UNIVERSITY OF MUMBAI

No. UG/700f 2018-19

CIRCULAR:-

Attention of the Principals of the Affiliated Colleges, the Head University Departments and Directors of the recognized Institutions in Humanities Faculty is invited to this office circular No. UG/121 of 2015-16, dated 24th November, 2015 relating to syllabus of Ph.D. Course Work.

They are hereby informed that the recommendations made by the Board of Studies in Geography at its meeting held on 2nd May, 2018 have been accepted by the Academic Council at its meeting held on 5th May, 2018 <u>vide</u> item No. 4.30 and that in accordance therewith, the revised syllabus of six months Ph.D. Course work in Geography has been brought into force with effect from the academic year 2018-19, accordingly. (The same is available on the University's website <u>www.mu.ac.in</u>).

MUMBAI – 400 032 6th June, 2018 To (Dr. Dinesh Kamble)
I/c REGISTRAR

The Principals of the affiliated Colleges, the Head, University Departments and Directors of the recognized Institutions in Humanities Faculty. (Circular No. UG/334 of 2017-18 dated 9th January, 2018.)

A.C/4.30/05/05/2018

No. UG/ 70-A of 2018

MUMBAI-400 032

6 th June, 2018

Copy forwarded with Compliments for information to:-

- 1) The I/c Dean, Faculty of Humanities,
- 2) The Chairman, Board of Studies in Geography,
- 3) The Director, Board of Examinations and Evaluation,
- 4) The Director, Board of Students Development,
- 5) The Co-Ordinator, University Computerization Centre,

(Dr. Dinesh Kamble)
I/c REGISTRAR

Paper I: Research Methodology and application of techniques in Geography

- 1. Defining Research- importance of geographical research- types of research in geography.
- 2. Research design and literature review
- 3. Research Hypothesis, Selection of sample and Sampling techniques
- 4. Nature and Type of Geographical data Sources and Methods of data collection.
- 5. Analytical techniques in Geography for data analysis- Traditional and Contemporary.
- 6. Principles in Report Writing

- 1) . Karlekar Shrikant and Kale Mohan (2005): Statistical analysis of Geographical data, Dimond publication
- 2) Burt, J.E. and Barber, G.M.(1996): Elementary statistics for Geographers, The Guilford press, New York.
- 3) Clark, W.A.V. and Hosking, P.C(1986): Statistical Methods for Geographers, John Wiley & Sons, New York.
- 4) Dickinson, G.C.(1977): Statistical Mapping and presentation of statistics, Edward Arnold limited London.
- 5) Ebdon David (1989): Statistical for Geographers
- 6) Geoge Joseph (2003): Fundamental of Remote Sensing, Universities Press, Hyderabad.
- 7) Gregory, S.(1963): Statistical Methods and Geographer Longman Group Ltd; London
- 8) Keates, J.S.(1973) : Cartographic design and production 2ndEdn;. Longman group Limited, London.
- 9) Keates, J.S.(1996): Understanding Maps, 2ndEdn; Longman group limited, London.
- 10) King, (1975): Statistical Geography
- 11) Maling .H. (1973): Co ordinates systems and map projections, George Philip, London.
- 12) Maslov A. V.Gordeev A. V. Batrakov Yu. G. (1984): Geodetic surveying, Mir Publishers, Moscow
- 13) Monmonier, Mark S.(1982): Computer Assisted Cartography: Principals & prospects, Pprentice Hall, Inc, London.
- 14) Norcliff, G.B.(1982) Inferential Statistics for Geographers Hutchinson, London.
- 15) Norcliffe G. B. (1977): Inferential statistics for Geographers (Hutchinson, London)
- 16) P. A. Burrough and R.A. McDonnell (2000): Principle of Geographical Information System, Oxford
- 17) Robinson, A.H.et al.(1985): Elements of Cartography, Vol.VI, John Wiley and Sons, New York.
- 18) Shaw G and Wheller D. (1985): Statistical techniques in geographical analysis. John Wiley and sons,
- 19) Sumner G J (1978): Mathematics for physical geographers. Edward Arnols
- 20) Taylor, P.J.(1977): Quantitative Methods in Geography. Houghton Mifflim Company, Boston University Press.
- 21) Yeates, M. (1974). An Introduction to Quantitative Analysis in Human Geography, McGraw Hill, New York.
- 22) Wicox, R.R.(2003): Applying Contemporary Statistical Techniques Academic press, Amsterdam.
- 23) Wilsons, A.G. &Bennet, R.J.(1985): Mathematical Methods In Human Geography And Planning, John

Paper II: Recent Trends in Geography:

- 1. Recent trends of development in geography during 20th Century-
- 2. Geography as a study of spatial organization, structure, pattern and processes.
- 3. Geography as an empirical an analytical science- Processes and form in physical geography-environment and regional geography-approaches to systematic human geography.
- 4. Postmodernism and human geography: Era of globalization and restructuring of world economy.
- 5. Measuring levels of development- indicators of development- identifying spatial inequality in development levels in world and within India.
- 6. Welfare approaches in geography Radical geography- Marxism and Marxist geography- political-social, economic, environmental perspective in geography.

