Rayat Shikshan Sanstha's SADGURU GADAGE MAHARAJ COLLEGE KARAD



Accredited By NAAC with 'A+' Grade
An Autonomous College
[Shivaji University, Kolhapur]



CHOICE BASED CREDIT SYSTEM

Syllabus For B.A. Part - III Geography

(Syllabus to be implemented from June, 2024 onwards.)

B. A. Part-III

(Introduce From June, 2024 Onward)

(Course Paper No. VII)

Geography (Evolution of Geographical Thought) Code-NGEOS 7

Semester-V

Redesigned/Replaced Module under Autonomy	Teaching Hours	Credits
Module I: Geography in Ancient Period		
1.1 Contribution of Greeks and Romans		
1.2 Arab Geographical Thoughts	15	1
1.3 Indian Geographical Thoughts	13	1
1.4 Exploration and Development of Geography		
Module II Schools of Geography		
2.1 German School of Geography – Alexander von Humboldt	15	
2.2 French School of Geography – Vedal de la Blache	15	1
2.3 American School of Geography –William Moris Davis		1
2.4 British School of Geography – Halford J. Mackinder		
Module III Dualisms in Geography		
3.1 Determinism Vs Possibilism	1.5	
3.2 Systematic Vs Regional geography	15	1
3.3 Physical Vs Human geography		
3.4 Historical Vs Contemporary		
Module IV: Trends in Geography		
4.1 Quantitative Revolution		1
4.2 Model Building in Geography	15	_
4.3 Man-nature relationship: Radicalism, Behaviourism and Humanism		
4.4 Future of Geography		

- 1. Adhkari, S. (2006) Fundamentals of Geographical Thought, Chaitanya Publishing House, Allahabad.
- 2. Bunkse, V.E. (2004) Geography and the art of Life, John Hopkins University Press, Bailtimore,
- 3. Dikshit, R. D. (1997). Geographical Thought: A Contextual History of Ideas. Delhi, India: Prentice– Hall India.
- 4. Dixit, R.D. (2001) Geographical Thought: A critical History of ideas, Prentice Hall of India, New Delhi.
- 6. Gaile, G. and Wilmot, C. (ed) (2003) Geography in America at the Dawn of the 21st Centrury, Oxford University Press, Oxford & New York.
- 7. Harvey, David., (1969): Explanation in Geography, London: Arnold.

- 8. HubbarD, P.et al (2002) Thinking Geographically: Space, Theory and Contemporary Human Geography, Continuum, London
- 9. Johnston, R.J. (1988) The Future of Geography, Methuen, London,
- 10. Johnston, R.J. and Claval, P. (1984) Geography since the Second World War: An International survey, Crown Haim, Sydney.
- 11. Majid Husain (2007): Evolution of Geographic Thought Rawat Publication, Jaipur
- 12. Marcus, D. (1999) Post Structuralism in Geography, The Diabolical Arts of Spatial Sciences, Edinburgh University Press, Edinburgh.
- 13. Martin Geoffrey J. (2005). All Possible Worlds: A History of Geographical Ideas, UK: Oxford.
- 14. Singh, R.B. (2016). Progress in Indian Geography. New Delhi, India: Indian National Science Academy.
- 15. Sudeepta, A. (2015). Fundamentals of Geographical Thought. Delhi, India: Orient black swan private limited.

B. A. Part-III

(Introduce From June, 2024 Onward)

(Course Paper No.VII)

Geography (Geography of India)

Code-NGEOS 8

Semester-V

Redesigned/Replaced Module under Autonomy	Teaching Hours	Credits
Module I: Physical Profile of India		
1.1) Location (Absolute and Relative)		
1.2) Physiographic Divisions (Characteristics and Importance)		
1.3) Climate: Summer, Rainy and Winter Seasons in India (weather conditions and		
Characteristics)	1.5	1
1.4) Major Drainage Systems: a) Northern River Systems (Sindhu, Ganga &	15	1
Brahmaputra)		
b) Southern River Systems (Godavari, Krishna &		
Cauvery)		
(Characteristics and Importance)		
Module II: Soils and Forests		
2.1 Major soil types, characteristics and its distribution in India	1.5	
2.2 Soil degradation and soil conservation in India	15	1
2.3 Major forest types: characteristics and their distribution		1
2.4 Deforestation and conservation of forests in India		
Module III: Mineral and Power Resources		
3.1 Conventional Resources: Iron Ore and Manganese (Distribution, Production	1.5	
and	15	1
Trade)		
3.2 Power Resources: Coal and Mineral Oil (Distribution, Production and Trade)		

