

SOLAPUR UNIVERSITY SOLAPUR

SYLLABUS

For

M. Phil. Theory Courses

In

GEOGRAPHY

To implement from June 2010

Appendix- A

Course Structure for Class M. Phil. in Geography

100 Marks for each paper

Code No.	Course No.	Title of the paper
M. Phil.-1	MPCG – 101	Research Methodology in Geography & Geographical Information Technique
M. Phil. –2	MPCG – 102	Recent Trends in Geography
M. Phil. –3	MPOG – 103/1	Geomorphology
	MPOG – 103/2	Recent Trends in Settlement Geography
	MPOG – 103/3	Recent Trends in Agricultural Geography
	MPOG – 103/4	Recent Trends in Economic Geography
	MPOG – 103/5	Recent Trends in Population Geography
	MPOG – 103/6	Recent Trends in Tourism Geography
	MPOG – 103/7	Recent Trends in Biogeography
	MPOG – 103/8	Geographical Approaches for Disaster Management
	MPOG – 103/9	Recent Trends in Application of GIS and Remote Sensing

Note: Course No. MPCG – 101 & MPCG – 102 are Compulsory
& Any One Course from MPOG – 103/1 To 103/9

SOLAPUR UNIVERSITY, SOLAPUR

Revised Structure of Syllabus

Subject : - Geography

Class : - M. Phil.

Course Code No – MPCG – 101

Paper- I - Research Methodology in Geography & Geographical Information Technique

Marks : 100

Objectives -

- To acquaint the students with research process
 - To understand the concept, types of research, its importance and its applications
 - To familiarise the various tools and sources of information for the research
 - To familiarise the students with preparation of research design
 - To acquaint the students with the process of writing the report.
 - To introduce the students the basic principles of Remote Sensing & its application value.
 - To acquaint the students with the concept of GIS & GPS and its application in the field of research
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Section I

Research Methodology in Geography

Chapter I :- Introduction to research in Geography

- 1) Meaning, Nature and Significance of Research
- 2) Characteristics of research
- 3) Types of research
- 4) Survey of Geographic research in India

Chapter II:- Defining the research problem & Research Design

- 1) Meaning of research problem
- 2) Selection of research problem
- 3) Review of literature
- 4) Objective of research
- 5) Methodology
- 6) Limitations of the research problem
- 7) Work plan (Chapter Scheme)

Chapter III:- Data sources & data collection

- 1) Types of Data
- 2) Sources of data
- 3) Tools & Techniques of data collection (Traditional & Modern)
- 4) Sampling – need types & techniques

Chapter IV:- Organization of Data & data Analysis

- 1) Classification & Organization of data
- 2) Tools & Technique of data analysis
- 3) Cartographic & Statistical techniques
- 4) Use & application of computer of data analysis
- 5) Formulation of model, technique, laws

Chapter V:- Writing of Research Report

- 1) Preliminary section : - Title page, Acknowledgement, Content, list of tables, list of figures
- 2) Main body of the report : - Introduction, Review of literature, Design of the study, Presentation and analysis of Data, summary and conclusion
- 3) References & Bibliography, Appendix

Section II

Geographical Information Techniques

Chapter VI:- Remote Sensing

- 1) Meaning & Importance
- 2) Elements of remote sensing
Isolation, Sensor, Platforms

Chapter VII:- Aerial photographs & Imaginaries

- 1) Process of aerial photograph
- 2) Types of aerial photograph
- 3) Indexing of aerial photograph
- 4) Scale & Resolution
- 5) Elements of aerial photo interpretation
- 6) Imaginaries

Chapter VIII:- Geographical Information Systems (GIS)

- 1) Introduction to GIS :- Definition, Purpose, advantages, Disadvantages
- 2) Data Structure : - Raster data & Vector Data
- 3) Components :- data input, output & data management