References:

Adams, W.M. (1990): Green Development, Environment and Sustainability in the Third World, Routledge, London.

Chapman, K. (1979): people, Pattern and Process, Arnold Heinemann.

Chorley, R. J. and Haggett, P (eds) (1967): Models in Geography, Mathuen, London. (U.K.)

Cole, J.P. (1981): development gap, John & Wiley an dSons.

Deskins, D.R.(jr), Kish, G., Nystuen, J.D. and Olsson G. (1977): Geographic Humanism, Analysis and Social ASction, Michigan University.

Gregory, D.(1978): Ideology, Science and Human Geography, Macmillan.

Haggett, P. (1965): Locational Analysis in Human Geography, Edward Arnold, London. (U.K.)

Hartshorn, Richard (1939): The Nature of Geography, the Association of American Geographers, USA and Rawat Publications, Jaipur.

Hartshorne, R (1958): "The Concept of Geography as a Science of Space from Kant and Humboltt to Hettner," Annal, s Association of American Geographers, 48 (2): 97-108.

Harvey, David (1969): Explanations in Geography, Edward Arnold, London, UK. • Harvey, David (1973): Social Justice and the City, Edward Arnold, London, UK.

Harvey, D (1989): The Condition of Post Modernity: An Enquiry into the Origins of Cultural Change, Basil Blackwell, Oxford.(U.K.)

Husain, Majid (2001): Evolution of Geographical Thought (Fourth en.), Rawat Publications, Jaipur.

Knox, p. et.al., (1989): The Geography of the World Economy, Arnold.

Peet, Richard (ed.)(1977): Radical Geography: Alternative Viewpoints on Contemporary Social Issues, McThuen, London.

Peet, R.(1998): Modern Geographical Thought, Blackwell.

Singh, L.R. (2008) Fundamentals of Human Geography, Sharda Pustak Bhawan, Allahabad.

Soja, Edward W.(1997): Postmodern Geographies: The Reassertation of Space in Critical Social Theory (Indian en.) Rawat Publications, Jaipur.

Unwin, T. (1992): the Place if Geography, Longman.

Paper III: Applied Geography (choose any one from the following)

A.Recent trends in Geomorphology:

- 1. Recent development in geomorphology- conceptual and contextual
- 2. Processes in Geomorphology: Aeolian, fluvial and glacial.
- 3. Forces of crustal instability: Isostasy, Plate tectonics, Seismicity and vulcanicity.
- 4. Concept of gradation: Types and classification of weathering, mass wasting cycle of erosion Davis and Penck.
- 5. Morphometric techniques in Geomorphology and measurement of geomorphic features.
- 6. Applied Geomorphology-Role of Geomorphology in Hazard management.

- 1. Ahmad, E,(1999): Geomorphology-Kalyani Publishers, New Delhi
- 2. Chorley, R. J. (ed) (1972): Spatial analysis in Geomorphology, Methuen, London. (U.K.)
- 3. Fair Bridge, R.W (1968): Encyclopedia of Geomorphology, Reinhildts, New York
- 4. Hart, M.G.(1986): Geomorphology Pure and Applied-CBS Publishers Delhi
- 5. Hugget, Richard, J (2003): Fundamentals of Geomorphology, Routlege(UK)

- 6. King, C.A.M.(1966): Techniques in Geomorphology, Methuen, London, Edward Arnold
- 7. Pity, A F, (1974): Introduction to Geomorphology, Methuen, London. (U.K.)
- 8. Skiman, B.J. and Porter ,S.C,(1975):The dynamic Earth, John Willey, New York
- 9. Spark B.W.(1950): Geomorphology-Longman, London
- 10. Sharma H.S.(1980): Perspective in Geomorphology- Concept, New Delhi
- 11. Singh Savinder (1998): Geomorphology-Prayag Publication Allahabad
- 12. Steers, J.A. (1964): The Unstable Earth, Methuen and company, London.
- 13. Thornbury, W. (1960):Principles of Geomorphology, John Willey, New York

