.M., 1993: Central Asia in World History, Macmillan, London.
2. Allworth, E., (ed.), 1994 : Central Asia : 130 Years of Russian Dominance : A Historical Overview, University Press, Durham.
3. Anderson, J., 1997: The International Politics of Central Asia, University Press, Manchester.
4. Banuazizi, A. and Weiner M., (eds.), 1994: The New Geopolitics of Central Asia and its Borderlands, I.B. Tauris, London.
5. Capisani, G.R., 2000: The Handbook of Central Asia: A Comprehensive Survey of the New Republics, I.B. Tauris, London.
6. Ferdinana, P., (ed.), 1994: The New Central Asia and its Neighbours, Pinter, London.
7. Gleason, G., 1997: The Central Asia States: Discovery Independence, Westview press, Boulder.
8. Hunter, S., 1996: Central Asia since Independence, Praeger, Westport.
9. Pomfret, R.W.T., 1995: The Economics of Central Asia, Princeton University Press, Princeton.
10. Ruffin, M.H., and Waugh, 1999: Civil Society in Central Asia, University of Washington Press, Seattle.

Geography of Federalism (GEO 402)

4. The State: Concept and evolution; Nation, and the nation-states, types of states, shape and location of state.
5. Definition of Federalism: Concept, approaches and types, geography and federalism.
6. A Spatio-temporal analysis of the classical federation of Switzerland.
7. Evolution of Indian Federation: Pre-colonial period, colonial period, post-colonial period and state reorganisation.
8. Centre-State Relations: Spatial nature of administrative, judiciary and financial relations.
9. Government's Policies: Development planning, agricultural policies, industrial policies, land reforms and Panchayati Raj.
10. Regionalism and its Manifestations: Types of movements, Inter-State river water disputes, Inter-State boundary disputes.

Recommended Readings:

1. Bajpai A., 1997: Panchayati Raj and Rural Development, Sahitya Prakashan, Delhi.
2. Bhambri, C.P.: 1991: Political Process in India, Vikas, New Delhi.
3. Brass, P.R., 1997: The Political Economy of India Since Independence, Cambridge University Press, New Delhi.
4. Basu, S., 1992: Regional movement: Ethnicity identity, IIAS, Simla.
5. Dandekar, V.M., 1996 : Indian Economy : 1947-92, Sage, New Delhi.
6. Deshpande, C.D., 1992: India: A Regional Interpretation, I.C.S.S.R, New Delhi.
7. Dikshit, R.D, 1975: The Political Geography of Federalism, Macmillan, New Delhi.
8. Gopalkrishan, R., 1991: Political Geography of India's North-East, Har-Anand Publications, Delhi.
9. Inamdar, N.R., 1992: Development Administration in India, Rawat, Jaipur.
10. Kothari, R., 1970: Politics in India, Oriental and Longman, New Delhi.
11. Oommen T.K., 1990 : Protest and Change Studies in Social Movements, Sage, New Delhi
12. Singh, R., 1991: Social Movements, Old and New: A Post Modernist Critique, Sage publications, New Delhi.

Political Geography of Middle East (GEO 402)

1. Middle East as a region: Territorial Evolution, space relationship and interdependencies.
2. Political history and administrative structure: Evolution of national boundaries and administrative structures.
3. Geographical bases of geo-ethnic regions: Relief, climate, language, migration, types of geo-ethnic regions.
4. Economic structure: Agriculture, mineral oil, industry, role of petroleum in regional economies.
5. Conflict resolution: Economic, social, political, centripetal and centrifugal forces.
6. Foreign Policy: Spatial Problems, linkages with developing and developed countries.
7. Middle East and the global economy.