Chapter IX:- GPS

- 1) Concept of GPS
- 2) Elements of GPS
- 3) Importance & uses of GPS
- 4) Mechanism of GPS
- 5) Application of GPS in geographical Research

Chapter X:- Introduction to computers

- 1) Input & Output devices
- 2) Concept of Memory
- 3) Operating system
- 4) Data analysis
- 5) Use of internet in research
- 6) Power point presentation

References :

- 1) Misra H.N. & : - Singh, V.P. (Ed.) Research Methodology, in Geography, Rawat Publications, Jaipur.
- 2) Mishra, R.P. : - Research Methodology, Concept publication, New Delhi
- 3) Durrnberger : - Geographical Research and Writing
New York: Thomas Y. Cromvell & Cc. 1971
- 4) Maring, L L & : - Introduction to Scientific Geographic Research.
Lounbury, J.F.
- 5) Kothari, C.R. : - Quantitative Techniques, New Delhi, Vikas Publishing House. New Delhi (2005)
- 6) Gautam, N.C. : - Development of Research tools, New Delhi, Shree Publishers (2004)
- 7) Gupta Santosh :- Research Methodology and statistical Techniques, Deep and Deep Publications, New Delhi. (2005)
- 8) Chandra, A. : - Style manual, New Delhi, Metropolitan Book Camp Ltd. (2000)
and Saxena T.P.
- 9) Shukla, J.J. : - Theories of Knowledge, Ahemadabad, Karnavati Publication. (1999)
- 10) Bhattacharya, D.K. : - Research Methodology, NEW Delhi, Excel Books. (2004)
- 11) Brymann, Alan : - Qualitative data analysis for social scientist, New York, Routledge
and Cramer, D. Publication. (1995)
- 12) Best, J.W. : - Research introduction, New Delhi, PHI. (2005)
and Kahn J.V.
- 13) Creswell J.W. : - Qualitative Approach, New Delhi, Sager Publication. (1994)

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Revised Structure of Syllabus

Subject : - Geography

Class : - M. Phil.

Course Code No. – MPCG – 102

Paper II – Recent Trends in Geography

Marks - 100

Objectives -

- To familiarise the students with the scientific nature of Geography
 - To acquaint the students with the historical development of Geography
 - To familiarise the students with various approaches in the study of Geography
 - To understand the importance of study of Geography in regional planning
 - To familiarise the role of Geographers in the planning process
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1. Geography as a scientific Discipline.
2. Trends of development in Geography in 20th century.
3. Approaches in Geography- Homothetic, Idiographic, behavioural system and welfare.
4. Geography as a professional Discipline, (planning, Health care, cartography and GIS)
5. Region and Regionalization
 - i) Concept of area, region and space, ii) Stages of regionalization
6. Geography as a study of spatial organisation- structure, pattern and process.
7. Measurement and scaling in Geography.
8. Explanation in Geography – Laws theories, and models.
9. Contribution of Geographers in the planning process in India.
10. Geography and human ecology- Man induced hazards

References : -

1. Ablar, Admas, Gould – Spatial organization : The Geographer's view of the world
2. Cook, Johnson – Trends in Geography
3. P. Gould and R. White – Mental maps
4. Fielding, G.J. – Geography as a Social science
5. Berry, Conkling, Rays – Geography of Economic systems.
6. Hurste - Geography of Economic Behavior.
7. Haggerstrand, T – Innovation Diffusion as a spatial process.
8. Brry B.J.L. and Marble – Spatial Analysis : A Reader in Statistical Geography.
9. Haggett Peter and Chorley N.J. – Integrated Models in Geography.
10. Roger Minshul – Model in Geography.
11. Johnson, R.J. – Geography and Geographers
12. Haggett Peter – Geography a Modern Synthesis

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Revised Structure of Syllabus

Subject : - Geography

Class : - M. Phil.

