# SHIVAJI UNIVERSITY, KOLHAPUR.



Accredited By NAAC with 'A' Grade
Revised Syllabus For

M. Phil./ Ph. D. Course Work

Geography

Syllabus to be implemented from June, 2020 onwards.

# FOR M. Phil./ Ph.D. Course Work: Geography (Introduced from June, 2020 onwards)

Paper: I

Title of Paper: Research Methodology, Quantitative Techniques, Computer Application

# **Objectives:**

- 1. Identify the objectives and significance of research in geography
- 2. Prepare schedule and questionnaire in geography
- 3. Collect data of physical and human elements
- 4. Tabulate data, formulate research design and represent data by using most appropriate methods
- 5. Effective writing, maintaining research ethics and academic integrity

#### **Total Marks:100**

## **Unit I: Introduction to Research Methodology**

15 hrs

Research Methodology: Sources and types of data. Methods of data collection. Sampling techniques. Hypothesis and its types, Planning of Research: Selection of a Problem for Research, Formulation of the Selected Problems, Research Design, Research communication: Writing review article, Research paper, Research project and Research Report and thesis.

# **Unit II: Measures of Central Tendency 15 hrs**

Centrographic techniques: mean, mode, median. Measures of dispersion and concentration: Range, quartile deviation, mean deviation, standard deviation; coefficient of variation, Lorenz Curve and Gini's Coefficient; location Quotient.

# Unit III:Correlation Analysis and Methods of Regionalization15 hrs

Correlation analysis and test of significance: correlation coefficient, T test, Chi square test, regression analysis, Methods of Regionalization: choice of indicators and measurement of development.

# Unit IV:Computer Applications, and Fundamentals of Remote Sensing and GIS in Geographical Research15 hrs

Computer applications in geography, remote sensing: fundamentals and application in research, GIS: mapping, data storage and analysis, Surveying with advance techniques

- 1. Arora P. N. & Arora S (1994): Foundation Course in Statistics, S. Chand and Company Ltd, New Delhi.
- 2. AslamMehmood (1976): Statistical Techniques in Geographical studies, Rajesh Publication, New Delhi.
- 3. Durrenberger, R. W. (1971): Geographical Research and Writing, Thomas Y. Cromwell & Co. New York
- 4. Gibbs, J. P (ed) (1966): Urban Research Methods, D Van Nostrand Co., Inc Princeton, New Jersey, New York.
- 5. Gregory, S. (1963): Statistical Methods and the Geographer, Longman, London
- 6. Hagget Peter (1990): Geography: Modern Synthesis. Harper International, New York
- 7. Hammond, R.&McCullagh P.(1974): Quantitative Techniques in Geography Clarendon Press, Oxford.
- 8. Haring, L. L. &Loundbury, J. F. (1975): Introduction to Scientific Geographic Research. W.C.BrowCompany,U.S.A
- 9. Haring, Lloyed(1975): Scientific Geographic Research. W.C.BrowCompany, U.S.A
- 10. Kothari, C.R.(1996): Research Methodology, VishwasPrakashan, New Delhi.
- 11. Lillesand& Kiefer (1994): Remote Sensing and Image Interpretation, John Wiley and sons Inc, New York
- 12. Mishra, R.P.(1991): Research Methodology in Geography, Concept Publising, New Delhi.
- 13. Pugh, Griffith Thomoson (1968): Guide to Research Writing, Houghton Miffin Boston, New York.
- 14. Saha, P. &Basu, P. (2006): Advanced Practical Geography, Books and allied Pvt. Ltd. Kolkata
- 15. Sarvanavel, P (1998): Research Methodology, KitabMahal, Allahbad.

# FOR M. Phil./ Ph.D. Course Work: Geography (Introduced from June, 2020 onwards)

Paper: II

Title of Paper: Recent Trends in Geography

# **Objectives:**

- 1. Acquire knowledge about the historical development of the subject during different time scales.
- 2. Apprehend the place of geography in the field of science, social science and natural science.
- 3. To acquainted with dualism and various types of scientific explanations in geography.

#### **Total Marks:100**

# **Unit I: Brief Disciplinary History**

10 hrs

Early origins, imperial influences and multi paradigmatic nature, professionalization and institutionalisation of geography.

# Unit II: Classical contributions to geographical thought

10 hrs

Greek, Roman, Indian, Arab; Geography Rethought: Varenius to Immanuel Kant.

# Unit III: Founders of modern geographical thought and their major contributions

#### 15 hrs

Alexander von Humboldt, Carl Ritter, Friedrich Ragzel, Vidal de la Blach, Halfford J. Mackinder, William Moris Davis, Ellen Churchill Semple; Schools of Geography: German, French, British, American and Russian.

# Unit IV: Modern approaches and trends

25 hrs

Quantitative Revolution, Humanistic Geography, Areal Differentiation, Exceptionalism in geography, Spatial analysis, Location analysis, Geography as a scientific discipline, Explanations in geography, Region and regionalism, Determinism and possibilism; Modern themes: Positivism, Radicalism, Behaviouralism, Globalization and Postmodernism.Geographical research, Theorisation and future of Geography: Applied geography and applied research, Deductive and Inductive methods, Prediction and prescription, Drivers of global relevance, Emerging subfields, Future of geography.