Recommended Readings

1. Ayubi, N. N. 1995: *Over- Stating the Arab State: Politics and Society in the Middle East*, I.B. Tauris, London.
2. Barkley, H., 1993: *The Politics of Economic Reform in the Middle East*, MacMillan, London.
3. Beinin, J., and Stork, J., 1997: *Political Islam*, I.B. Tauris, London.
4. Cleveland, W.L., 1994: *A History of the Modern Middle East*, Westview Press, Oxford.
5. Findlay, A.M., 1996: *The Arab World*, Routledge, London.
6. Fisher, W.B., 1985: *Middle East: A Physical, Social and Regional Geography*, Cambridge University Press, Cambridge (7th edition).
7. Owen, R., 1992: *State, Power and Politics in the making of the Modern Middle East*, Routledge, London.
8. Richard, A. and Waterbury, J.A., 1996: *A Political Economy of the Middle East*, West view Press, Colorado, (Revised).
9. Shamim A. and Sayigh Y., (eds) 1998: *The Cold War and The Middle East*, Oxford University Press, Oxford.
10. Wilson, R., 1995: *Economic Development in the Middle East*, Routledge, London.

Group-III (GEO 403)

I. Environmental Geography

II. Natural Hazards & Disaster Management

III. Biogeography

IV. Terrain Analysis & Evolution

Environmental Geography (GEO 403)

1. Meaning and Scope of environmental geography; Basic principles of environmental geography; Composition and types of environment; Ecological principles; Man – environment relationship.
2. Ecosystem: concept and components; Trophic levels; Food chains and food webs; Energy flow in the ecosystem;
3. Circulation of matter in the ecosystem, Geobiochemical cycle, ecosystem productivity, ecosystem stability.
4. Environmental degradation; Extreme events, hazards and disasters (earthquake, volcanoes, cyclones, floods); Environmental pollution (air, water, solid waste, soil and noise pollution); Environmental pollution in India; Environmental Problems – global warming, ozone depletion, land degradation, reduction in biodiversity.
5. Environmental management: concept and approaches; sustainable development; Environmental consciousness, Environmental policy; environmental legislation; Environmental impact assessment; Disaster management.

Recommended Readings:

1. Balakrishnan, M., 1998: *Environmental Problems and Prospects in India*, Oxford & IBH Pub., New Delhi.
2. Das, R.C., et. al., 1998: *The Environmental Divide : The Dilemma of Developing Countries*, A.P.H. Pub., New Delhi.
3. Goel R.S., 2000: *Environment Impacts Assessment of Water Resources Projects-Concerns, Policy Issues Perceptions and Scientific Analysis*, Oxford & IBH Publishing Co. Pvt. Ltd, New Delhi.
4. Gole, P., 2001: *Nature Conservation and Sustainable Development in India*, Rawat Pub., Jaipur.
5. Hussain, M., (ed.) 1996: *Environmental Management in India*, Rawat Pub., Jaipur.
6. Ramakrishnan, P.S., 1998: *Conservation and Management of Biological Resources in Himalaya*, Oxford & IBH Pub., New Delhi.
7. Sapru, R.K., 1987: *Environmental Management in India*, A.P.H. Pub., New Delhi.
8. Saxena, H.M., 1999: *Environmental Geography*, Rawat Pub., Jaipur.
9. Singh, R.B., (ed.) 1990: *Environmental Geography*, Heritage Pub., New Delhi.
10. Singh, R.B., (ed.) 1996: *Disasters, Environment and Development*, Oxford & IBH Pub., New Delhi.
11. Singh R.B., (ed.) 2001 : *Urban Sustainability in the Context of Global Change*, Science Pub., Inc., Enfield (NH), USA
12. Singh, S., 1997: *Environmental Geography*, Prayag Pustak Bhawan, Allahabad.

Natural Hazards & Disaster Management (GEO 403)

1. Concept of Hazards, Risk, Vulnerability and Disaster.
2. Types of Hazards: Natural, man-made.
3. Regional Dimension of hazard: Occurrence and trends, methods of identifying hazard prone regions.
4. Disaster Losses and Impact – Displacements, livelihood, economy and infrastructure, health.
5. Response to Disasters: International, national, government, non government, community and individual, media and education.
6. Mitigation and Management: Plans and policies; engineering, economic, social, political and policy initiatives.