Course Code No. – MPOG – 103/1

Optional Paper III – GEOMORPHOLOGY

Marks 100

Objectives -

- To appreciate the contrasting geomorphic processes operating in glacial and periglacial Environment.
 - To understand the deformational behavior of ice and melt water.
 - To understand the sensitiveness of the periglacial environment to heat budget
 - To understand the human activities in permafrost environment
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- 1) Recent trends in Geomorphic studies- quaternary geomorphology.
Geomorphic evidences of climatic changes.
- 2) Geomorphic systems and general systems theory, Basic concepts – concept of uniformity, open systems, Equilibrium, Three fold.
- 3) Drainage basin morphometry and slope analysis techniques. Soils and sediment- sediment analysis Granulometry. Composition of soil and sediment
- 4) Tropical landscapes and the processes, Duricrusts, Slope evolution and characteristics of slopes. Contributions of W.M. Devis, Albert Penk, Walther Penk and L.C. King.
- 5) Environmental changes and geomorphic hazards- Natural and Man induced (Anthropogenic)
- 6) Application of Remote sensing and GIS in Geomorphology.
- 7) Review of literature in research of Geomorphology in India.

References

- 1) Bloom A.L.: Geomorphology. Prentice Hall, New Jersey (1970)
- 2) Fairbridge et al (Ed.) Encyclopaedia and Geomorphology – Reinhold, New York. (1968)
- 3) Pitty A.F.: Introduction to Geomorphology – Methuen and Co. London. (1970)
- 4) Doorn Kamp : Numerical methods in Geomorphology.
- 5) King C.A.M.: Techniques in Geomorphology, Ed. Arnold, London (1966)
- 6) Goudie A.: Duricrusts in Tropical and Subtropical landscape. Clarendon press Oxford. London. (1972)
- 7) Young A.: Slopes Longman London. (1972)
- 8) Ollier: weathering, Longman, London. (1969)
- 9) Thomas: Tropical Geomorphology (1967)
- 10) Tricart: Geomorphology of the humid tropics, Longman, London. (1966)
- 11) Dayal P.A. : Textbook of Geomorphology, Shukla book depot, Patna. (1996)
- 12) Savinder Singh: Geomorphology, Prayag Pustak Bhavan, Allahabad. (1998)

- 13) Strahler A.N. -: Geography and Man's environment.
Strahler A.H. John. Wiley. New York. (1976)
- 14) Thorn Bury, N.D.: Principles of Geomorphology John. Wiley and Sons, New York. (1969)
- 15) Tucker and Tucker: Environmental Science. Arnold Hoinamen, New York. (1990)

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Revised Structure of Syllabus

Subject : - Geography

Class : - M. Phil.

Course Code No. – MPOG – 103/2

Optional Paper III - RECENT TRENDS IN SETTLEMENT GEOGRAPHY

Marks - 100

Objectives -

- To understand the growth and evolution of rural settlement.
- To recognise and analyse the distribution, patterns, morphology and functions of rural settlements
- To examine the prevailing social and environmental issues in rural areas in India
- To understand the process of urbanisation and origin, growth and classification of urban settlements with relevant theories and models
- To examine the changing economic base and structure of the contemporary cities.
- To relate the urbanisation process and the evolution of urban system.
- To examine the contemporary urban issues and suggest new urban planning and urban policy perspectives.

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1. Concept of Settlement – Rural and Urban, Evolution of settlement, Meaning, Nature, Scope, and Significance of Settlement Geography, Its relation with other Disciplines.
 2. Concepts, Approaches and methodology in settlement studies.
 3. Transformation of rural settlement types and patterns.
 4. Role of rural service centers in rural development.
 5. Trends of urbanization in developing countries with special reference to India.
 6. World urban growth in 20th century.
 7. Changes in morphology of the urban centers and theories related with morphology of urban centers
 8. Problems of urban settlements and recent view about planning of urban centers to minimise the problems
 9. Growth pole strategy for urban and regional planning.

