

Gondwana University, Gadchiroli

Master of Arts (NEP 2020)

M. A. Geography

SEMESTER I

Paper code	Major Papers	Teaching Scheme (Hrs/Week)	Examination Scheme						
			Theory / Practical	Credit	Max Marks		Total Marks	Min. Passing Marks	
		External Marks (Univ)			Practical / Internal Marks	External TH Marks		Practical / Internal Marks	Total
PGGEO01	Paper I - History of Geographical Thoughts	4	4	80	20	100	32	8	40
PGGEO02	Paper II- Marine Geography	4	4	80	20	100	32	8	40
PGGEO03	Paper III- Climatic Map and Diagram (Practical I)	8	4	0	100	100	0	40	40
PGGEO04	Paper IV- Research Methodology	4	4	80	20	100	32	8	40
Elective Papers									
PGGEO5	Paper I- Rural Settlement	4	4	80	20	100	32	8	40
	Paper - II Geography of Climate Change								
	Paper III - Geography of Soil & Water Resources								
	Paper IV- Geography of Tourism								
	Paper V - Population Geography								
Total		24	20	320	180	500	128	72	200

SEMESTER II

Paper code	Major Papers	Teaching Scheme (Hrs/Week)	Examination Scheme						
			Theory / Practical	Credit	Max Marks		Total Marks	Min. Passing Marks	
		External Marks (Univ)			Practical / Internal Marks	External TH Marks		Practical / Internal Marks	Total
PGGEO06	Paper I - Applied Geomorphology	4	4	80	20	100	32	8	40
PGGEO07	Paper II- Remote Sensing and GIS	4	4	80	20	100	32	8	40
PGGEO08	Paper III- Practical II -	8	4	00	100	100	40	00	40
PGGEO09	Paper IV- On Job Training (OJT)	8	4	00	100	100	40	00	40
Elective Papers									
PGGEO10	Paper I- Geography of Resources	4	4	80	20	100	32	8	40
	Paper - II Medical Geography								
	Paper III - Bio-Geography								
	Paper IV- Social Geography								
	Paper V - Urban Geography								
Total		24	20	320	180	500	128	72	200

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Dr. V. N. Lakhe

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Dr. Y. D. Dhadhpakar

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Dr. V. K. Kake

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Dr. P. M. Wankar

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Dr. Y. K. Patil

PATTERN OF EXAMINATION (ALL SEMESTERS)

Theory:

Three theory papers of 80 marks each and of three hours duration will be conducted at the end of each semester.

Practical:

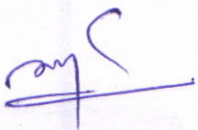
- 1) One Practical examination of 100 marks and of six hours duration of each semester will be conducted at the end of the same semester.
- 2) Practical examinations of all four semesters will be conducted by internal and External examiners appointed by the University.
- 3)

Internal Assessment:

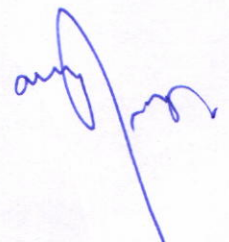
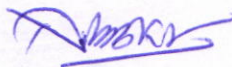
- 1) Head of the department will carry out internal assessment of the students on the basis of evaluation report from the concerned teacher/ teachers.
- 2) Distribution of 20 marks of internal assessment is as under –
 - i) Class Attendance 05 marks
 - ii) Home Assignment 05 marks
 - iii) Group discussion / seminar/
Geographical activities etc. 10 Marks

Pattern of Question Paper

- | | | |
|---------|--|----------------------------|
| Que 1 : | A) from unit I
OR
B) from unit II | Marks 20 |
| Que 2 : | A) from unit III
OR
B) from unit IV | Marks 20 |
| Que 3 : | A) from unit I
B) from unit I
OR
C) from unit II
D) from unit II | Marks 20
(10 mark each) |
| Que 4 : | A) from unit III
B) from unit III
OR
C) from unit IV
D) from unit IV | Marks 20
(10 mark each) |



lakhe
Dr. V. N. Lakhe



Shri Mahajan

Rules and Regulation

1. There will be four periods per week for theory papers per semester.
2. The batch of Practical class should not be exceeding 16 students.
3. The minimum passing marks of Theory paper and internal Assessment is $32+8=40$
4. The minimum passing marks of Practical examination is 40
5. Marks will not be allotted to student if he found absent in study tour.