B. Recent trends in Economic Geography:

- 1. Bases and Classification of economic activity-recent approaches to the study economic geography.
- 2. Location of economic activities- factors determining- theories of von-Thunen, Alfred Weber, Walter Christaller and Reilly's gravitational model.
- 3. Principle of Comparative Territorial Advantage and interaction among territorial specialization complexes- global trading patterns.
- 4. Bases of spatial interaction-concept of distance and connectivity and accessibility- transport network and measures of connectivity.
- 5. Globalization and Indian economy-sectors of foreign direct investment and its impact-measures of analysis.
- 6. Economic development- concept and techniques of measurement- identification of gapspolicy for promoting economic development.

- 1. Knox Paul, Agnew John and McCarthy Linda, (2008): The Geography of the World Economy, Hodder Education, UK.
- 2. Wood Andrew and Roberts Susan, (2011): Economic Geography- Places, network and flows, Routledge, London and New York.
- 3. Bryson John, Henry Nick, Keeble David and Martin Ron, (eds.) (1999): The Economic Geography Reader- Producing and Consuming Global Capitalism, John Wiley and Sons Ltd.,

New York.

- 4. Harrington J.W. and Warf Barney, (1995): Industrial Location- Principle, Practice and Policy, Routledge, London and New York.
- 5. Rodrigue Jean-Paul, Comtois Claude and Slack Brian, (2006): The Geography of Transport System, Routledge, London and New York.
- 6. Berry, B. J. L. et. Al. (1976): Geography of Economic Systems, Prentice Hall, Englewood Cliff.
- 7. Boyce, R. D. (1974): Bases of Economic Geography, Holt, Rinehart and Winston, New York.
- 8. Conkling, E. C. & Yeates, M. (1976): Man's Economic Environment, McGraw Hill, London.
- 9. Hodder, B. W. and Lee, R. (1974): Economic Geography, Field of Geography Series, Methuen & Co. Ltd, London.
- 10. Hussain Majid (ed.), (1993): Perspectives in Economic Geography, Vols. 1-6, Anmol Publication, New Delhi.
- Smith, D. M (1971): Industrial Geography: An Economic Geographic Analysis, John
 Wiley & Sons.
- 12. Sarwade W.K. (editor) ((2013): International Journal of management and Economics', Vol II, No.7, march 2013, Chetan Publications, Aurangabad, ISSN No.- 2231-4687.
- 13. Streeton, P. and Jolly, R. (eds.) (1981). Recent Issues in Development, Pergamon Press, London.
- 14. Kundu, A. (1975): Construction of Composite Indices for Regionalization: An enquiry into the Methods of Analysis, Geographical Review of India, Vol.37 No.1, March, 1975, pp. 19-29.
- 15. Mitra, A. (1961): Levels of Regional Development, Cenus of India, 1961.
- 16. Eade Deborah, (Series Editor) Jo Rowlands (Introducer), (2006): Development Methods and Approaches- Critical approaches, Oxfam, 2003, Rawat.
- 17. Hammond, R. and McCullagh, P.S. (1974): Quantitative Techniques in Geography: An Introduction, Oxfrod University Press, London.
- 18. Crang M. and Cook, I. 2007, Doing Ethnographies, Sage.
- 19. Cope M. and Elwood S. (2009), Qualitative GIS, Sage.
- 20. Vallentine G. Clifford N. (2010), Key Methods in Geography, Sage.

C. Recent trends in Agricultural Geography:

- 1. Nature of Agricultural Geography- Scope and Significance- Recent approaches in the study of agricultural geography.
- 2. Agricultural patterns in the world- factors determining- their impact on environment, economy and society.
- 3. Concept of agricultural region Techniques of delimiting agricultural region- agroclimatic regions of India and their characteristics
- 4. Nature of agricultural marketing- Location of market places-factors influencing.
- 5. Agricultural productivity of land measurements of agricultural productivity- Landuse use and land capability classification.
- 6. Indian Agriculture- Regional perspective of agricultural development in India-issues related with Indian agriculture- measures adopted.