References

1. M. Chisholm and Brian Rodgers : Studies in human Geography SSRC, London
2. R.L. Singh and others : Geographic Dimensions of Rural Settlements
3. R.L. Singh and others : Readings in Rural settlement geography. N.G.S.I., Varanasi.
4. R.B. Mandal : Rural Settlement Geography Concept Publishers, New Delhi.
5. Davis K. and Hertz H. : The Pattern of World urbanization, New York.
6. G. Breeze : Urbanization in newly developing countries, Prentice Hall, N.J.
7. B.J.L. Berry and Hortal : Perspectives on urban systems, Prentice Hall N.J.
8. Mishra R.P. : Urban systems and rural development, Prasaranga, Mysore
9. Brush J.E. : Regional planning for West Bengal, Calcutta Metro planning org.
10. Mishra R.P. : Regional planning, Prasaranga, Mysore
11. A. Nobel and Dutt : Indian urbanization and planning, Mcgrew Hill, New Delhi.

SOLAPUR UNIVERSITY, SOLAPUR.
Revised Structure of Syllabus
Subject : - Geography
Class : - M. Phil.
Course Code No. – MPOG – 103/3
Optional Paper III - Recent Trends in Agricultural Geography

Marks 100

Objectives

- To familiarise the students with the concepts, origin and development of agriculture.
- To examine the role of agricultural determinants towards changing cropping patterns, intensity, productivity, diversification and specialization.
- To familiarise the students with the application of various theories, models and classification schemes of cropping patterns and productivity.
- To discuss technological and social issues in agricultural sector with references to India.

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- 1) Nature and scope of agricultural geography.
 - 2) Agricultural geography as a research discipline.
 - 3) Data sources, approaches and techniques in Agricultural geography.
 - 4) Determinants of agricultural patterns – Technological determinants their impact on Agricultural
 - 5) Concept of agricultural region and bases of agriculture regionlization and types of region.
 - 6) Agricultural system and its basic components.
 - 7) Concept of agricultural productivity and efficiency
 - 8) Concept of land use, Land utilization, Land cover, Land capability and methods of land capitaibility compatibility land evaluation.
 - 9) Theories and models in Agricultural geography.
 - 10) Fruit farming in India and problems of Agriculture.

References

- 1) Dunn, E.S. : Location of Agricultural production
- 2) Found C. : A Theoretic approach to land use analysis. (1971)
- 3) Davidson, Lonalds : Soils and Land use planning, Longman, London. (1980)
- 4) Harris, D.R. : The ecology of Agricultural systems in trends in geography, Cooke R.V. and John J. (Ed) London, Pargaman press. (1969)
- 5) Klages, K.H.W. : Ecological crop Geography, New York, Macmillion.
- 6) Negi Balbir singh : Rural geography, Redamith, Meerat.
- 7) Pianka Erik R. : Evolutionary ecology, New York, Harper and Row. (1987)
- 8) Singh Jasbir and Dhillion S.S. : Agricultural geography, Tata Mc Grall hill New Delhi.
- 9) Sysmons, L. : Agricultural geography, 2nd edition, Bouldor, Colorado westiew press (1979)
- 10) Tarrant, John K : Agricultural Geography, David and Charles, Newton (1974)
- 11) Husain M.: Agriculture Geography, Inter – India Publication, New Delhi.

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Revised Structure of Syllabus
Subject : - Geography
Class : - M. Phil.
Course Code No. – MPOG – 103/4
Optional Paper III :- Recent Trends in Economic Geography

Objectives -

Marks : 100

- To integrate the various facts of economic development and to acquaint the students about this dynamic aspect of economic geography
 - Acquaint the students with various theories of location of economy activities
 - Familiarise students with recent views in trading activity
 - To familiarise the students with various trade organizations
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1. Economic Geography in modern context, Classification of economic activities, Different approaches to the study of economic Geography.
2. Theories of location of economic activities – by Von Thunen, Alfred Weber, Christall Raily gravitational model, Behavioural location theory.
3. Resource – concept, classification, Resource utilization and environmental degradation. Concept of Sustainable development.
4. Economic development- Different Approaches to promote economic development and methods of measurement.
5. Ullman's tried connectivity and accessibility of transport network.
6. Recent views in trading activity- Wholesale and Retail trades, moles, E mail shopping, sky shopping etc. Location of suburban Business centers, multinuclear theory.
7. Trade organizations – WTO, GATT, EEC, OPEC, UNCTAD