3.2 Non-Conventional Resources: Solar and Wind (Distribution, Production and		
Trade)		
Module IV: Agriculture and Industry		
4.1 Importance of Agriculture in Indian Economy.		
4.2 Major Crops: Rice and Sugarcane (Distribution, Production and Trade)	1.5	1
4.3 Importance of Industries in Indian Economy.	15	
4.4 Industries: Location Factors, Sugar Industry, Iron and Steel Industry and		
Fertilizer		
Industry (Distribution, Production and Trade)		

REFERENCES:

- 1. Majid H., (2013): Geography of India, Tata Mcgraw Hill Education (India) Private Limited, New Delhi.
- 2. Khullar R. D. (2007): India- A Compressive Geography, Kalayani Publisher.
- 3. Tiwari, R.C. (2007) Geography of India. Prayag Pustak Bhawan, Allahabad.
- 4. Singh R. L., (1971): India: A Regional Geography, National Geographical Society of India.
- 5. Deshpande C. D., (1992): India: A Regional Interpretation, ICSSR, New Delhi.
- 6. Johnson, B. L. C., ed. (2001). Geographical Dictionary of India. Vision Books, New Delhi.
- 7. Mandal R. B. (ed.), (1990): Patterns of Regional Geography An Intenational Perspective. Vol. 3 Indian Perspective.
- 8. Sdyasuk Galina and Sengupta P., (1967): Economic Regionalisation of India, Census of India
- 9. Sharma, T. C. 2003: India Economic and Commercial Geography. Vikas Publ., New Delhi.
- 10. Singh, J., (2003),: India A Comprehensive & Systematic Geography, Gyanodaya Prakashan, Gorakhpur.
- 11. Spate O. H. K. and Learmonth A. T. A., (1967): India and Pakistan: A General and Regional Geography

NEW/REDESIGNED SYLLABUS FOR

B. A. Part-III

(Introduce From June, 2024 Onward)

(Course Paper No. IX)

Geography (Population Geography)

Code -NGEOS9

Semester-V

Redesigned/Replaced Module under Autonomy	Teaching Hours	Credits
Module I: Introduction to Population Geography 1.1 Definition of Population Geography 1.2 Nature and Scope of Population Geography 1.3 Significance of Population Geography 1.4 Sources of Population Data	15	1
Module II: Population Growth and Distribution 2.1 World Population Growth	15	

2.2 Factors Affecting on the Population Distribution		1
2.3 Population Distribution of the World		
2.4 Population Concepts: Minimum Population, Optimum Population and		
Over Population		
Module III: Population Dynamics		
3.1 Concept of Population Dynamics		
3.2 Fertility: Concept and Types	15	1
3.3 Fertility: Causes, Effects and Measures		1
3.4 Mortality: Concept and Types		
3.5 Mortality: Causes, Effects and Measures		
Module IV: Population Composition		
4.1 Age	15	1
4.2 Sex	13	
4.3 Literacy		
4.4 Rural and Urban Population		