CERTIFICATE

Department of Geography

Name of College.....

This is to certify that this practical record is the Original practical works of

Shri/ Kumari/ Smt.

Class..... Semester..... During the academic year.....

He/she has attended/ not attained the field work/ Study tour at -----
prescribed by the Gondwana University Gadchiroli.

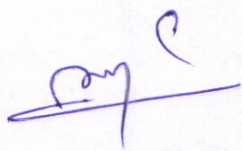
Signature of the teacher who taught the examinee.

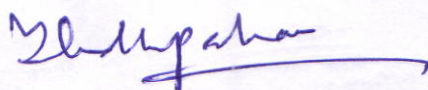
1)

2)

3)

Head of the Department


Dr. V.N. Lakhe


Shri. Upadhyay



Master of Arts (NEP 2020)

M. A. Geography

Semester – I

Total Marks=100 Marks, Credit: 4

Semester Examination =80 Marks

Internal Assessment= 20 Marks

PAPER – I (Major Subject)

History of Geographical Thoughts

Paper Code: PGGEO01

Unit – I

The field of geography, Major Branches of Geography. Selected concepts in Philosophy of geography, distributions, relationship, interaction, areal differentiation and spatial organization.

Unit – II

Contributions of different Geographical scholars during ancient, medieval and modern period. Status of Indian Geography: Man-Environmental dynamic Relationship, Statistical and Technical Geography

Unit – III


Dualism in Geography: Systematic and Regional Geography, Physical and human Geography. The myth and reality about dualism. Regional geography. Concept of region and regionalization and the regionalization methods.

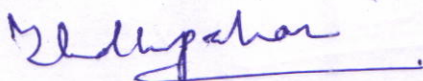
Unit – IV

Scientific explanations: routes to the scientific explanations (Inductive/Deductive); types of explanations; cognitive description; cause and effect; temporal; functional, Laws, theories and models, the quantitative revolution.

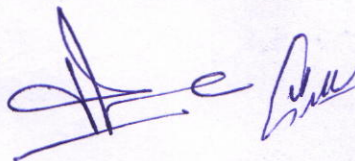
Suggested Reading:

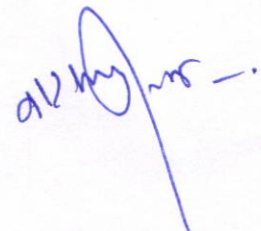
1. Albert, Ronald, Adams, John S, Gould, Peter (1971) Spatial Organisation, The Geographers View of the World, Prentice Hall. N.J
2. Ali, S.M. (1966): The geography of Puranas, People Publishing House
3. Amedeo, Douglas (1971): An Introduction to Scientific Reasoning in Geography, John Wiley U.S.A
4. Cole, J.P. and King, C.A.M. (1968): Quantitative Geography, John Wiley and sons. London
5. Dixit., R.D. :Political geography: A contemporary Policies
6. Dixshit, R.D.(ed)(1994): The Arts and Science of Geography-Integrated readings, Prentice Hall of India, New Delhi
7. Hartshorne, R (1959): Perspectives on Nature of geography, Rand McNally and Co.
8. Husain, M. (1984): Evolution of Geographical Thought, Rawat Publication, Jaipur
9. Kothari, C.R.(1993) : Research Methodology, Methods and Techniques Wiley Eastern Ltd, New Delhi
10. Mahmood Aslam (1977): Statistical methods in geographical studies, Rajesh Publication, New Delhi
11. Taylor, Peter(1977)Quantitative Methods in Geography, Houghton and Maffin co. Boston











Semester - I

PAPER – II (Major Subject)

Marks- 100, Credit: 04

Semester Examination=80Marks

Internal Assessment=20 Marks

Marine Geography

PAPER CODE PGGEO02

Unit – I

Nature and scope of Marine Geography, History of Marine Geography. Distribution of land and water; major features of ocean basins, continental Shelves, Continental Slope and Deep Ocean Basins,

Unit – II

Physical and chemical properties of ocean water: Distribution of Temperature and salinity of oceans and sea. Surface currents – currents of the Atlantic, Pacific and Indian Oceans, thermohaline, waves and tides.