References :

1. Hartshorn T.A. and Alexander J.W.: Economic Geography, (Third Ed.)
Prentice Hall of India, Pvt. Ltd. (1988)
2. Rubenstein James: The cultural landscape – An Introduction to Human
Geography (Third Ed.) Macmillan, New York. (1989)
3. Berry, Conkling and Ray: Economic Geography, Prentice Hall, New Jersey (1988)
4. Red Cliff, M.: Development and Environmental crisis, Mathuen, London. (1987)
5. Hurst Elliot: Geography of Economic Behaviour Unwin, London. (1986)
6. Arivill R.: Man and Environment- Crisis and the strategy of choice,
Perguin, Harmonds weath. (1967)
7. Savindra Singh : Environmental Geography, Prayag Pustak Bhavan, Allahabad. (1991)
8. Botkin, D.B. and Killer, E.A.: Environmental studies, Morsill Publishing
Company, Columbus (1982)

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Revised Structure of Syllabus
Subject : - Geography
Class : - M. Phil.
Course Code No. – MPOG. – 103/5
Optional Paper III :- RECENT TRENDS IN POPULATION GEOGRAPHY
Marks - 100

Objectives -

- To provide an understanding of spatial and structural dimensions of population and the emerging issues.
 - To familiarise the students with global and regional level problems and also equip them for comprehending the Indian situation.
 - To acquaint the students with causes and effects of change in population.
-

- 1) Population Geography – Approaches to the study of population geography. Relationship with other disciplines. Significance of the study.
- 2) Data sources, Techniques of analysis in study of population Geography
- 3) Determinants of population distribution. Physical and cultural factors.
(World and India), Population composition- age, sex ratio occupation, rural – urban. Population Growth- Malthusian theory of population growth, Optimum population theory.
- 4) Demographic transitions – Theories, stages, consequences, space and time dimensions.
- 5) Migration – Types of migration, Laws and major international migration streams, effect of migration on population.
- 6) Population of India- Population change during the 20th century, population problems and policies in India.

References

- 1) S.B. Sawant, Athawale A.S. - Population Geography, Mehta Publication, Pune.
- 2) Asha Bhende and Tara Kanitkar - Population studies, Himalaya Publishing House, Bombay
- 3) Chandna R.C. and Siddhu M.S. - Introduction to Population Geography, Kalyan Publishers, New Delhi 1980
- 4) Demoko G.J.(Et. al) - Population Geog. – A Reader, Mcgrow- Hill, New York, 1970
- 5) Clark J. I. - Population Geography, Pargamen Press, Oxford, 1966
- 6) Garnier J.B. - Geography of Population, St Martin Press, New York 1978
- 7) Trewartha S.J. - A. Geography of Population : World Patterns, John Wiley, New York. 1972

- 8) Rogers A. - Matrix Analysis and interregional Population growth and distribution, Berkeley, 1968
- 9) Jackson J.A. - Migration, University Press Cambridge, 1909
- 10) Lawry J.H. - World Population and food supply Edward Arnold, London 1976
- 11) Bose A. (Ed) - Patterns of Population changes in India, Allied Publishers, Bombay- 1967
- 12) Thomson W.S. - Population Problems – Tata McGraw Hill Publication Co. New Delhi 1965
- 13) Husain Majid - Human Geography, Rawat Publication, Jaipur – 1999
- 14) Sinha V.C. - Dynamics of India's Population growth, National Publication house, New Delhi, 1979