- 1. Ackerman, E.A. (1945): Geography as a fundamental Research Discipline, Chicago, University of Chicago, Dept. of Geography Research Paper No.53.
- 2. Baker, J N L (1955): The Geography of Bernhard Varenius, Tansanctions, Institute of British Geographers.
- 3. Bassin, M (1987a): Friedrich Ratzel 1844- 1904, In: Freeman, T W (ed.) Geographers Bibliographical Studies, Vol. II, London, Masell: 123-32.
- 4. Burton, I (1963): The Quantitative Geography and Theoretical Geography, The Canadian Geographer 7,: 151-62.
- 5. Dear, M. J. and Flusty, S. (2002): The Spaces of Postmodernity: Readings in Human Geography. Blackwell Publishers, Oxford.
- 6. Dickinson, R E (1969): The Makers of Modern Geography, London, Routledge and Kegal Pal.
- 7. Dikshit, R. D. (2004): Geographical Thought. A Critical History of Ideas. Prentice-Hall of India, New Delhi. (in English and Hindi).
- 8. Doel, M. (1999): Poststructuralist Geographies. The Diabolical Art of Spatial Science. Edinburgh University Press, Edinburgh.
- 9. Emery, F W (1984): Geography and Imperialism, the Role of Sir Bartle Frere (1815-84), Geographical Journal, 150, pp. 342-50.
- 10. Febvre, L (1925): A Geographical Introduction to History, London, Pal Trench Tubner.
- 11. Gaile, G. and Wilmott, C. (eds.) (2003): Geography in America at the Dawn of the 21st Century. Oxford University Press, Oxford and New York.
- 12. Gold J R ((1980): An Introduction of Behavioural Geography, Oxford, Oxford University, Press.
- 13. Hartshorn, Richard (1939): The Nature of Geography, the Association of AmericanGeographers, USA and Rawat Publications, Jaipur.
- 14. Hartshorne, Richard (1939): The Nature of Geography, Lancaster, Association of American Geographers. USA.
- 15. Hartshorne, Richard (1959): Perspective on Nature of Geography, Rand McNally, Chicago, USA.
- 16. Hartshorne, R (1958): "The Concept of Geography as a Science of Space from Kant and Humboldt to Hettner, "Annals Association of American Geographers, 48 (2): 97-108.
- 17. Hartshorne, R (1955): "Exceptionalism in Geography- Re- examined," Annals Association of American Geographers, 45 205 44.
- 18. Harvey, David (1973): Social Justice and the City, London, UK: Edward Arnold,.
- 19. Harvey, D. (1969): Explanation in Geography, London: Edward Arnold,
- 20. Harvey, M. E. and Holly, P.B. (2002): Themes in Geographic Thought. Rawat Publications,
- 21. Jaipur and New Delhi.
- 22. Harvey, D (1985): The Urbanization of Capital, Basil Blackwell, Oxford. (U.K)
- 23. Harvey, D (1989): The Condition of Post Modernity: An Enquiry into the Origins of Cultural Change, Basil Blackwell, Oxford.(U.K.)

- 24. Hempel, C. G. (1965) :Aspects of Scientific Explanation and Other Essays on the Philosophy of Science, Free Press, New York.
- 25. Hubbard, P., Kitchin, R. Bartley, B. and Fuller, D. (2002): Thinking Geographically: Space, Theory and Contemporary Human Geography, Continuum, London.
- 26. Husain, Majid (2001): Evolution of Geographical Thought (4th ed.), Rawat Publications, Jaipur.
- 27. Husain Majid (2007): Models in Geography, Rawat Publication, Jaipur.
- 28. Johnston, R., Gregory D., Pratt G, Watts M. and Whatmore S. (2003): The Dictionary of Human Geography. Blackwell Publishers, Oxford. 5th edition.
- Johnston, R.J. (1985): The Future of Geography, Metheun and Company Ltd., New York. Johnston, R.J. (1991): Geography and Geographers, Anglo-American Human Geography Since 1945 London: Edward Arnold.
- 30. Kapur, A. (ed.) (2001): Indian Geography Voice of Concern. Concept Publishing. Company, New Delhi.
- 31. Ley, D and Samuels M S (eds) (1978): Humanistic Geography, Prospects and Problems, London, Croom Helm.
- 32. Martin, G. (2005): All Possible Worlds. A History of Geographical Ideas. 4 edition, Oxford University Press, New York.
- 33. Peet, R. (1998): Modern Geographical Thought. Blackwell Publishers Inc, Massachusetts.
- 34. Shaefer, F. K. (1953): Exceptionalism in Geography: A Met6hodological Examination, Annals of Associations of American Geographers, 43, pp. 226-49.
- 35. Singh, R. L. and Singh, Rana P.B. (eds.) (1992): The Roots of Indian Geography: Search and Research. National Geographical Society of India, B.H.U., Varanasi, Publication Number 39.
- 36. Soja, E. (1989): Post-modern Geographies. Verso Press, London. Reprinted 1997: Rawat Publications, Jaipur and New Delhi.
- 37. Taylor, G. (ed.) (1953): Geography in the Twentieth Century. Methuen and Company Ltd. and Company, London.
- 38. Tuan, Yi-Fu (1977): Space and Place. The Perspective of Experience. Edward Arnold, London.
- 39. Singh, Ravi S (ed.) 2009. Indian Geography: Perspectives, Concerns and Issues. Jaipur / New Delhi: Rawat Publications.
- 40. Wilson, A G (1989): Mathematical Models and Geographic Theory, In: Gregory. D. and
- 41. Walford R (eds) Horizons in Human Geography, Basingstoke, Macmillan: 29-47.