Unit – III

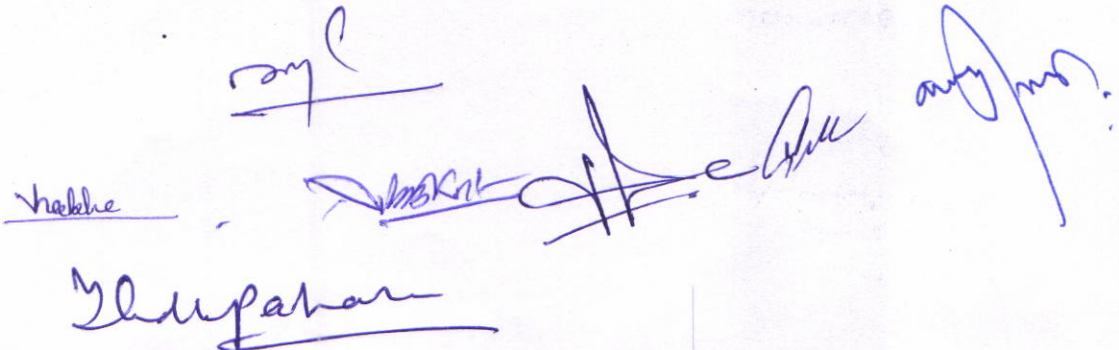
Major Marine Environment, impact of human on Marine Environment, Marine Pollution – causes and effects, Marine Deposits and formation of coral reefs. Marine National Parks.

Unit – IV

Applied Marine Geography: Marine life – factor of Marine Environment, Marine Biozones, laws of the sea; exclusive economic zone, Food and Mineral resources of the sea, Oceans and world Geopolitics with special reference to South China Sea.

Suggested reading:

1. Davis Recharj.A.(1986) Oceanography- An Introduction to the Marin Environment,
2. W.M.C.Brown Iowa.Garrison T (2001): Oceanography- An Introduction to marine science Books/Cole, Pacific Grove. USA
3. Savindra Singh: Oceanography
4. B S Lal : Oceanography
5. Duxbary C.A. and Cuxbary B : An introduction to the world's Oceans C Brown Iowa 2nd ed,1996.
- 6.Gross M Grant.: Oceanography a view of the earth, Prantice – Hall inc. New Jersey 1987.
7. भुरूपशास्त्र आणि सागरविज्ञान : नागतोडे, शेख, दुधपंचारे, विज्ञा प्रकाशन नागपुर

The bottom section of the page contains several handwritten signatures in blue ink. On the left, there is a signature that appears to be 'Vakhe'. In the center, there is a large, stylized signature that is difficult to decipher but seems to be 'Shripatan'. To the right, there are two more signatures, one of which is a large, flowing signature that could be 'Anil' or similar. The signatures are written in a cursive style.

Semester - I

Marks- 100, Credit: 04

PAPER – III

CLIMATIC MAPS AND DIAGRAMS

Paper Code: PGGE003

PRACTICAL – I

1. Preparation and interpretation of the following maps and diagrams.

Group A

(10 Marks)

- i. Equivariable
- ii. Equipluves
- iii. Frequency graph
- iv. Rainfall dispersion diagram
- v. Running mean
- vi. Wind rose and compound wind rose

Group B

(10 Marks)

- i. Water budget graph
- ii. Climatograph
- iii. Hythergraph
- iv. Taylor's Climograph
- v. Compound columnar graph
- vi. Index of aridity and index of moisture

2. Study of Indian daily weather map and weather analysis.

(15 Marks)

Study and interpretation of at least four maps of India pertaining to –

- (a) S. W. Monsoon Season
- (b) Summer season
- (c) Transition period
- (d) Cyclonic

3. Advanced techniques of spatial analysis:

(a) Remote sensing

(15 Marks)

Definition of remote sensing. Elements of Remote Sensing. Electromagnetic radiation and study of Climatological remote sensing. Weather conditions and weather reports. Study of dams and water storages with RM. Remote sensing and weather phenomena's.