Text-Books:

- 1. Grigg, D. (1984): An Introduction to Agricultural Geography, Hutchinson Publication, London
- 2. Hussain, M. (1996): Systematic Agricultural Geography, Rawat Publishers, New Delhi
- 3. Morgan, W. B. and Munton, R.J.C. (1977): Agricultural Geography, Methuen, London.
- 4. Singh, J. and Dhillon, S. S. (1984): Agricultural Geography, McgrawHill, New Delhi.
- 5. Symons, L. (1972): Agricultural Geography, Bell and Sons, London.
- 6. Tarrant, J. R. (1974): Agricultural Geography, John Wiley and Sons, New York.
- 7. Bansil, B.C. (1975): Agricultural Problems of India, Delhi.
- 8. Bowler, l.R. (1992): The Geography of Agriculture in Developed Market Economy, Longman.
- 9. Gregor, H. F. (1971): Geography of Agriculture Themes in Research, Prentice Hall, N. J.
- 10. Grigg, D.B.(1974): The Agricultural Systems of the World, Cambridge University Press.
- 11. Sharma, PS (1973): Agricultural Regionalization of India, New Heights Publication, New Delhi.

D.Recent trends in Population Geography

- 1. Approaches to the study of Population Regional and ecological
- 2. Demographic attributes of population study
- Sources of Population data- Census of India- Vital Statistics and other sources and analytical techniques.
- 4. Growth of population factors influencing population growth.
- 5. Urbanization and its impact.
- 6. Human Development Measures and Welfare policies

Books Recommended:

- 1. Beaujeu Garnier, J.: Geography of Population, Longman Group Ltd.
- 2. Chandna, R.C. (2000): Geography of Population Concepts, Determinants and Patterns, Kalyani Publishers, New Delhi.
- 3. Clarke, J.I. (1972): Population Geography, Pergmon, Oxford.
- 4. Clarke, J.I.: Geography of Population- Approaches and Applications, Pergmon Press Ltd., Oxford.
- 5. Gibbs, Jack, P. (Ed.) (1961): Urban Research Methods, D. Von Nostrand, East-West Press Pvt. Ltd. New Delhi.
- 6. Jones, H. R., (1981): A Population GeoMethodologgraphy, Harper and Row, London.
- 7. Newman, J.L. and Matzk, G.E., (1984): Population: Patterns, Dynamics and Prospects, Prentice Hall, Englewood Cliffs, N.J.
- 8. Pryor, R.J. (1984) 'Methodological Problems in Population Geography' in J.I.Clarke (ed) : Geography and Population, 26-42, Pergmon, Oxford.
- 9. Rhind, D. (ed) (1983): A Census User's Handbook, Methuen, London.
- 10. White, P.E. and Woods, R.I., (eds.) (1980): The Geographical Impact of Migration, Longman. London.
- 11. Woods, R.I., (1979): Population Analysis in Geography, Longman, London.
- 12. Woods, R.I., (1982): Theoretical Population Geography, Longman, London.

- 13. Woods, R.I., and Rees, P.H. (eds.) (1986): Population Structures and Models, Allen and Unwin, London.
- 14. Zelinsky, Wilbur: A Prologue to Population Geography, Prentice Hall Inc. Englewood Cliffs, N.J.

E. Recent trends in Settlements Geography:

- 1. Geography of settlements- types and locational characteristics.
- 2. Size and number of settlements- factors influencing spatial distribution of settlements-Settlement Patterns factors governing pattern of settlement.
- 3. Service Centres: Role of service centers in growth of rural and urban settlements.
- 4. History and growth of settlement and nature of associated problems-remedial measures legislation and its efficacy.
- 5. Patterns of Index of concentration- Location Quotient; Index of dissimilarity and index of segregation- Ginni's coefficient.
- 6. Analysis of spatial structures and relationships- Settlement hierarchy and functional hierarchy- Rank size rule.

- 1. R.L.Singh et.al: Readings in Rural Settlement, N.G.S.I.Varanasi.
- 2. R.B. Mandal: Rural Settlement Geography.
- 3. B.J.L.Berry and Horton: Perspectives on Urban Systems, Pentice hall, N.J.
- 4. Mishra R.P.: 'Regional Planning' Prasaranga, Mysore
- 5. Mahmood Aslam(1977): Statistical methods in Geographical Studies, Rajesh Publications, New Delhi.
- 6. Davis Kinglsey and Hertz H.: 'The pattern of World Urbanization', New York.
- 7. Gerald Breeze: Urbanization in Newly developing countries, Prentice Hall, New Jersey.

F. Recent trends in Tourism and Recreation Geography:

- 1. Geography of Tourism: Definition, nature, scope and significance, types.
- 2. Defining tourist- types of tourist- flow of tourist and spatial distribution.
- 3. Determinants of tourism: Natural, Cultural, Recreational, Built, Infrastructure, services, Governance.
- 4. Tourism Impact: Positive and Negative on environment, economy and society methods for measuring the impact.
- 5. Tourism Development: Role of Government and Tourism Organizations- Need, types and role in promoting tourism development at regional and national level.
- 6. Sustainable tourism: Need and measures adopted for sustainable tourism in India and at Global level.