# FOR M. Phil./ Ph.D. Course Work: Geography (Introduced from June, 2020 onwards)

**Paper – III: (Elective Paper)** 

**Total Marks** – **100**: (80 Marks for theory exam and for 20 Marks for presentation of review of published papers in National/ Internationals Journals for Ph. D. course work and 10 + 10 marks seminar and review of papers respectively for M. Phil. Course)

# Title of Paper: Recent Trends in Hydrology and Watershed Management

# **Objectives**

- 1. To understand basic of hydrology
- 2. To understand different watershed behavior.
- 3. Plan and design soil conservation measures in a watershed
- 4. Plan and design water harvesting and groundwater recharge structures
- 5. To be able to interpret runoff data and quantify erosion by using various modelling methods.

Unit I:

Hydrology as emerging discipline of earth science, Water budget equation, World water balance, Global Fresh water resources, Hydrological cycle: Man's intervention in hydrological cycle

Unit II:

Major components of hydrological cycle: precipitation, evapotranspiration, infiltration, surface and ground water runoff, Hydrograph: components and separation, Unit hydrograph, Stream flow measurement: Measurement of stage and velocity, Stage-discharge relationship, Rating curve, Factor affecting on runoff, basin yield, Rainfall-Runoff relationship, Geohydrology; Occurrence of ground water, Aquifer parameters, Ground water movement.

Unit III:

Watershed management: concept and history of watershed management, Watershed characterization, Classifications: Land Capability, Land Suitability, Land Use Land Cover, Integrated watershed management: Participatory approach, Policy Making, Principles of soil erosion- causes of soil erosion, types of soil erosion, estimation of soil erosion from small watersheds, Control of soil erosion, Methods of soil conservation – structural and non-structural measures, Soil Erosion models

Unit IV:

Rainwater harvesting: Potential and Methods, Water resources models – Rainfall runoff modelling – Groundwater modeling – Water quality modeling - Flood inundation mapping and modelling – Drought monitoring – Cropping pattern change analysis - Site selection for artificial recharge - Reservoir sedimentation, Use of RS and GIS in watershed Management.

- 1. Allam, Gamal Ibrahim Y., Decision Support System for Integrated Watershed Management, Colorado State University, 1994.
- 2. Am. Soc. Of Agri. Engr., Hydrologic Modeling of Small Hydrologic Modeling of Small Watersheds, Am. Soc. Agri. Eng., Michigan, 1982.
- 3. American Soc. of Civil Engr., Watershed Management, American Soc. of Civil Eng, ,ineers, New York, 1975.
- 4. Black Peter E., Watershed Hydrology, Prentice Hall, London, 1991.
- 5. Bedient, Philip B. and Huber, Wayne Charles 2002. Hydrology and Floodplain Analysis. Prentice Hall, Englewood Cliffs NJ.
- 6. Bilas,Ram.,RuralWaterResource Utilization andPlanning.ConceptPublishingCompany,New Delhi. 1988.
- 7. Chow, VenTe.,. Handbook of Applied Hydrology: A Compendium of Water Resources Technology.McGrawHill,NewYork, 1964.
- 8. Chow, VenTe; Maidment, David R. and Mays, Larry W., Applied Hydrology. McGraw-Hill, New York, 1988.
- 9. Fetter, C. W., Applied Hydrogeology. Pearson Education, San Francisco, 2001.
- 10. Gopallyer, K.,v& Roy U.N., (Eds.), Watershed Management & Sustainable Development, Kanishka Publishers, , New Delhi, 2005.
- 11. Heathcote, I.W., Integrated Watershed Management Integrated Watershed Management- Principles and Practice, Jown Wileyv& Sons, London, 1998.
- 12. Krešić, Neven., Groundwater Resources: Sustainability, Management, and Restoration. McGraw Hill Professional, New York. 2008.
- 13. Michael A.M., Irrigation Engineering, Vikas Pub. house, 1992.
- 14. Murty, J.V.S. Watershed Management, New Age Intl., New Delhi 1998.
- 15. Purandare, A.P., Jaiswal A.K., Watershedsv Development in India, NIRD, Hyderabad, 1995.
- 16. Rai, Vinay K., Water Resource Planning and Development. Deep and Deep Publication, New Delhi, 1993.
- 17. Rajesh Rajora, Integrated Watershed Management, Rawat Publication, New Delhi, 1998.
- 18. Reddy, J.P., ATextbook of Hydrology. Lax mi Publication., New Delhi. 4<sup>th</sup> edition, 1988.
- 19. Schwartz, Franklin W. and Zhang, Hubao Fundamentals of Ground Water. Wiley Science, Chichester UK, 2003.
- 20. Singh, M.B. Climatologyand Hydrology. TaraBook Agency, Varanasi. (In Hindi). 1999.
- 21. Ward, R.C. and Robinson, M. Principles of Hydrology. McGraw Hill, New York. 2000.
- 22. Vir Singh, Raj, Watershed Planning and Watershed Planning and Wanagement, Yash Publishing House, Bikaner, 2000.
- 23. Paul A. Debarry., Watershed, Processes, v Assessment & Management, Wiley London 2004 Wiley, London, 2004.