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(b) **Geographical information system**

(10 Marks)

Introduction to GIS. Fundamental of GIS- Spatial concepts and spatial relationships. Data models and structures- raster and vector. Integration procedure for spatial and non-spatial data. Scanning and digitization exercises. Thematic mapping with GIS software.

4. **Excursion:**

(20 Marks)

Visit to any plain, plateau, hilly, coastal area, Mines, Forest, Tiger Project, National Park, Sanctuaries, Dams, meteorological center and submit a report with GPS photographs.

5. **Viva Voce**

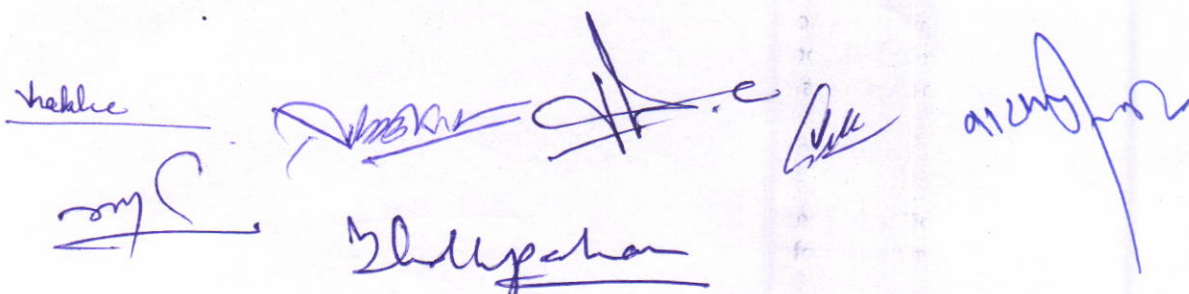
(10 Marks)

6. **Practical Record**

(10 Marks)

Suggested Reading

- Aronoff S.(1989): Geographic Information System: Management Perspective, DDI Publication Ottawa.
Burrough P.A. (1986): principles of Geographic information system for Land Resource Management, Oxford University press, New York.
Barrett E.C. and L.F Curtis (1992): Fundamentals of Remote Sensing and Air photo Interpretation, McMillan New York
Campbell J(1989): Introduction to Remote Sensing Guilford, New York
Clendinning J (1985): Principal and use of Surveying Instruments 2nd edition Blockie A
Curran (1985): Principals of Remote Sensing Longman, London
Fraser Taylor D.R. (1991) Geographic In information system Pergamum Press oxford,1991Hord
R.M.(1989): Digital Image processing of remotely sensed data Academic New York Hotine,
Major M.(1935) : The re-triangulation of Great Britain Empire Survey Review
Luder D.(1955): Aerial Photography Interpretation: Principals and Application Mc graw Hill, New York.Mark
S.Monmoni er (1982): Computer assisted geography, Prentice Hall, Englewood Cliff, New Jersey.
MaquireD.G.M.F Goodchild and D.W. Rhind (eds)(1991): geographic information system : Principals and Application Taylor& francis Washington.
Mishra R.P and Ramesh,A (1986) : Fundamentals of cartography. Mcmillan Co.New Delhi
Pal.S.K(1968): Statistics for Geoscientist_ Techniques and Application, Concept, New Delhi
Pouquet D.Jand D.F. Marble (1990): Introductory teaching in Geographic Information system. Taylor& Fransis Washinton
Pratt W.K. (1978): Digital Image Processing, Wiley, New York.
Rao D.P(ed)(1998): Remote Sensing for Earth Resources, Association of Exploration Geophysicist,
Star J and J Estes (1994); Geomorphic Information system: An Introduction Prentice Hall Englewood Cliff, New Jers
Thomas M. Lilles and and Ralph W Kefer,(1994): Remote Sensing and Image Interpretation John Wiley &son, New York.
Nagtode P. M. & Lanjewar H.D. : Nakashashtra, Pimplapure Publication Nagpur.

The bottom of the page contains several handwritten signatures and marks in blue ink. On the left, there is a signature that appears to be 'Vahlic' with a horizontal line underneath. Below it is another signature that looks like 'Sue'. In the center, there is a large, stylized signature that could be 'Shalpan' or similar, with a horizontal line underneath. To the right of this, there are two more signatures, one of which is a cursive signature that looks like 'Raj' and another that is a vertical signature.