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Revised Structure of Syllabus
Subject : - Geography
Class : - M. Phil.
Course Code No. – MPOG – 103/6
Optional Paper III :- Recent Trends in Tourism Geography
Marks 100

Objectives -

- To familiarise the students with aspects of tourism which have a bearing on subject matter of Geography.
- To orient the students to the logistics of tourism industry and the role of tourism in regional Development.
- To understand the impact of tourism on physical and human environments

-
1. Concept of Tourism – Meaning, nature and scope. Significance of Tourism Geography. Relation of Geography with tourism. Development of tourism through ages. Role of Tourism in changing economy of India.
 2. Types of tourism- Factors of tourism development. Development of tourism with special reference to India. Places of tourist attraction in different states in India. Constraints in tourism development. Impact of Tourism on society, economy, and natural environment.
 3. Tourism Marketing – concept of tourism marketing and types, market potential, need of tourism marketing and significance, tourism marketing in developed countries, tourism marketing in India, tourism products, marketing strategy for tourism.
 4. Tourism promotion, promotional policies and programmes in India, Role of advertisement in tourism. Developing promotional strategy. Tourism promotional plans of State Government with special reference to Maharashtra.
 5. Transport and communication systems and their role in the growth of tourism. New trends in transportation and communication for growth of tourism.
 6. New trends in tourism like – Rural, tribal, agro, leisure tourism
 7. Tourist organizations in the world and their role in development of Tourism.

References -

- 1.M.A. Khan - Tourism Marketing, Anmol publication, New Delhi.02, 2005
- 2.Jagir Singh Bajwa - Tourism Management APH publication , New Delhi.
and Ravindar Kaur
3. Govind prasad, - Eco-Tourism and Environment Management,
S.Kislaya and Discovery publishing House N. Delhi – 02
K. Lal Gupta
4. S.M. Jha - Tourism Marketing, Himalaya publishing House, Delhi (2006)

5. Romila Chawla - Tourism promotion, Sonali publishing, New Delhi – 2 (2006)
6. Harish Bhatt and B.S. Badan - Leisure and Tourism Crescent Publication, New Delhi. 2006
7. A.K. Bhatia - Tourism Management, Sterling publishers, New Delhi, 20, 2006
8. P.S. Gill - Tourism- Economic and Social development, Anmol publication, New Delhi. – 02 (2005)
9. A.K. Bhatia - Tourism Development Principles and practices, Sterling publication, New Delhi.- 20 (1989)
10. Bhatia, A.K. - Tourism in India, History and Development. Sterling Publishers PVT. Ltd. New Delhi. 1978
11. Bhatia, A.K. - International Tourism Fundamentals and practices, Sterling Publishers PVT. Ltd. Green Park Extension. New Delhi. 1991
12. S.B. Verma, S.K. Jiloka and P. Thryambakam - Rural tourism and tribal development, Deep and Deep Publication, New Delhi – 27, 2006
13. Douglas Pearce - Tourism Today – A Geographical Analysis, Longman, India. 1987
14. Gupta, V.K. - Tourism in India. Gian Publishing House. Delhi. 1987
15. Robinson, H. - A Geography of Tourism, Macdonald and Evans, Ltd London. 1976
16. Stephen L. & J. Smith - Recreation Geography, Longman, London and New York 1939
17. Singh S.N. - Geography of Tourism and Recreation. Inter-India Publications, New Delhi. 1986
18. Tejvir Singh & Others - Studies in Tourism, Wild life parks conservation. Metropolitan Book Company, New Delhi. 1982

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Revised Structure of Syllabus
Subject : - Geography
Class : - M. Phil.
Course Code No. – MPOG – 103/7
Optional Paper III - Recent Trends in Biogeography

100 Marks

Objectives –

- To introduce the students the concept, recent trends of Biogeography and its interpretation.
 - Information and their application, interaction between living organisms with climate and physical environment.
 - To make students aware of need of conservation alarm with geographical perspectives.
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1) Recent Trends in Biogeography -

Definition and meaning, Nature and Scope, Development and Recent trends.