# FOR M. Phil./ Ph.D. Course Work: Geography (Introduced from June, 2020 onwards)

**Paper – III: (Elective Paper)** 

**Total Marks** – **100**: (80 Marks for theory exam and for 20 Marks for presentation of review of published papers in National/ Internationals Journals for Ph. D. course work and 10 + 10 marks seminar and review of papers respectively for M. Phil. Course)

# Title of paper: Recent Trends in Economic Geography

# **Objectives:**

- 1. To get acquainted with theories and models in economic geography
- 2. To get comprehensive knowledge of World energy resources, situation and distribution
- 3. To understand transport and Trade policies of country
- 4. To get detail knowledge of economic power determinants of country and able to analyze the economic development of country.

**Total Marks: 100** 

# **Unit I: Basics of Economic Geography**

15 hrs

Nature and scope of Economic Geography, Basis of economic processes: Production, exchange & consumption, Elements of a Market Place: Sellers and Consumers, Goods and Services, World economic development, Special Economic Zones. Development of EPZ and SEZ, Land reforms in India.

# **Unit II: Energy Resources**

10 hrs

World energy situation and distribution; Sources of Energy: Coal, Oil, Natural gas and Nuclear energy, OPEC-energy crisis.

#### **Unit III: Industrial Geography**

15 hrs

Nature and scope of Industrial Geography, Linkage in Industries, Principles of Industrial Location: Profit maximization, Least cost location- A. Weber & A. Losch, Industrial regionalization, Analysis of Industrial Intensity: Location Quotient, Location Co-officient, Location Curve, Impact of Globalization and Problems of Industrialization; Environmental Impact of Industrialization, New industrial policies of India.

# **Unit IV: Transportation & Trade**

20 hrs

Modes of transportation, Accessibility and connectivity; Interregional and Intraregional: Ullman's tried- Complementarily- Intervening Opportunity- Transferability, Concept of Gravity Model and Spatial Interaction. Theories Related to Freight Determination Trade Policy, patterns of world trade, Regional Trade blocks EEC, WTO.

- 1. Alexander J.W. (1976): Economic Geography, Prentice Hall of India. New Delhi.
- 2. Alexanderson G. (1988): Geography of manufacturing, Prentice Hall of India. New Delhi.
- 3. Berry, Conkling & Ray (1988): Economic Geography Prentice Hall of India, New Jersey.
- 4. Hurst Elliott (1986): Geography of Economic Behaviour, Unwin, London.
- 5. Johnson R.J. & Taylor D.J. (1989): A world in crisis, Basil-Blackwell, Oxford.
- 6. Losch (1954): Economics of Location, Yale University Press New York.
- 7. Redcliff, M. (1987): Development & the environmental crisis. Methuen. London.
- 8. Sinha B.N.(1971): Industrial geography of India
- 9. Watts H.D. (1987): Industrial Geography, Longman scientific and Technical, New York.
- 10. Haggett, Peter: Modern Synthesis in Geography.
- 11. Robinson H &Bamford C. G. (1978): Geography of Transport, Macdonald & Evans USA.
- 12. Misra R. P.: Regional Planning, concepts, New Delhi.
- 13. Jones & Darkenwald: Economic geography

# FOR M. Phil./ Ph.D. Course Work : Geography (Introduced from June, 2020 onwards)

**Paper – III: (Elective Paper)** 

**Total Marks** – **100**: (80 Marks for theory exam and for 20 Marks for presentation of review of published papers in National/ Internationals Journals for Ph. D. course work and 10 + 10 marks seminar and review of papers respectively for M. Phil. Course)

# Title of paper: Recent Trends in Settlement Geography

# **Objectives:**

- 1. To study the fundamentals of settlement geography
- 2. To understand the approaches to rural settlement geography; rural services; hierarchy; morphology etc.
- 3. To know the concept and processes of urban settlement studies; urban problem & their planning; concept smart cities, urban agriculture, etc.
- 4. To study the theories and models of settlement geography to understand the structure of settlements.

#### **Total Marks: 100**

#### Unit I: Introduction 10 hrs

Nature, scope and significance of Settlement Geography, The dichotomy of settlement: rural and urban, Spacing, dispersion, localization, Site, and situation of human settlements, Westernization, cultural urbanization

15 hrs

#### Unit II: Rural Settlements

Histrogenesis and Morphogensis of Rural Settlement, Indian villages- multiplicity, regional characteristics, transformation of Indian villages, India: Rural house types, social segregation, Census categories of rural settlements, Rural planning and challenges.

## Unit III: Urban Settlements 20 hrs

Concept and processes of urbanization, suburbanization, Indian urbanization: characteristics and Rural-urban linkages in a metropolitan system. Trends of urbanization in India, Conurbation, Concept of smart city, Garden city movement, Urban agriculture, role of geographer in urban planning, urban challenges.