Recommended Readings:

1. Allan,S., Adam,B. and Carter,C., (eds.), (2000) : *Environmental Risks and the Media*, Routledge,London.
2. Ambala-Bertrand, J.M., (1993): *Political Economy of Large Natural Disasters: With Special Reference to Developing Countries*, Clarendon Press, Oxford.
3. Burton,I., Kates,R.W. and White,G.F., (1993) : *Environment as Hazard*, 2nd edition, Guilford Press, New York.
4. Hewitt,K., 1997 : *Regions of Risk: A Geographical Introduction to Disasters*, Longman, London.
5. Hood, C. and Jones, D.K.C. (eds.), (1996) : *Accident and Design : Contemporary Debates in Risk Management*, UCL Press, London.
6. Kasperson,J.X., Kasperson, R.E. and Turner, B. L., (1995) : *Regions at Risk: Comparisons of Threatened Environments*, United Nation University Press,Tokyo.
7. Mitchell,J.K., (ed.) (1999) : *Crucibles of Hazard: Mega-Cities and Disasters in Transition*, United Nations University Press, New York
8. Schneider,S.K., (1995) : *Firting with Disaster: Public Management in Crisis Situations*,M.E.Sharpe, New York
9. Quarantelli, E.L.(ed.)(1998): *What is a Disaster? Perspective on the Question*, Routledge, London.
10. Schneid,T.and Collins,L. (1998): *Disaster Management and Preparedness*, Lewis Publishers,Washington, D.C.
11. Godschalk,D.R.et.al. (1999): *Natural Hazard Mitigation Recasting Disaster Policy and Planning*, Island Press, Washington,D.C.
12. Paraswamam,S.and Umikrishnan, P.V. (2000): *India Disaster Report* , Oxford University Press, New Delhi.

Biogeography (GEO 403)

1. Biogeography: Concept, approaches and relevance.
2. Evolution of Plants and Animals: Theories, classification and characteristics.
3. Community Dynamics and Energy Flow: Food webs, biogeochemical pathways, ecological succession, climax concept, and ecosystem balance.
4. Factors Influencing the Community: Physical, biological and human.
5. Floristic and Zoogeographic Division with special reference to India: Migration and dispersal, barriers and disjunctions; latitudinal and altitudinal distribution, realms, regions and provinces.
6. Major Ecological Communities: Composition and Structure - forest, grassland, desert, island, mountain and aquatic.
7. Adaptations of Plants and Animals to the Environment: Classification and characteristics.
8. Biodiversity in India: Concept, distribution, legislation, conservation and institutions.

Recommended Readings:

1. Cox, C.B. and Moore, P.D., (1993): *Biogeography: An Ecological and Evolutionary Approach*, 5th Edition, Blackwell, Oxford.
2. Dansereau, P., (1957) : *Biogeography : An Ecological Perspective*, Ronald Press, New York.
3. Good, R., (1953) : *Geography of the Flowering Plants*, Longman, Green & Co.London.
4. Haggett, R.J., (1998) : *Fundamentals of Biogeography*, Routledge, London.
5. Illies, J., (1974) : *Introduction to Zoogeography*, translated by W.D.Williams, Macmillan, London.
6. Jeffries, M.J., (1997): *Biodiversity and Conservation*, Routledge, London.
7. Pielou, E.C.,(1979) : *Biogeography*, John Wiley and Sons, New York.
8. Pimm,S.L., (1991) : *Balance of Nature-Ecological Issues in the Conservation of Species and Communities*, University Press, Chicago.
9. Shimvell, D.W., (1971): *Description and Classification of Vegetation*, University of Washington Press, Seattle.
10. Walter, H., (1993): *Vegetation of the Earth in Relation to Climate and the Ecophysiological Conditions*, English University Press Limited, London.
11. Wilson, E.O., (1992) : *Diversity of Life*, Massachusetts Harvard University Press, Cambridge.