2) Biosphere and theories of origin and evolution of life.

Features of Biosphere, Animate and Inanimate life, Theory of eternity of life, Theory of Catastrophism, Theory of organic evolution, Modern concept of origin of life.

3) Ecosystem

Concept, Structure and function of ecosystem, Law of energy exchange, food chain and food web, Types of ecosystem in tropical, subtropical and polar zones of the world, Controlling factors of ecosystem.

4) Plant and Zoogeography –

A) Plant Geography

Elements of plants Geography, Types of plants, Distribution of forest, Plant succession In newly formed landforms.

B) Zoo Geography

Determinants of Animal growth and distribution, Classification and distribution of animals.

5) Biodiversity –

Concept of biodiversity, Global, National and Local level biodiversity, Importance of biodiversity, Concept of conservation of biodiversity, Need of conservation biodiversity, Strategic management and planning of biodiversity.

6) Conservation of Biotic Resources-

National forest policy of India, Conservation of biotic Resources, Legal protection of plants and Animals.

7) Man and Ecosystem-

Influence of Human activities on plant and animal life, Environmental Hazards and management.

References

- 1) Agarwal, D. P.: - Man and Environment in India Through Ages, Books and Books, 1992.
- 2) Anderson M. S.: -The Geography of living things, English University press, 1951.
- 3) Bradshaw M.J. :-Earth and Living planet, ELBS, London, 1979.
- 4) Cain S.A.: - Foundation of Plant Geography, Harper and Rous, 1944.

- 5) Cox, C.D. and Moore, P.D. – Biogeography – An Ecological and Evolutionary Approach 5th Ed. Blackwell, 1993
- 6) Cole, M.M. – Biogeography in the service of man, Bedford College University of London, 1964.
- 7) Cox, C.B., Hed. loy, I.N., Moose P.D. – Biogeography and ecological and evolutionary approach, Blackwell, Oxford. 1973.
- 8) Darwin C – The origin species, Mooray, London, 1959.
- 9) Dasereav P. – Biogeography, ecological perspectives, New York, 1975.
- 10) David Watts – Principles of Biogeography, MC. Grant Hill, New York, 1971.
- 11) Joy Tivy – Biogeography- A study of plants in ecosphere, Hong Kong, 1982.
- 12) Khan Y.S. – Perspectives in Biogeography, Lotus publication, Solapur, 2007
- 13) Lavbenfets D.J. – A Geography of plants and Animals WMC Brown, 1970.
- 14) New Begin M.I. – Plant and Animal Geography, Methyen, 1936.
- 15) Pears N. – Basic Biogeography, Long man, London, 1980.
- 16) Robinson H. – Aspects Geographies, Biogeography, Mac Donald and Evans, London, 1978.
- 17) Walson E.O. – Biodiversity, Washington D.C. 1988.

SOLAPUR UNIVERSITY, SOLAPUR.

Revised Structure of Syllabus

Subject : - Geography

Class : - M. Phil.

Course Code No. – MPOG – 103/8

Optional Paper III:- Geographical Approaches for Disaster Management

Objectives -

Marks 100

- Provide a general insight to students about the dimensions of disasters caused by nature.
- To familiarise the students with environmental hazards induced by human developmental activities
- To acquaint the students with planning and control of natural disasters.
- To familiarise the students with various national and international agencies working in disaster management.
- To acquaint the students with national and state level planning for hazards mitigation

1. Disaster Management

Definition, nature, types and classification of disasters, risk analysis. Difference between hazard and disaster, Introduction to Dimensions of Natural And Man made Disasters.

Disasters causes and effects

2. Man made Hazards.

Industrial accidents, hazardous waste, their disposal and control.

Industrial pollution Environmental degradations due to wars. Pest – Infestation.

// - Industrial and Technological disasters, including Fire and Accidents.