# Unit IV: Theories and Models in Settlement Geography 15 hrs

Morphology of the settlements: Classical models-Burgess, Homer Hoyt, Harris and Ullman, Metropolitan concept. 3. City-region and Conurbation 4. Functional classification of cities: Harris, Nelson and Mackenzi

- 1. Carter, H. (1975): The study of urban geography. Edward Arnold, London.
- 2. David, P., Hopkinson M. (1983): The Geography of Settlements, Oliver & Boyd; 2<sup>nd</sup> Revised edition.
- 3. Deniel, P. (2002): Geography of Settlements. Rawat Publications, Jaipur and New Delhi.
- 4. Gosh, S. (1998): Introduction to Settlement Geography. Orient Longman.
- 5. Haggett, Peter (1991): Geography-A Modern Synthesis, Harper & Row, New York.
- 6. Hornby, WF., Jones M. (1991): An Introduction to Settlement Geography. Cambridge University Press.
- 7. Johnston, J.H. (1974): Urban Geography, Pergoman Press, Oxford.
- 8. Johnston, R, J. (1984): City & Society. Unwin, London.
- 9. King, L.J., Golledge R.G. (1978): Cities, Space & Behavior, Prentice Hall, Engle wood cliff, New Jersey.
- 10. Mandal, R.B. (2000): Urban Geography, Concept Publishing Co., New Delhi.
- 11. Mayer, H.M., Cohen (1967): Readings in Urban Geography, Central Book Depot. Allahabad.
- 12. Mosely, M.J. (2005): Rural Development: Principles and Practice. Sage Publication, London.
- 13. Northamray, M. (1975): Urban Geography, John Willey & Sons, New York.
- 14. Pacione, M. (2009): Urban Geography-A Global Perspective. 3rd edition. Routledge, London.
- 15. Ramachandran, R. (1991): Urbanization and Urban Systems in India, Oxford Uni. Press. Delhi.
- 16. Robinson, Brian T. (1973): Urban growth, Mathuen& Company, London.
- 17. Rykwert, J. (2004): Settlements. University of Pennsylvania Press, University Park, USA.
- 18. Sidhartha, K. and Mukherjee, S. (2000): Cities-Urbanizations & Urban Systems. Kisalaya Pub. Pvt. Ltd., New Delhi.
- 19. Singh, RY. (1994): Geography of Settlements. Rawat Publications. New Delhi, Jaipur.
- 20. Singh, R.L. (eds.) (1973): Rural Settlements in Monsoon Asia, National Geographical Society of India, Varanasi.
- 21. Singh, R. L., Singh, K.N. and Singh, Rana P.B., (eds.) (1975): Readings in Rural Settlement Geography, National Geographical Society of India, Varanasi.
- 22. Singh, R. L. and Singh, Rana P. B. (eds.) (1978): Transformation of Rural Habitat in Indian Perspective, National Geographical Society of India, Varanasi, Pub. 19.
- 23. Singh, R.L. and Singh, Rana P.B., (eds.) (1979): Place of Small Towns in India. National Geographical Society of India, Varanasi.
- 24. Singh, R.L., Singh, K.N and Singh Rana P.B., (eds.) (1976): Geographic Dimensions of Rural Settlements. National Geographical Society of India, Varanasi.

- 25. Wood, M. (2005): Rural Geography: Processes, Responses and Experiences of Rural Restructuring. Sage Publication, London.
- 26. Yeates& Garner (1971): Readings in Urban Geography. The North American City. Harper & Row. New York

# FOR M. Phil./ Ph.D. Course Work: Geography (Introduced from June, 2020 onwards)

**Paper – III: (Elective Paper)** 

**Total Marks** – **100**: (80 Marks for theory exam and for 20 Marks for presentation of review of published papers in National/ Internationals Journals for Ph. D. course work and 10 + 10 marks seminar and review of papers respectively for M. Phil. Course)

# Title of paper: Recent Trends in Geography of Population & Human Resource Development

**Course outcome:** After completing the course, the students will develop an aptitude to:

- 1. Infer factors influencing population distribution and density;
- 2. Establish relationship of social sciences with population geography;
- 3. Attain skill to describe regional patterns of population change and composition;
- 4. Figure out and explore fertility, mortality and migration for micro, meso and macro regions;
- 5. Compute and analyse regional variations in the human development levels;
- 6. Understand and create awareness about provincial aspects of gender equity, social well-being and quality of life.

# **Unit I: Sources of Population data and Population Processes**

History, meaning, nature, scope and significance of Population Geography; relationship of other social sciences with population geography; Population trends & distribution patterns: causes and consequences, global perspective; history of population in India; Population composition and change: India and States-Demographic, Socio-Cultural, Economic, Health; Sources of population data: primary and secondary. Fertility, Mortality and Migration: concepts, types, patterns, determinants and consequences-World & India; Population policies in developed and developing countries.

#### **Unit II: Methods of Population Analysis**

10 hrs

20 hrs

Rate of population growth: Arithmetic & exponential; measures of population distribution and concentration; population pyramid; Period and cohort measures of fertility; direct and indirect methods of mortality estimation; direct and indirect measures of Migration.

#### **Unit III: Human Resource Development**

20 hrs

Concepts of human development, social development, sustainable development; four pillars and approaches of human development; education, health and resources as indicators of development; Human Development Index (HDI), Social Development Index (SDI), Gender Development Index (GDI), Human Poverty Index (HPI).

# **Unit IV: Methods of Human Resource Development Analysis**

10 hrs

Ranking Methods, Standardization, Maximum-Minimum Method, Principal Component Analysis (PCA), Regression Analysis, Weighting methods.