- 1. Barrett H. R., 1995: Population Geography, Oliver and Boyd.
- 2. Bhende A. and Kanitkar T., 2000: Principles of Population Studies, Himalaya Publishing House.
- 3. Chandna R. C. and Sidhu M. S., 1980: An Introduction to Population Geography, Kalyani Publishers.
- 4. Clarke J. I., 1965: Population Geography, Pergamon Press, Oxford.
- 5. Jones, H. R., 2000: Population Geography, 3rd ed. Paul Chapman, London.
- 6. Lutz W., Warren C. S. and Scherbov S., 2004: The End of the World Population Growth in the 21st Century, Earthscan
- 7. Newbold K. B., 2009: Population Geography: Tools and Issues, Rowman and Littlefield Publishers.
- 8. Pacione M., 1986: Population Geography: Progress and Prospect, Taylor and Francis.
- 9. Wilson M. G. A., 1968: Population Geography, Nelson.
- 10. Panda B P (1988): Janasankya Bhugol, M P Hindi Granth Academy, Bhopal
- 11. Maurya S D (2009) Jansankya Bhugol, Sharda Putak Bhawan, Allahabad
- 12. Chandna, R C (2006), Jansankhya Bhugol, Kalyani Publishers, Delhi
- 14. Trewartha, G T (1969), A Geography of Population: world patterns, John Wiley, New York.
- 15. e-PG Pathshala: https://epgp.inflibnet.ac.in/
- 16. MOOCS NPTEL: https://nptel.ac.in/
- 17. MOOCS SWAYAM: https://swayam.gov.in/
- 18. National Digital Library of India: https://ndl.iitkgp.ac.in/
- 19. Shivaji University Library (E-Resources): http://www.unishivaji.ac.in/library/E-Resources

B. A. Part-III

(Introduce From June, 2024 Onward)

(Course Paper No.X)

Geography (Economic Geography) Code-NGEOS- 10

Semester-VI

Redesigned/Replaced Module under Autonomy	Teaching Hours	Credits
Module – I Introduction to Economic Geography		
1.1 Definition, Nature and Scope		
1.2 Concept and Classification of Economic Activity	15	1
1.3 Branches of Economic Geography		
1.4 Significance of Economic Geography		
Module – II Economic Activity		
2.1 Factors Affecting on Location of Agricultural Activity	15	
2.2 Factors Affecting on Location of Industrial Activity		1
2.3 Alfred Weber's Theory of Industrial Location		
Module – III Manufacturing Activity		
3.1 Concept of Manufacturing Region		
3.2 Concept of Special Economic Zone	1.5	
3.3 Major Industries: i) Cotton Textile Industry - USA	15	1
ii) Iron and Steel Industry – USA		
iii) Sugar Industry – Brazil		
iv) Automobile Industry – India		
Module – IV Transport and Trade		
4.1 Significance of Transportation	15	1
4.2 Major Transport Routs: Roadway, Railway, Airway and Ocean Routs	13	
4.3 International Trade: India and USA		
4.4 Trade Policies: India and USA		

- 1. Alexander J. W., (1963): Economic Geography, Prentic Hall Inc Englewood Cliffs, New Jersey.
- 2. Boesch H. (1964): A Geography of world Econimy" D. Van Nostrand co. New york.
- 3. Coe N. M., and others, (2007): Economic Geography: A Contemporary Introduction, Wiley-Blackwell.

- 4. Combes P., Mayer T. and Thisse J. F., (2008) Economic Geography: The Intergration of Regions and
- 5. Nations, Princeton University Press.
- 6. Goh Chang & morgan, G.C. (1997): Human and Economic Geography, oxford University Press.
- 7. H. Robinson (1978): Economic Geography, Macdonaid & Evans.
- 8. Hamilton, I (1992): Resources and Jndurtry, Oxford University Press New York.
- 9. Hartshorn, T.N. and Alexander, J.W. (1994): Economic Geography, prentice Hall, New Delhi.
- 10. Hodder B. W. and Lee Roger, (1974): Economic Geography, Taylor and Francies.
- 11. Meyer, B. S., Aanderson, D. B. and Bohning, R. H. (1960): An Introduction to Plant Physiology, Von Nostrand Company, New York.
- 12. Roborstson D (2001): Globalization and Environment E. elgar CO.U.K.
- 13. Sadhukhan S. K., (1990): Economic Geography An Appraisal of Resources, S. Chand and Company Ltd., New Delhi.
- 14. Truman A. Hartshorn and John W. Alexander, (1988): Economic Geography, PHI Learning Private Limited, New Delhi.
- 15. Walker, D. F., Collins, L. (Eds.), (1975): Locational Dynamics of Manufacturing Activity, John Wiley and Sons, New York.
- 16. Wheeler J. O., (1995): Economic Geography John wiely, New York.
- 17. White H.P. and senior M.L. (1983) Transport Geography, Longman, London.
- 18. Willington D. E., (2008): Economic Geography, Husband Press.
- 19. Zimmermann, E. W., (1933): World's Resources and Industries, Harper and Row, New York.