3. Natural Disasters – Earthquake, Volcanoes, Tsunami, Cyclones, Storms, Floods, Droughts, Landslides.

4 : Geographical, Issues and the Environment

From Unsustainable to Sustainable development. Urban problems related to energy, Water conservation, rain water harvesting, watershed management, # Resettlement and rehabilitation of people ; its problems and concerns. Case studies, # Environmental ethics : Issues and possible solutions, # Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust.

5 : - Principles of Disaster Management

A. Planning and control of natural disasters, Remote- sensing and GIS applications in real time disaster monitoring, prevention and rehabilitation.

B. Agencies working in disaster management work : -

. **International and National Agencies –1 International Agencies 2 National Disaster Management Agency 3. State and District level Agency**, Role of Remote Sensing, Science & Technology, Geo informatics for Disaster preparedness and rehabilitation, Rehabilitation Programmes.

6: - National and state level planning for hazards mitigation : Social and economic impact of natural disasters and man made hazards. Environmental disasters and hazards. Environmental Degradations. Vital needs, - Need Assessment and logistic planning for food water supply,

sanitation including debris management shelter – temporary and semi permanent. Essential Services – Medical care, Education, Psychosocial, Reproductive and children health care, Law and order.

References

- 1) Fairbairn D. and N. Erharuyi : - Adaptive techniques for delivery of spatial data to mobile devices
Geowissenschaftliche Mitteilungen 66 : 11 – 15 (2004)
- 2) Erharuyi N and D Fairbairn : - Adaptation in Mobile Environments for Geo information. Handling.
Proceeding of GI & GIS for Integrated Coastal Management
conference, Seville, Spain (2004)
- 3) Erharuyi N and D Fairbairn : - Mobile Geographic Information Handling Technologies to
support Disaster Management. Geography 88 (4) 312- 318 (2003)
- 4) Erharuyi N and D Fairbairn : - Mobile Handling of Environment Sensitivity Index (ESI)
Datasets, Proceedings of the Coast GIS 2003 Conference
Genoa. Italy (2003)
- 5) Dr. Prakash Sawant, : - Paryavaran Abhyaas.
Phadke Prakashan, Kolhapur. (2005)
- 6) Dr. Prakash Sawant, : - River dam construction and Resettlement of affected villages -
Inter India Publications, New Delhi. (1985)

SOLAPUR UNIVERSITY SOLAPUR.

Revised Structure of Syllabus

Subject : - Geography

Class : - M. Phil.

Course Code No. – MPOG – 103/9

Optional Paper III:- GIS and Remote Sensing in Geographical Studies

Objectives -

Marks 100

- To introduce to the students the basic principles of Remote Sensing.
 - To indicate the methods of visual and digital interpretations of satellite imageries
 - To outline the application value of Remote Sensing.
 - To acquaint the students with the concept of GIS and its importance in the field study
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1. Concept of Remote Sensing advantages & disadvantages. Application in geography, Brief history of GIS & GPS, Development GIS, GIS and other information systems.
2. Types of aerial photographs; scale & resolution, Electromagnetic radiation & its interaction with matter, Elements of aerial photo interpretation.
3. Sensors, platforms & Data products. Introduction to Image processing.
4. Introduction to Geographic Information system. Definition, Purpose, Advantages. Disadvantages, Data Structure – Raster & Vector, Components – Data input, output, Data Management.
5. Data Models and Axioms, conceptual modes of space – Geographical data models- vector data model – Tessellations of continuous fields. Pixels & Voxels. Display of geographical primitive using vector & Raster approaches – data types – Axioms & procedures for handling data information systems.
6. Geographical data in the computer – coding the basic data models for inputs to the computer data base structure – File & data access – Data structure for representing the geometry of spatial phenomena – methods for storing raster data.
7. Data input, verification storage & output, Sources of geographical data. Geographical data collectors & providers Digitizer – Acquiring digital data sets from a data supplier. Creating digital data sets by manual input – data presentation.

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