- Barclay, George W (1958): Techniques of Population Analysis, John Wiley & Sons, New York
- 2. Barrett H.R.(1992): Population Geography, Oliver and Boyd Longman House, Harlow.
- 3. Bhende A., Kanitkar T. (2006): *Principles of Population Studies*, Himalaya Publishing House, Bombay. 18th revised.
- 4. Birdsell N., Kelley A.C., Sinding S. (2003): *Population Matters: Demographic Change, Economic Growth and Poverty in Developing Countries*. Oxford University Press.
- 5. Bogue, Donald (1969): Principles of Demography, John Wiley, New York.
- 6. Bruce Newbold, K. (2010): *Population Geography: Tools and Issues*, Rowman& Littlefield Publishers, Inc., UK.
- 7. Chandana, R.C. (1984): Geography of Population, Kalyani Publisher, Ludhiana.
- 8. Dyson T. (2010): *Population and Development: Demographic Transition*, Zed Books Ltd.; 1st edition.
- 9. Ehrlich, P.R. and Ehrlich, A.H. (1996): *Ecoscience: Population, Resources, Environment,* 6th edition, W.H. Freeman and Company, San Francisco.
- 10. Gould WTS. (2009): Population and Development: Routledge Perspective on Development, Routledge: 1st edition.
- 11. Davis K. (1951): Population of India and Pakistan, Princeton University Press, Princeton.
- 12. Newell C. (1990): Methods and Models in Demography, Guilford Press; 1st edition.
- 13. Pacione M. (2011): Population Geography: Progress and Prospects, Routledge; Reissue edition.
- 14. Peters G.L., Larkin R.P. (2008): *Population Geography: Problems, Concepts and Prospects*, 9th edition. Dubuque, IA: Kendall Hunt Publishing.
- 15. Preston S., Heuveline P., Guillot M. (2000): *Demography: Measuring and Modelling Population Processes*, Wiley-Blackwell; 1st edition.
- 16. Rowland DT. (2003): Demographic Methods and Concepts, Oxford University Press, USA.
- 17. Swanson DA., Siegel JS. (2004): *Methods and Materials of Demography*, Emerald Group Publishing; 2nd edition.
- 18. Smith, T.L (1960): Fundamental of Population Studies, Lipineott, London.
- 19. Weeks JR. (2004): *Population: An Introduction to Concepts and Issues*, Wadsworth Publishing; 9th edition.
- 20. Woods, R. (1979): Population Analysis in Geography, Longman, London.

## Journals:

Demography: https://link.springer.com/journal/13524

Journal of Population Research: https://link.springer.com/journal/12546

International Migration Review: <a href="https://journals.sagepub.com/home/mrx">https://journals.sagepub.com/home/mrx</a>

Population and Environment: <a href="https://link.springer.com/journal/11111">https://link.springer.com/journal/11111</a>

Population Bulletin: https://www.prb.org/population-bulletins/

Population Development Review: https://onlinelibrary.wiley.com/loi/17284457

Population, Space, and Place: https://onlinelibrary.wiley.com/journal/15448452

Population Studies: https://www.tandfonline.com/loi/rpst20

The Professional Geographer: https://www.tandfonline.com/loi/rtpg20

Studies in Family Planning: https://onlinelibrary.wiley.com/journal/17284465

# **Useful websites:**

Census of India: <a href="http://censusindia.gov.in/">http://censusindia.gov.in/</a>

Population Council: <a href="https://www.popcouncil.org/">https://www.popcouncil.org/</a>

Population Reference Bureau: www.prb.org

United Nations Development Program: <a href="http://hdr.undp.org/en/">http://hdr.undp.org/en/</a>

World Bank: www.worldbank.org

# FOR M. Phil./ Ph.D. Course Work : Geography (Introduced from June, 2020 onwards)

**Paper – III: (Elective Paper)** 

**Total Marks** – **100**: (80 Marks for theory exam and for 20 Marks for presentation of review of published papers in National/ Internationals Journals for Ph. D. course work and 10 + 10 marks seminar and review of papers respectively for M. Phil. Course)

# Title of paper: Recent Trends in Agricultural Geography

# **Objectives:**

- 1. To educate students about nature, scope and significance of agricultural geography as an academic and professional discipline.
- 2. To understand the fundamental concept, crop combination, diversification, agricultural productivity and study the determinants of agricultural patterns.
- 3. To get knowledge about agricultural systems of the world.
- 4. To understand the agrarian revolution, socio-economic constraints, agricultural problems and policies

#### **Total Marks: 100**

# Unit I: Introduction to Agriculture Geography15 hrs

Nature and scope of agricultural geography, Approaches to the study of agricultural geography, Determinants of agricultural Patters – Physical and Non-Physical Determinants, Agricultural geography as a research discipline, Data Sources, and techniques in agricultural Geography.

# **Unit II: Agricultural Regionalization 15 hrs**

Concept of agricultural region and bases of agricultural regionalization, Whittlessey's classification of Agricultural systems of the world.

# Unit III: Concepts, Theories & Modelsin Agricultural Geography 15 hrs

Concept of agricultural productivity and efficiency, Concept of land use/land cover, Agricultural land use- land capability classification and land use planning for agricultural development, Theories & models in agricultural geography

#### Unit IV: Agricultural Development and Green Revolution in India15 hrs

Green revolution in India, Impact of green revolution in India, Green revolution and regional imbalances. Problems of Indian agriculture, Measures for Agricultural development, Concept of second green revolution in India, Sustainable Agricultural Development.