B. A. Part-III

(Introduce From June, 2024 Onward)

(Course Paper No. XI)

Geography (Urban Geography)

Code- NGEOS- 11

Semester-VI

Redesigned/Replaced Module under Autonomy	Teaching Hours	Credits
Module-I: Introduction to Urban Geography 1.1 Urban Geography: Meaning and Definitions		
1.2 Nature and Scope of Urban Geography	15	1
1.3 Approaches of Urban Geography		
1.4 Significance of Urban Geography		

Module-II: Urbanization		
2.1 Site and Situation: Significance and Types	1.5	
2.2 Concept and Factors of Urbanization	15	1
2.3 Patterns of Urbanization in developed and developing countries		1
2.4 Functional classification of cities (Quantitative and Qualitative)		
Module-III: 3 Structure and Morphology of Urban Centers		
3.1 Structure and Morphology		
3.2 City Region and C.B.D.	1.5	
3.3 Rural-Urban Fringe	15	1
3.4 Models of Town Morphology: The Concentric Zone Theory, the		
Sector		
Theory and the Multi-Nuclei Theory		
Module-IV: Urban Problems and Issues		
4.1 Urban Issues: problems of housing, slums, civic amenities (water and		
transport)	1.5	1
4.2 Concept of Garden	15	
4.3 Urban Planning in India		
4.4 Case studies of		
Urban Issues		

- 1. Tim Hall. (1998): Urban Geography,
- 2. Verma L.N.: Urban Geography, Rawat Publications,
- 3. Johnson J. H. (1967): Urban Geography, An Introductory
- 4. Bose A., : India's Urbanization
- 5. Carter H. (1972): The study
- 6. Smailes A. E.: The Geography of
- 7. Taylor and Pntnam : Geography of UrbanPlaces.
- 8. Hudson F: SettlementGeogrpahy
- 9. Mandal: Urban Geography

B. A. Part-III

(Introduce From June, 2024 Onward)

(Course Paper No. XII)

Geography (Political Geography)

Code-NGEOS-12

Semester-VI

Redesigned/Replaced Module under Autonomy	Teaching	Credits
	Hours	

Module I: Introduction to Political Geography		
1.1 Definition of Political Geography		
1.2 Nature and Scope of Political Geography	15	1
1.3 Approaches of Political Geography		
1.4 Significance of Political Geography		
Module II: Concepts in Political Geography		
2.1 State	1.5	
2.2 Nation	15	1
2.3 Boundary		1
2.4 Frontier		
Module III: Theories in Political Geography	1.5	1
3.1 Hartland Theory - Halford J. Mackinder	15	1
3.2 Rimland Theory – Nicholas J. Spykeman		
Module IV: Resource Disputes and Conflicts		
4.1 Krishna Water Dispute		
4.2 Ganga Water Dispute	1.5	1
4.3 Sardar Sarovar Project: Issues of Relief, Compensation and	15	
Rehabilitation		
4.4 Chandoli Dam Project: Issues of Relief, Compensation and		
Rehabilitation		_