Terrain Analysis & Evolution (GEO-403)

1. Principles of Photogrammetry: Stereoscope Parallax and height determination; Orthorectification; Global Positioning System based altitude determination; contouring.
2. Digital Terrain Model: Contour/point interpolation – IDW, Spline, Krigging etc.; SAR Interferometry; Laser Scanning; Quality assessment of DTM.
3. Terrain Analysis on grided DEM: slope, aspect, curvature, flow direction, watershed delineation etc.; Terrain classification; Secondary topography attributes-wetness indices, stream-power indices, radiation indices, temperature indices etc.
4. Geomorphological, Hydrological and Biological applications of Digital Terrain Model.
5. 3-D visualization of the terrain and identification of landform and land cover features.

Recommended Readings

1. Bell, S. (1999): *Landscape: Pattern, Perception and Process*, E&FN Spon, NY.
2. Burrough, P.A. and McDonnell, R.A., (1998): *Principles of Geographic Information Systems*, Oxford University Press, Oxford.
3. Clifford, N., (2003): *Key Methods in Geography*, Sage Publications Inc.
4. Davis, J.C., (1986): *Statistics and Data Analysis*, 2nd edition, Wiley.
5. De Mers, Michael N., (1999): *Fundamentals of Geographic Information Systems*, John Wiley & Sons, New York.
6. El-Rabbany, A., (2002): *Introduction to GPS*, Artech House.
7. Jensen, J.R., (2004): *Remote Sensing of the Environment: An Earth Resource Perspective*, Pearson Education.
8. Henderson, F.M. and Lewis. A.J. (eds), 1998, *Manual of Remote Sensing, Vol.2, Principles and Application of Imaging Radar*, 3rd edition, Wiley.
9. Lawrence, C.J., Byard, R.J. and Beaven, P.J., 1993, *Terrain Evaluation Manual*, HMSO Publications, London.
10. Lyon, J., (2003), *GIS for water Resources and Watershed Management*, Taylor & Francis.
11. Sabins, Floyd F. Jr., (1997): *Remote Sensing: Principles and Interpretation*, W.H. Freeman, New York.
12. Wilson, J.P. and Gallant, J.C. (eds), 2000, *Terrain Analysis: Principles and Applications*, John Wiley & Sons.

Group-IV (GEO-404)

- I. Agricultural Geography
- II. Soil Geography
- III. Dry Land Farming
- IV. Food Security System

Agricultural Geography

1. Agricultural Geography: Origin and dispersal of agriculture - major theories of origin of agriculture; gene centres of agriculture - New World and Old World.
2. Agricultural Regionalization: Concept and criteria, Whittlesey's agricultural regions; agricultural typology-concept and criteria, hierarchy of world type of agriculture; agricultural regions of India.
3. Models in Agricultural Geography: Bases of classification; normative models - locational model, diffusion model, and decision making models; combinational models.
4. Agricultural Productivity: Concept, determinants and methods of its measurement; regional imbalances in agricultural productivity in India.
5. Agricultural problems and strategies for agricultural developments; agricultural planning regions.
6. New Perspectives in Agriculture: Urban agriculture; agri-business; food security, Sustainable Agricultural Development.

Recommended Readings:

2. Atkin's, P., and Bowler, L., 2001: *Food in Society - Economy, Culture and Geography*, Oxford University Press, Oxford.
3. Basu, D.N., and Guha, G.S., 1996: *Agro-Climatic Regional Planning in India*, Vol.I & II, Concept Publication, New Delhi.
4. Buller, N. and Hoggart, K., (eds.) 2001: *Agricultural Transformation, Food and Environment*, Vol. I, Ashgate Publishing Company, Burlington.
5. Burger, A., 1994: *Agriculture of the World*, Aldershot, Avebury.
6. Bryant, C.R., Johnston, T.R., 1992: *Agriculture in the City Countryside*, Belhaven Press, London.
7. Grigg, D.B., 1984: *Introduction to Agricultural Geography*, Hutchinson, London.
8. Grossman, D., VanDen Berg, L.M., and Ajaegbu, H., 1999 : *Urban and Peri-Urban Agriculture in Africa*, Ashgate, Publishing Company, Brookfield.
9. Ilbery, B.W., (ed.) 1998: *Geography of Rural Change*, Addison Wesley Longman, London.
10. Mohammad, N., 1992: *New Dimension in Agriculture Geography*, Vol. I to VIII, Concept Pub., New Delhi.
11. Obosu-Mensah, K., 1999: *Food Production in Urban Areas: A Study of Urban Agriculture in Accra, Ghana*, Ashgate publishing Co., Brookfield.
12. Roling, N.G., and Wagerutgers, M.A.E.,(ed.) 1998 : *Facilitating Sustainable Agriculture*, Cambridge University Press, Cambridge.
13. Singh, J., and Dhillon, S.S., 1994: *Agricultural Geography*, Tata McGraw Hill, New Delhi.
14. Srivastava, H.C.(ed.) 1993 : *Biotechnological Applications for Food Security in Developing Countries*, Oxford & IBH Publishing Company, New Delhi.

Geography of Energy

1. Importance of Energy: Energy and Economic Development; Energy and Environment; Historical Development
2. of Energy: the Global pattern.
3. Energy resources of the World: Conventional and Non Conventional Sources, New Discoveries and Inventions; Production and Consumption, the World Patterns; Oil Prices and the International Economy, the Nuclear Debate.
4. Energy in Developing and Developed Countries: Characteristics and Consumption Patterns.
5. Energy Resources Of India: Conventional and Non Conventional Sources: Potential, Production and Consumption: Sectoral and Regional patterns of Energy Use, New alternatives and Inventions, Rural Energy in India, Energy policies.
6. Contemporary Issues: Energy Security, Energy Efficiency, Energy Auditing, Conservation of Energy and Sustainable Development, the Geo-Politics of Energy; Emerging Issues in Energy sector.

Recommended Readings:

1. Chaturvedi, Pradeep (1998) *Rural Energy for Sustainable Development- Technology and Environmental Issues*, Bio Energy Society of India.
2. Hannesson, R. (1998) *Petroleum Economics: Issues and Strategies of Oil and Natural gas Production*, Quorum Books, West Port ,USA.
3. Heal, Geoffery and G. Chichilnisky (1991) *Oil and the International Economy*, Clarendon Press, Oxford.
4. Meier, Peter and M, Munasinghe (2005) *Sustainable Energy in Developing Countries- Policy Analysis and Case Studies*, Edward Elgan Publishing Ltd, UK.
5. Nakicenovic, N. et al (1998) *Global Energy perspectives*, Cambridge University Press, Cambridge, New York, Melbourne.
6. Nooij, Michael and others, International Comparisons of Domestic energy Consumption, *Energy Economics*, 25 94) 2003 (July) 359-73.
7. Ramesh Babu, M. et.al.(1997) *Energy for Better Tomorrow: Renewable and Non Renewable Energy Sources*, Allied Publishers Ltd.
8. Reliance Industries ltd. (2003) *Reliance Review of Energy Markets*, Corporate Communications, Mumbai.
9. Suludhi, R.N. (1993) *Energy Options for the 21st Century*, Ashish Publishing House.
10. World Energy Council, (1993) *Energy for Tomorrow's World*, Kogan Page.
11. World Energy Council, (1994) *New Renewable Energy Resources- a Guide to Future*, Kogan page.

Dry Land Farming

1. Dry land farming: Concept, nature and scope; methods of identification and delimitation
2. Dry land characteristics and degradation process: Physical, biological, social and institutional
3. Models of Dry land Development and management: Risk and uncertainty model
4. land Capability Classification in Dry land: Concept, criteria and capability classes, patterns of general land use
5. Dry land Farming Technology and Cultivation Practices: Absorption of rainwater in the soil, soil moisture conservation, and erosion control; availability and potential of irrigation; patterns of crop land use and crop combination; agricultural productivity.
6. Problems and Prospects of Dry land Agriculture: Alternate mode of land use opportunities: Animal Husbandry, forestry, horticulture and pisci culture.