Semester – I

Marks -100, Credit: 04

Semester Examination=80 marks

Internal Assessment =20 marks

PAPER – IV (Major Subject)

RESEARCH METHODOLOGY

Paper Code: PGGE004

Unit - I

Meaning, origin of research, research design, Types of research methods – Formulation of research problem – Objectives and hypotheses: testing of hypotheses.

Unit - II

Characteristics of Geographical data – Measurement of data: – Primary and secondary data – Sources of data: traditional and modern – Data compilation. Primary data collection: census and sampling methods – Types of sampling – Spatial adaptation of sampling techniques – Data collection techniques through field work and questionnaires. Collection of Data through social and electronics media.

Unit - III

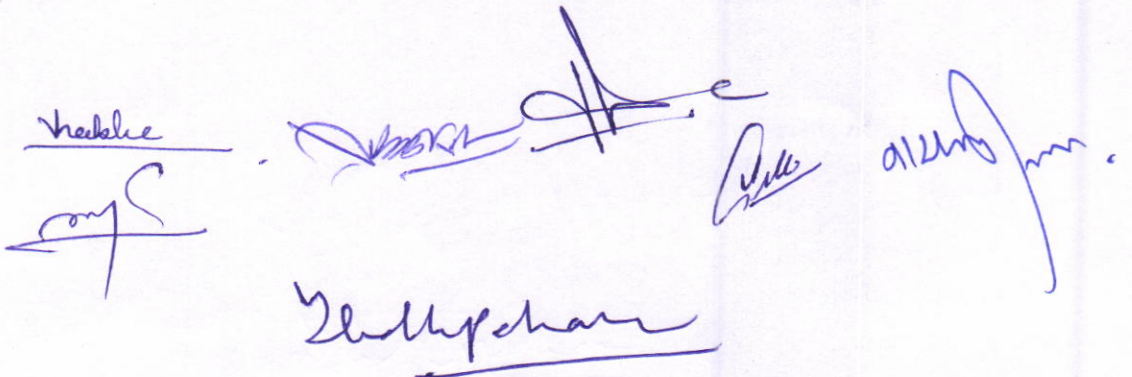
Data processing: classification and tabulation – Cartographic representation of data – Descriptive and inferential statistics – Functional and spatial interpretation of the results.

Unit - IV

Preparation of project report: basic heads- Introduction to the problem- Results of analysis- Summary of findings in the light of the hypotheses- Conclusion. Writing of references, Bibliography.

Suggested reading;

- i. Mishra R.P: Research methodology
- ii. Bhandarkar: Research methodology in social science
- iii. Kothari: Research Methodology
- iv. Nagtode P. M. & Lanjewar H.D., Nakashashtra, Pimplapure Publication Nagpur
- v. संशोधनशास्त्राची मुलतत्वे: डॉ. बी एम कराडे
- vi. संशोधनशास्त्राची मुलतत्वे: डॉ. क्रीष्णा घोरमोंडे

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Master of Arts (NEP 2020)

M. A. Geography

Semester – I

Total Marks=100 Marks, Credit: 4
Semester Examination =80 Marks
Internal Assessment= 20 Marks

PAPER – V (ELECTIVE PAPER -I)

Rural Geography

Paper Code: PGGE05

Unit - I

Nature, Scope and significance and development of settlement geography, Approaches to rural settlement geography. Histogenesis of rural settlements, Spatio – temporal dimensions and sequent occupation. Definition and characteristics of rural settlement in the fringe areas.

Unit - II

Type, forms and patterns of rural settlement cause and effect. Functional classification of rural service centre: their nature, Hierarchy and functions, rural-urban fringe e- structure, characteristics and function.