- 1. Adhikari, S. (1997): Political Geography, Rawat Publications, Jaipur.
- 2. Dikshit, R. D. (1985): Political Geography, A Contemporary Perspective, McGraw Hill, New Delhi
- 3. Dwivedi, R. L. (1996):Political Geography, ChaitanyaPrakashan, Allahabad.
- 4. Muir, Richard (1995): Modern Political Geography, Macmillan, London.
- 5. Pounds, N. J. G. (1972): Political Geography 2nd Ed. McGraw Hill, N. Y.
- 6. Sharma, T. C.: Political Geography.
- 7. Agnew J., 2002: Making Political Geography, Arnold.
- 8. Agnew J., Mitchell K. and Toal G., 2003: A Companion to Political Geography, Blackwell.
- 9. Cox K. R., Low M. and Robinson J., 2008: The Sage Handbook of Political Geography, Sage Publications.
- 10. Cox K., 2002: Political Geography: Territory, State and Society, Wiley-Blackwell
- 11. Gallaher C., et al, 2009: Key Concepts in Political Geography, Sage Publications.
- 12. Glassner M., 1993: Political Geography, Wiley.
- 13. Jones M., 2004: An Introduction to Political Geography: Space, Place and Politics, Routledg.
- 14. Mathur H M and M M Cernea (eds.) Development, Displacement and Resettlement Focus on Asian Experience, Vikas, Delhi
- 15. Painter J. and Jeffrey A., 2009: Political Geography, Sage Publications.
- 16. Taylor P. and Flint C., 2000: Political Geography, Pearson Education.
- 17. Verma M K (2004): Development, Displacement and Resettlement, Rawat Publications, Delhi
- 18. Hodder Dick, Sarah J Llyod and Keith S McLachlan (1998), Land Locked States of Africa and Asia (vo.2), Frank Cass

B. A. Part-III

(Introduce From June, 2024 Onward)

(Course Paper No.13)

Geography (Fundamentals of Map Making and Map Interpretation) Code-NGEOS- 13

(Cridits-4)

Semester-VI

Redesigned/Replaced Module under Autonomy

Module – I: Introduction to Map and Scales:

1.1 Map

- 1.1.1 Map: Definition and Elements
- 1.1.2 Classification of Maps: Based on Scale and Purpose

1.2 Scale

- 1.2.1 Meaning and Definition,
- 1.2.2 Methods of Representation of scale Verbal, Numerical and Graphical.
- 1.2.3 Scale Conversion
- 1.2.4 Construction of Graphical Scale –
- i) Simple (Plane Scale)
- ii) Time and Distance Scale
- iii) Diagonal Scale

Module II: Map Projection

- 2.1 Definition, Classification of Projections:
- a) Based on the methods of Construction: Perspective and Non-perspective
- b) Based on Developable Surface used: Conical, Cylindrical, Zenithal,

Conventional.

- c) Based on Position of Tangent Surfaces: Polar, Equatorial (normal), Oblique.
- d) Based on Position of view point or light: Gnomonic, Stereographic,

Orthographic

- e) Based on Preserved qualities: i) Equal area projection (Homolographic)
- ii) Orthographic Projection
- iii) Azumuthal Projection (True Bearing

Projection)

- 2.2 Graphical Construction of the following Projections with Properties and Use:
- i) Zenithal Polar Gnomanic Projection
- ii) Zenithal Polar Equal Area Projection
- iii) Simple Conical Projection with one standard Parallel
- iv) Cylindrical Equal Area Projection
- v) Mercator's Projection and Reference to Universal Transverse Mercator

(UTM) Projection

Module – III: Identification, Mapping of Slope, Relief Features and Profiles

- 3.1 Slope and Gradient
- 3.1.1 Types of Slope: Gentle, Steep, Even, Uneven, Convex, Concave,

Terraced.

3.1.2 Expression of Slopes: a) Gradient b) Degree c) Per Cent d) Mills

3.1.2 Representation of Relief by Contours: Hill, Mountain, Ridge, Cliff,

Saddle, Plateau, Knoll, Spur, Col or Pass, Volcanic Col or Crater, Gorge,

'V' Shaped Valley, Waterfall, 'U' Shaped Valley, Cirque, Hanging

Valley, Ria Coast, Fiord Coast, Sea cliff.