Recommended Readings:

1. Beamont, P., (1989): *Environmental Management and Development in Drylands*, Routledge, London.
2. Bruins H.I., Lithwick H. (eds) (1998): *The Arid Frontier Interactive Management of Environmental Development*, Academic publishers, Netherland.
3. Dixon, J.A., James, D.E. and Sherman, P.B., (1989): *Economics of Dryland Management*, Earthscan Pub., London.
4. Doi, R.D., (1991): *Semi-arid Land System: Use and capability*, Pointer, Jaipur.
5. Glantz, M.H., (ed) (1994): *Drought Follows the Plan*, Cambridge University Press, Cambridge.
6. Gliessman, S.R., (ed) (2001): *Agroecosystem Sustainability: Developing Practical Strategies*, CRC Press, Boca Raton, New York.
7. Jodha N.S. (2000): *Living On the Edge: Sustaining Agriculture and Community Resources in Fragile Environment*, Concept Publications, Delhi.
8. Jodha N.S. (1989): *Technology Options and Economic Policy for Dry land Agriculture Living On the Edge: Sustaining Agriculture and Community Resources in Fragile Environment*, Concept Publications, Delhi.
9. Moellering, H. (ed.) (1992): *Spatial Data Transfer Standards: Current International Status*, Elsevier Applied Sciences, London.
10. Purandar, A.P. and Jaiswal, A.K., (1993): *Transfer of Integrated Land Use Technology under Dryland Farming*, National Institute of Rural Development, Hyderabad.
11. Quershi. S. (1989): *Regional Perspective on Dry Farming: Tribal Societies and Development through Environmental Regeneration*, Oxford, New Delhi.
12. Reeve, P.E. et al (1999): *GIS, Organisation and People: A Socio-Technical Approach*, Taylor and Francis, London.
13. Shafi, M. et al., (1998): *India's Dry lands: Tribal Societies and Development through*

Food Security System

1. Food Security : Concept, approaches, indicators and methods of measurement..
2. Distributional Patterns of Food Resources: Agriculture, animal husbandry, inland fisheries, forest, horticulture and marine.
3. Factors and Patterns of Food Resources Consumers: Population, density and distribution, age, sex and occupation.
4. Food Resources and Human Consumer Interface: Demand and availability of food resources in calorific and monetary value, poverty, hunger and vulnerability.
5. Regional Pattern of Food Security: Bases of measurements, comparison of relations with developed countries and developing countries on selected parameters of food security.
6. Regional Dimensions of Food Security in India: Distributional pattern of consumers - total population and agricultural population; food availability - calorific and monetary value, food security and insecurity regions, food consumption and nutritional status, problem of malnutrition.
7. Public Distribution System and Food Security: Structure and Policy of P.D.S; Regional Variation, Transport Network and P.D.S, Impact of P.D.S. on food security with special reference to non-food crop regions of India.
8. Food Security through Sustainable Agriculture. Global environmental change and food security and other mitigation strategies.

Recommended Readings:

1. Barun, J. et al. 1992: Improving Food Security of the Poor: Concept Policy and Programme, International Food Policy Research Institute, Washington.
2. Chakravarty, A. K. 1970: Food Sufficiency Patterns in India, Geographical Review, Vol. LX, New York.
3. Chopra, et al.(eds), 1998 : Crop Productivity and Sustainability – Shaping the Future, Oxford and IBH Pub. Co. New Delhi
4. Chung, K, et al. 1997: Identifying the Food Insecure: The Application of Mixed Method Approaches in India; International Food Policy Research Institute, Washington.
5. George,P.S., 1994 : Food Security in South Asia : Performance and Prospects Economic and Political Weekly, Vol.29, No.15 April 30
6. Minhas, B.S., 1976: Towards National Food Security, Indian Journal of Agricultural Economics, Vol. 31, No.4.
7. Mohammad,N., 2002 : Reginal Patterns Of Food Security In India , Annals, NAGI, Vol.21, Delhi
8. Radhakrishna, R., 1991 : Food and Nutrition: Challenge for Policy, Journal of the Indian Society of Agricultural Statistics, Vol. 53, No.3, December.
9. Reutlinger, S., 1977 : Food Insecurity: Magnitudes and Remedies, Washington, U.S.A.
10. Sen, A.K., 1981: Poverty and Famines : An essay in entitlement and Deprivation, Oxford University Press, Delhi.
11. Shafi, M and Aziz, A. (eds), 1989 : Food Systems of the World, Rawat Pub., Jaipur.
12. Srivastava, H. C. (ed), 1993 : Biotechnological Applications for Food Security in Developing Countries, Oxford and IBH Pub. Co., New Delhi