- 1. Griggs, D.G. (1964): An Introduction to Agricultural Geography.
- 2. Gregor H.F.(1970): Geography of Agriculture; Themes in Research. Prentice Hall Englewood Cliff. London.
- 3. Ilbury B.W.(1983): Agricultural Geography. Oxford University Press, London.
- 4. Mohammed A.(1978): Studies in agricultural Geography, Rajesh Pub. New Delhi.
- 5. Morgan W.B. (1978): Agriculture in the third world Methuen, London.
- 6. Morgan W.B. & Muton R.C.(1971): Agricultural Geography, Mathuen, London.
- 7. Singh Jasbir&Dhillon S.S (1970): Agricultural Geography, New Delhi.
- 8. Tarrant J.R.(1974): Agricultural Geography, Newton, Abbot.
- 9. Chorley & Haggett P.(1971): Socio-Economic Models in Geography, London. Methuen.
- 10. Former B.H.(1977): Green Revolution., London, Macmillan.
- 11. Grigg, D.B.(1973): The Agricultural systems of The World, Cambridge University Press.
- 12. Hagerstrand, T.(1968): Innovation Diffusion as a spatial process, University of ChicagoPress.
- 13. Hussain Majid (1999):Systematic Agricultural Geography, Rawat publications, Jaipur.(India)
- 14. Shfi M. (1983): Agricultural Productivity and regional Imbalances a Study of Uttar Predesh, Concept, New Delhi.
- 15. Symon, L. (1968): Agricultural Geography, London.
- 16. Mohammad Noor: Perspective in Agricultural Geography, Six Volumes.
- 17. Shfi M. (1978): Agricultural Productivity and regional Imbalances, concepts. Delhi.

# FOR M. Phil./ Ph.D. Course Work: Geography (Introduced from June, 2020 onwards)

**Paper – III: (Elective Paper)** 

**Total Marks** – **100**: (80 Marks for theory exam and for 20 Marks for presentation of review of published papers in National/ Internationals Journals for Ph. D. course work and 10 + 10 marks seminar and review of papers respectively for M. Phil. Course)

# Title of Paper: Recent Trends in Geography of Health and Human Nutrition

# **Objectives:**

- After completing the course, the students will develop an aptitude to:
- 1. Acquaint the students with the role of geographical factors, viz., physical, demographic, social and economic, influencing human health and spatial distribution of diseases;
- 2. Highlight the relation of health with nutrition, diet and nutrients;
- 3. Decipher the causes of the changing disease pattern, and
- 4. Make the students abreast of existing health-care facilities, so as to train them with better health care planningfor the country.
- 5. Compute and analyse nutritional status of population.

#### **Total Marks: 100**

#### Unit I: Introduction 10 hrs

Nature, scope and significance of geography of health; Geographical factors affecting human health with special reference to physical, social, economic, environmental and diseases arising from them; Epidemiological Transition.

# **Unit II: Classification of Diseases 15 hrs**

WHO Classification of diseases: genetic, communicable and non-communicable; occupational and nutritional deficiency diseases; Pattern of World distribution of major diseases; disease ecology and transmission of diseases: cholera, malaria, cardiovascular, cancer, AIDS, STDS and COVID-19; Health care systems, National Family Surveys and Health for all programs in India

## **Unit III: Human Nutrition 15 hrs**

Food groups: balanced diet, food pyramid, macro and micro nutrients; Nutrients: role of nutrients in the body, nutrient deficiencies and requirements for Indians, Deficiency disorders and problems of micro and meso nutrients; Nutrition through life span: physiological changes, growth and development; nutritional needs and dietary guidelines for adequate nutrition through life cycle.

# Unit IV: Methods of analysis 20 hrs

Measures of concentration and distribution; PCA, Regression analysis; Methods and techniques of nutritional assessment: dietary methods of accessing nutritional status, observed food consumption, food frequency questionnaire, weighted mean, composite index methods.

- 1. Brown et.al eds(2010): A Companion to Health and Medical Geography, London, Blackwell.
- 2. Cliff, A. and Haggett, P. (1989): Atlas of Disease Distribution. Basil Blackwell, Oxford.
- 3. Curtis, S &Taket, A. (1996): Health and Societies: Changing Perspectives, London, Arnold.
- 4. Digby, A. and Stewart, L. (eds.) (1996): Gender, Health and Welfare. Routledge, New York.
- 5. Eastwood, Martin (2003): Principles of Human Nutrition Oxford, Blackwell.
- 6. Gatrell, A.C. (2002): Geographies of Health, Oxford, Blackwell.
- 7. Gopalan B.V et.al (1989): Nutritive value of Indian food, NIN, ICMR, Hyderabad
- 8. Hazra, J. (ed.) (1997): Health Care Planning in Developing Countries. University of Calcutta, Calcutta, 1997.
- 9. Jones, K. and Moon, G. (1987): Health, Disease and Society: An Introduction to Medical Geography, London, Routledge and Kegan Paul.
- 10. Kearns, R. A. and Moon, G. (2002): From medical to health geography: Novelty, place and theory after a decade of change. Progress in Human Geography 26, 605 625.
- 11. Kitchin, Rob (eds) (2009): International Encyclopedia of Human Geography, 1st edition, Vol. 5, London, Elsevier
- 12. Learmonth A.T.A. (1979): Patterns of Disease and Hunger. A Study in Medical Geography. David & Charles, Victoria, 1978.
- 13. May, J.M. (1959): Ecology of Human Disease, M.D. Pub., New York, 1959.
- 14. McGlashan N.D. &B'unden Y.R. (1983): Geographical Aspects of health, Academic press, London.
- 15. Meade, Milinda& Michael Emch 3<sup>rd</sup>ed. (2010): Medical Geography, London, Guilford Press.
- 16. Moon, G. (1995): Replacing research on health and health care. Health and Place 1, 1 4.
- 17. Park, K. (2019): Preventive and Social Medicine, Bhanot Publishers. Jabalpur.
- 18. Parr, H. (2002): Medical geography: Diagnosing the body in medical and health geography, 1999 2000. Progress in Human Geography 26, 240 251.
- 19. Philips D.R. (1981): Contemporary issues in Geography of health Case GeoBooks, Norwick.
- 20. Phillps, D.R. (1990): Health and Health Care in the Third world. Longman, London, 1990.
- 21. Rais, A. and Learmonth, A.T.A.: Geographical Aspects of Health and Diseases in India.
- 22. Shannon G.W. & Dever G.E.A. (1974): Health care Delivery McGraw Hill New York.
- 23. Shannon, G.M. et. al (1987): The Geography of AIDS. Guilford Press, New York, 1987.