- 3.2 Profiles
- 3.5.1 Superimposed Profile
- 3.5.2 Composite Profile
- 3.5.3 Projected Profile
- 3.5.4 Longitudinal Profile

Module – IV: Topographical Maps

- 4.1 Indexing of S.O.I. Topographical Map
- 4.2 Signs, Symbols and Colors used in SOI Toposheet
- 4.3 Interpretation of S.O.I.'s Topographical Maps
- a) Marginal Information
- b) Physical environment: Relief, Drainage and Vegetation
- c) Cultural environment: Settlements, Transportation and Communication, Irrigation.
- d) Land Use

Module V: Weather Instruments and IMD Maps

- 5.1 Study of weather Instruments with reference to Principle, Mechanism, and Function
- a) Thermograph
- b) Barograph
- c) Dry and Wet Bulb Thermometer
- d) Cup Anemometer
- e) Rain Gauge
- 5.2 Isobaric Patterns: Cyclone, Anticyclone, Col, Ridge, Secondary Depression
- 5.3 Signs and Symbols used in Indian Daily Weather Maps
- 5.4 Interpretation of Indian Daily Weather Maps

Marginal Information, Pressure, Winds, Clouds, Rainfall, Other Conditions,

Sea Condition, Temperature departure from normal

Module VI: Representation Techniques of Statistical Data

- a) Divided Rectangle
- b) Proportional Circle
- c) Proportional Square
- d) Choropleth Map
- e) Dot Map
- f) Isopleths

Module VII: Journal and Viva Voce

- 1. Bygoot, J: An Introduction to Mapwork and Practical Geography, University Tutorial, 2. London 1964.
- 3. Khan MD. Zulfequar Ahmad : Text Book of Practical Geography, Concept Publishing Company, New Delhi, 1998

- 4. Mishra, R.P. and Ramesh A.: Fundamentals of Cartography, Concept Publishing Company, New Delhi, 2000
- 5. Monkhouse F.J. and Wilkison, H.R.: Maps and Diagrams, Mathuen. London, 1971.
- 6. Negi., Dr. Balbir Singh: Practical Geography, Kedar Nath Ram Nath, Meerut, Delhi.
- 7. Raisz, E.: Principals of Cartography, McGraw Hill Book Com., Inc, New York, 1962.
- 8. Robinson, A.H. and Sale, S.D.: Elements of Cartography, John Witey and Sons, Inc, New York, 1969.
- 9. Saha, Pijushkanti and Basu Partha: Advanced Practical Geography A Laboratory Manual Books and Allied (P) Ltd, Kolkata. 2010.
- 10. Sarkar, Ashis: Practical Geography: A systematic Approach, Orient Longman limited, Calcutta, 1997.
- 11. Singh, Gopal: Map work and Practical Geography Vikas Publishing House Pvt. Ltd. New Delhi, 1996.
- 12. Singh, R and Kanaujia, L.R.S.: Map Work and Practical Geography, Central Book Depot, Allahabad.
- 13. Singh, R. L. and Rana P.B.: Elements of Practical Geography, Kalyani Publishers, New Delhi Ludhiana, 1998.
- 14. Aher A. B., Chodhari A. P. & Bharambe S. N. Techniques of Spatial Analysis Prashant Publication Jalgaon 2015
- 15. Maurice Yeats, An Introduction to Quantitative Analysis in Human Geography, McGraw Hill, New York, 1974.
- 16. P. Saha and P. Basu (2006): Advanced Practical Geography, Books and Allied Publication, Kolkata, India.
- 17. Khullar, Essentials of Practical Geography, New Academic Publishing Co, India.
- 18. Singh L R (2011): Fundamentals of Practical Geography
- 19. Robinson Rep. (2010): Elements of Cartography 6/e
- 20. Khan Za (1998): Text Book of Practical Geography

B. A. Part-III

(Introduce From June, 2024 Onward)

(Course Paper No. 14)

Geography (Advanced Tools, Techniques & Field Work)

Code- NGEOS- 14

(Cridits-4)

Semester-VI

Redesigned/Replaced Module under Autonomy

Module-I: Introduction to Computer

- 1.1: Introduction to Computer
- 1.2: Application of computer in geography
- 1.2.1: Construction of Line Graphs, Bar Graphs
- 1.2.2: Construction of Pie Diagram and Scatter Diagram
- 1.3: Application of Excel for Data Analysis