Group-V

- I. Historical Geography
- II. Demography & Population Policy
- III. Health, Environment and Society
- IV. Geography of Well being

Historical Geography

1. Approaches and contribution to the study of historical geography: over view of European and American contributions to historical geography.
2. The study of historical geography in India – critical evaluation of methodologies and approaches.
3. Evolution of the cultural landscape of India from pre- historic times to the present
4. Resources, environment, settlements, territorial organization, economy and trade routes in early historic India.
5. Centres of pilgrimage and geography of sacred places
6. Economic activities, settlement patterns, forest and trade routes, territorial political divisions in the medieval period.
7. Role of coastal and interior centres, developments in resource use, settlements, and transportation and their effects in the colonial period.
8. Urbanisation, migrations, famines, diffusion of land grant settlements, deforestation in the post colonial India.

Recommended Readings:

1. Ali, S.M. 1966: The Geography of the Puranas, People's publishing House, Delhi.
2. Baker, A.R.H (ed.) 1972: Progress in Historical Geography. David and Charles.
3. Baker, A.R.H., Hamshere, J.D., Langton, J., 1972: Geographical Interpretation of historical Sources, David and Charles.
4. Bhardwaj, S.M., 1973: Hindu Places of Pilgrimage in India: A Study in Cultural Geography, University of California Press, Berkley.
5. Bharadwaj, O.P., 1986: Studies in the Historical Geography of Ancient India, Sundeep Prakashan, Delhi.
6. Butin, R.A., 1993: Historical Geography: Through the Gates of Space and Time, Edward Arnold, London.
7. Dey, N.L., 1971: The Geographical Dictionary of Ancient and Medieval India, New Delhi.
8. Guelke, L., 1982: Historical Understanding in Geography: An idealist approach, Cambridge University Press, Cambridge.
9. Habib, I., An Atlas of Mughal Empire, Oxford University Press, Delhi.
10. Law, B., 1968: Historical Geography of Ancient India, Societe Asiatique dei Paris, Paris.
11. Pacione, M., 1987: Historical Geography: Progress and Prospect, Croom Helm, London.
12. Roberts, P.E., 1995: Historical Geography of India, Vol. I & II, Printwell, Jaipur.
13. Schwartzberg, J.E., 1978: A Historical Atlas of South Asia, University of Chicago Press, Chicago.
14. Sircar, D.C., 1971: Studies in the Geography of Ancient and Medieval India, Motilal banarasi

Demography & Population Policy

1. Population Geography: Nature, Scope, Development, Sources of Population Data (Census, Registration Systems, Population tables).
2. Theories of Population: Malthus and his Critique; the Demographic Transition Theory.
3. Population Composition: Age, Sex, Literacy, Rural- Urban.
4. Fertility and Mortality: Measurements, Theories, Regional Patterns.
5. Migration: Theories, Typologies, Patterns and Flows; Causes and Consequences
6. Human Development: Concept, Construction of HDI, Regional patterns.
7. Political Economy of Population and the Politics of Population Control.

Recommended Readings.