Reference books

- 1. Cosgrove, I. And Jackson, R. (1972): The Geography of Recreation and Leisure, Hutchinson, London.
- 2. Robinson, H. (1976): Geography of Tourism, Macdonald and Evans, London.
- 3. Kaul, R.K. (1985): Dynamics of Tourism and Recreation, Inter India, New Delhi.
- 4. Pearce, D. (1987): Tourism Today-- A Geographical Analysis, Longman Scientific and Technical, New York.
- 5. Bhatia, A.K. (1989): Tourism Development, Principles and Practices, Sterling, Banglore.
- 6. Pearce, D. (1989): Tourist Development, Longman Scientific and Technical, New York.
- 7. Bhatia, A.K. (1991): International Tourism: Fundamentals and Practices, Sterling, New Delhi.
- 8. Chris Ryan. (1991): Recreational Tourism, a Social Science Perspective, Routledge, London.
- 9. Hunter, C. and Green, H. (1995): Tourism and the Environment, A Sustainable Relationship.
- 10. Shaw, G. and Williams, A.M. (1994): Critical Issues in Tourism, a Geographical Perspective, Blackwell, Oxford, U.K. 11. Shaw, G. and Williams, A.M. (2004): Tourism and Tourism Spaces, Sage.
- 12. Hall, C.M. and Page, S. J. (1999): The Geography of Tourism and Recreation, Environment, Place and Space, Routledge, London.
- 13. Hall, C.M. and Page, S.J. (2001): Tourism in South and South-east Asia: Issues and Cases, Butterworth, Heinemann, Oxford.
- 15. Garg, N.K. (1996): Tourism and Economic Development. Avishkar, Jaipur.
- 16. Sinha, P.C. (1997): International Encyclopedia of Tourism Management, Vol. 1-12, Anmol, New Delhi.
- 17. Bhardwaj, D. S. and Chaudhary, M. (1997): Contemporary issues in Tourism, Himalaya, Mumbai 40
- 18. Goeldner, C.R. & Ritchie, J.R.B. (2003): Tourism: Principles, Practices, Philosophies, John Wiley & Sons, New Jersey.

G.Recent trends in Environmental Geography:

- 1. Man-Environment relationship-historical perspective-different approaches.
- 2. Concept of ecosystem and ecological principles-ecological-concept of ecological equilibrium.
- 3. Environmental degradation and its impact-spatial variation: local, regional and global.
- 4. Techniques of environmental quality assessment and analysis.
- 5. Need for Environmental conservation-Environmental dimension in Planning- eco-centric sustainable development.
- 6. Institutional Framework for Environmental protection- Conventions at Global level-Legislative measures in India and its efficacy.

Reference Books:

- 1. Adams, W.M. (2001): Green Development: Environment and Sustainability in the Third World, Routledge, London.
- 2. Basu, D.(ed.)(1995): Environment and Ecology The Global Challenge, Printwell, Jaipur.
- 3. Calvert P.S. (1999): The South, the North and the Environment, Pinter, London and New York.
- 4. Mather, A.S. and Chapman, K. (1995): Environmental Resources, Longman Group Limited, U.K.
- 5. Odum, E.P. (1971): 'Fundamentals of Ecology', Third Edition, W.B.Saunders Company, Philadelphia.
- 6. United Nations (1971): 'ECE Symposium on Problems Relating to Environment', U.N., New York.
- 7. UNFPA (1992): 'Population, Resources and Environment The Critical Challenges', United Population Fund, London.
- 8. Centre for Science and Environment (1985),(1991): The State of India's Environment, CES, New Delhi.
- 9. The Hindu (Annual) Survey of the Environment, Madras.
- 10. Saxena, H.M., (2010), Environmental Management, 2nd Edition, Rawat Publication, Jaipur.
- 11. Robin Flowerdew and David Martin, (eds.) (1997): Methods in Human Geography- A Guide for Students doing research Project, Longman.
- 12. Wong Cecilia, 2006, 'Indicators for Urban and Regional Planning', Routledge.
- 13. Hammond, R. and McCullagh, P.S. (1974): Quantitative Techniques in Geography: An Introduction, Oxfrod University Press, London.
- 14. Crang M. and Cook, I. 2007, Doing Ethnographies, Sage.
- 15. Cope M. and Elwood S. (2009), Qualitative GIS, Sage.
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- 17. Norcliff, G. B. (1982), Inferential Statistics for Geographers, Hutchinson, London