Module:-II: Remote Sensing

- 2.1 Definition of Remote Sensing
- 2.2 Fundamentals of Remote Sensing: EMR, Sensors and Platforms
- 2.3 Application of Remote Sensing in Geography
- 2.4 Aerial photographs and Satellite imagery: Definition, types and difference

between them

- 2.5 Determination of Photo Scale
- 2.6 Elements of image interpretation
- 2.7 Identification of Physical and cultural features from Aerial Photographs or Satellite Imagery

Module-III: GIS and GNSS

- 3.1 Geographical Information System (GIS)
- 3.1.1 Definition and components
- 3.1.2 GIS Data Structure: Types (spatial and non-spatial), Raster and Vector data
- 3.1.3 Georeferencing, Digitization, Map Layout Preparation
- 3.1.4 Application of GIS in Geography: Land use or Land Cover, Urban

Sprawl Analysis, Forests Monitoring

- 3.2 Global Navigation Satellite System
- 3.2.1 Definition and components
- 3.2.2: GPS and its applications in Geography
- 3.2.3 Field work in GPS: Determining latitude, longitude and altitude
- 3.3: Exercise with Google earth Program.

Module-IV: Statistical methods and techniques

- 4.1 Measures of Central Tendency: Mean, Median and Mode
- 4.2 Dispersion: Mean Deviation and Standard Deviation
- 4. 3Association and Correlation: Karl Pearson's Method (Product Moment)
- 4.4 Analysis of Time Series: Semi-average Method

Module-V: Surveying

- 5.1 Introduction to Survey: Meaning and types
- 5.2 Preparation of plans of the given area with the following survey method (Any one methods among them)
- A- Plane Table survey (Radial, Intersection, and Traverse method)
- B- Dumpy Level survey
- C- Theodolite survey
- **D-** Total Station
- E- Abony Level Survey
- 5.3 Preparation of plans Prismatic compass survey (Radical, Intersection and Traverse method)
- 5.3.1 Types and conversion of bearings.
- 5.3.2 Correction of bearing.

Module-VI: Project work based on field work any one of following:

Resource survey, Population survey, Agricultural survey, Settlement Survey, Environmental issues, Industrial visit, Health survey, Natural Hazard or Disaster

1. Project Report must be content of following points:

Introduction – Aims – Objectives - Review of the literature - Data collection – Methodology - Data Analysis – Interpretation - Findings – Suggestions - Bibliography

- 2. The duration of the field work should not exceed than 20 days.
- 3. The word count of the report should be about 8000 to 12,000 excluding figures, tables, Photographs, maps, references and appendices.
- 4. One copy per student of the report as per research standard should be submitted at the time of examination.

Module- VII: Study Tour

Maximum 15 days of Study Tour and preparation of Tour Report.

The Study Tour Report must be content of following points:

Introduction – Necessity – Importance - Route map – Objectives – Methodology -

Geographical Profile (Natural, Socio-economic and Cultural) - Geographical importance of visited tourist places - Conclusion - References

- 1. Lo C. P., Albert K. W. Yeung, (2011): Concepts and Techniques of Geographic Information Systems, PHI Learning Private Limited, New Delhi-110001.
- 2. Bygoot, J: An Introduction to Mapwork and Practical Geography, University Tutorial, London 1964
- 3. Khan MD. Zulfequar Ahmad: Text Book of Practical Geography, Concept Publishing Company, New Delhi, 1998
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- 6. Negi., Dr. Balbir Singh: Practical Geography, Kedar Nath Ram Nath, Meerut, Delhi.
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- 8. Robinson, A.H. and Sale, S.D.: Elements of Cartography, John Witey and Sons, Inc, New York, 1969.
- 9. Saha, Pijushkanti and Basu Partha: Advanced Practical Geography A Laboratory Manual Books and Allied (P) Ltd, Kolkata. 2010.
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- 16. P. Saha and P. Basu (2006): Advanced Practical Geography, Books and Allied Publication, Kolkata, India.
- 17. Khullar, Essentials of Practical Geography, New Academic Publishing Co, India.
- 18. Singh L R (2011): Fundamentals of Practical Geography.
- 19. Robinson Rep. (2010): Elements of Cartography.
- 20. Khan Za (1998): Text Book of Practical Geography.