1. Bandarage, Asoka. (1998) *Women, Population and Global Crises: A Political Economic Analysis*, Zed Books, London.
2. Cadwell, John. (1982) *Theory of Fertility Decline*, Academic Press, New York.
3. Crook, Nigel. (1997) *Principles of Population and Development*, oxford university Press ,oxford.
4. Davis, Kinsley. (1949) *Human Society*, Macmillan. Co, New York.
5. Ehrlich Paul R. (1968) *The Population Bomb*, Ballentine Books, New York.
6. Ehrlich and Ehrlich. (1990) *The Population Explosion*, Simon and Schuster, New York.
7. Guilmoto, C.Z and Alian Vagnet. (2000) *Essays on Population and Space in India*, Institut de Pondichery, Pondicherry.
8. Herdt, Gilbert and Shirley Lindenbaum. (1992) Eds *The Time of AIDS: Social Analysis, Theory and Method*, Sage Publications, Newbury Park C A.
9. Johnson, Stanley, P. (1994) *World Population- Turning the Tide- Three Decades of Progress*, Kluwer Academic Publishers Group.
10. Mamdani, Mahmood. (1972) *The Myth of Population Control: Family, Caste and Class in an Indian Village*, Monthly Review Press, New York.
11. Parret, H.R., (1997) *Population Geography*, Oxford and Boyd, Oxford.
12. Preston, Samuel. et al. (2001) *Demography*, Blackwell publishers Inc, Massachusetts, USA.
13. Rao, Mohan. (2004) *From Population Control to Reproductive Health- the Malthusian Arithmetic*.
14. Ramachandralu, G and M.Prasada Rao. (2004) *Census 2001 and Human Development in India*, Serials Publication, New Delhi.
15. Siegal, Jacob, S. (2002) *Applied Demography*, Academic Press, New York.

Geography of social well being

1. Welfare Geography and Social Well Being: Theoretical approaches and Development; Human needs and wants; State of Well being and Level of Living, Welfare as the focal theme in human geography.
2. Discrimination, Deprivation and Poverty: Concept of absolute and relative deprivation; Discrimination and Deprivation, place and people's poverty, geographic patterns of rural and urban poverty.
3. Regional Inequalities in Social Well Being: Key indicators of well being, Assessing social well being- choice of indicators , Inter regional differences in levels of social well being; implications for human resource development.
4. Access, Empowerment and Political Participation: Common property resources and access, participation of marginalized groups in decision making, 73 and 74 amendments to constitution, caste succession and rise of regional aspirations.
5. Well Being in a globalizing world: India shining and India invisible, Privatization of welfare sectors, conspicuous consumerism and relative deprivation

Recommended Readings:

1. Carley, M., (1982), *Social Measurement and Social Indicators*, London: Allen and Unwin
2. Dasgupta,P, (1993) *An Enquiry into Well-being and Destitution*, Oxford Univ.Press
3. Dreze, Jean & Amartya Sen (2002), *India: Development and Participation*, Oxford Univ Press.
4. Miles, I (1985) *Social Indicators for Human Development*, : Frances Pinter, London.
5. Morris D. Morris (1979) *Measuring the Condition of World Poor*, New York: Pergamon Press
6. Smith, David (1973), *A Geography of Social Well-Being in the United States*, McGraw-Hill, New York.
7. Smith D, 1977, *Human Geography- A Welfare Approach*, Edward Arnold, London.
8. UNDP, *Human Development Reports 1990 to 2002*, Oxford University Press also HDR for some states of India.

Dissertation (GEO-404)

Dissertation paper is compulsory and shall be on the themes or sub themes related to the field of Specialisation.

The main components of the Paper include Primary Survey based (with the help of the Printed Questionnaire) on the topic (s) related to the students' field of Specialisation, respectively. The field of Study or the area/ region of the study as well as the universe for the survey shall be decided by the department.

The preparation of the Survey based Project/ Dissertation shall be in accordance with the standard guidelines available for writing Thesis or dissertation.

Students are required to strictly follow the standard format in preparing the dissertation.

The evaluation shall be on the basis of the dissertation the subsequent Viva- Voce, there upon.

Students need to submit their Dissertation in Triplicate to the department before the commencement of the examination.

The Paper shall be of 100 marks and three hours duration.