- 24. Smith, S. and Easterlow, D. (2005): The strange geography of health inequalities. Transactions of the Institute of British Geographers 30, 173 190.
- 25. WHO (1996) Preparation and use of food-based dietary guidelines, Report of a Joint FAO/WHO Consultation, Geneva, World Health Organisation, 1996 (WHO Technical Report Series, No. 880)

# Websites:

*Global Nutritional Report:* https://globalnutritionreport.org/reports/global-nutrition-report-2018/

National Digital Library of India: https://ndl.iitkgp.ac.in/ National Health Programs, India: https://nhm.gov.in/

WHO International Classification of Diseases: https://www.who.int/classifications/icd/en/

# FOR M. Phil./ Ph.D. Course Work: Geography

(Introduced from June, 2020 onwards)

**Paper – III: (Elective Paper)** 

**Total Marks** – **100**: (80 Marks for theory exam and for 20 Marks for presentation of review of published papers in National/ Internationals Journals for Ph. D. course work and 10 + 10 marks seminar and review of papers respectively for M. Phil. Course)

# Title of Paper: Recent Trends in Tourism Geography

# **Objectives:**

- 1. To understand the concepts and components in tourism geography
- 2. To get comprehensive knowledge of different types of infrastructure and tourism
- 3. To know about pattern & tourism in the world and impact of globalization
- 4. To understand different elements of marketing in tourism
- 5. To get detail knowledge about planning process in tourism

#### **Total Marks: 100**

# **Unit I: Introduction to Tourism Geography**

15 hrs

Nature, Scope and development of Tourism Geography, Changing definitions of tourism; Various tourist classification schemes, Concept of tourists cape, tourism typologies, Tourism infrastructure and superstructures, Concept of tourist accessibility and walkability.

#### **Unit II: Fundamental Tourism Theories and Approaches 15 hrs**

Theories of Travel Motivation: Socio-psychological models of Crompton and Iso-Ahola. Doxey's Irritation Index Model. Butler's Tourist Area Life Cycle Model. Hall's Theory of Tourism Market System. Postmodern approaches in Tourism Geography.

# Unit III: Tourism, Inequality and Development

20 hrs

The Tourism-Development Dilemma: Ecological impacts of Tourism, Tourism, vulnerability and global environmental change. Globalization, Neoliberal tourism and socio-cultural change. Tourism and Justice- social and environmental: Tourism-Poverty nexus. Postcolonial hegemony and tourism, Tourism planning and management - Concepts and approaches of tourism planning and policy, Concept of tourism planning.

# Unit IV: Research Methodology for Tourism10 hrs

Recent development in tourism research, Quantitative techniques in tourism research, New concepts in tourism research.

- 1. Lajipathi, Rai (1993) Development of Tourism in India Print Jaipur.
- 2. A.K.Bhatia (1983) Tourism Development Principles and Practices, Sterling Publishers Pvt.,Ltd.
- 3. EngoneFoder William Cuntis (1975) Fodors India 1975: Hodder and Stoughton.
- 4. Hall, CM and Page, SJ. The Geography of Tourism and Recreation, Routledge.
- 5. Sinha, P.C. Tourism Geography, Anmol Publication.
- 6. Dixit, M. Tourism Geography and Trends, Royal Publication.
- 7. International Atlas, Penguin Publication and DK Publications.
- 8. Bhatia, A.K. (1978): Tourism in India. Sterling pub. New Delhi.
- 9. Burkarl, A.J. (1974): Tourism, Past, present and future Heineman London.
- 10. Gearing Charles, E. (1976): Planning for Tourism development Praeger Pub, New York
- 11. Lawbon, F & Bauet B. (1977): Tourism and recreation Development mass, CBI pub.
- 12. Lundberg, D.E. (1996): The Tourist Business cenners Books. Internationa, Boston.
- 13. Robinson H. (1976): A Geography of Tourism. Mac Donald and Evans Ltd; London.
- 14. Douglas, Pearce (1981): Topics in Applied Geography, Tourist Development. Longman london New York.