Unit - III

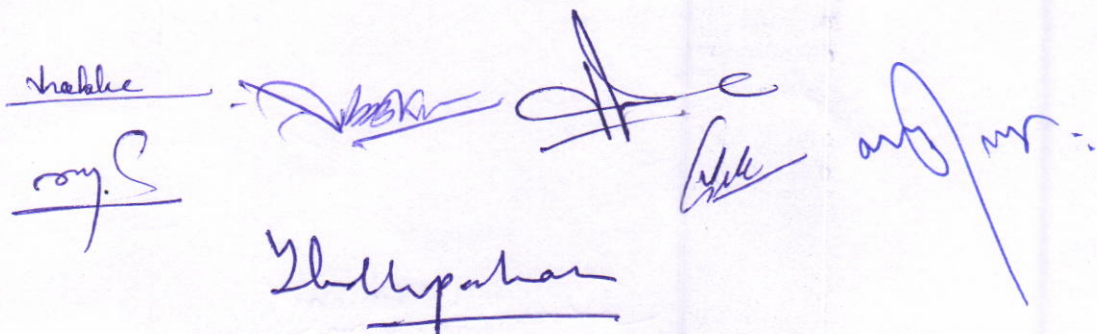
Social issues in rural settlements: Poverty, housing and shelter, deprivation and inequality, empowerment of woman, healthcare, rural-urban interaction. Environmental issues in total settlements: access to environmental infrastructure, water supply, sanitation, drainage, occupational health hazards.

Unit - IV

Cultural landscape element in rural settlement in different geographical environments with specific references of India. House types and field patterns. Origin, evaluation, size, socio – spatial structure of Indian villages. Rural development planning in India.

Suggested readings :

1. Singh R.Y : Geography of Settlements
2. Mondol, R.B.: Settlement Geography
3. Taylor: Urban Geography
4. Northam : Urban Geography
5. K.Siddarth& Mukherjee: urbanisation, system and process
6. Tiwari: Settlement Geography

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Master of Arts (NEP 2020)

M. A. Geography

Semester – I

Total Marks=100 Marks, Credit: 4

Semester Examination =80 Marks

Internal Assessment= 20 Marks

Paper- V (ELECTIVE PAPER -II)

Geography of Climate Change

Paper Code: PGGE05

Unit – I Introduction to Climate Change:

Meaning and concept of climate change. Origin of atmosphere. Concepts of weather and climate. Evidence of Climate Change: Historical and current weather and climate events: Meteorological, Lithogenic and biological, Greenhouse effect, Greenhouse Gases, Global Warming. Extreme weather and climate event: Drought, Extreme Heat, Extreme precipitation, Hurricanes, Tornadoes and Wildfire.

Unit II : Causes and Effect of climate change

Natural cause: Solar variation, Volcanic eruption, ocean currents, Earth orbital change and internal variability
Human causes: Burning fossil fuel, Deforestation, Intensive Agriculture, and industries. Impacts of climate change: Water resources, agriculture, human health, vegetation, economy and El nino, La Nina and Arctic Oscillation International efforts to control the climate change: UNFCC its policy framework and provisions, Earth Summit Rio-de-Janeiro, World summit, Kyoto Protocol, Copenhagen summit and Doha Conference

Unit – III : Climate change Vulnerability and Adaptation

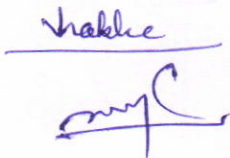
Meaning and type of vulnerability Meaning, Definition, and types of adaptation Approaches of adaptation and Adaptation Strategies. Adaptation in different sectors: Agriculture, Forest, Water resources, Biodiversity, Disaster Risk Management

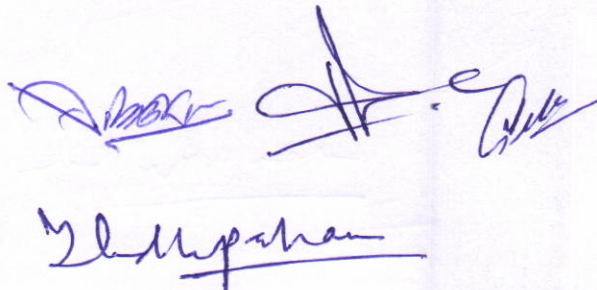
Unit- IV: Vulnerability Assessment and climate change mitigation

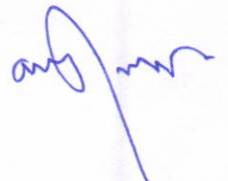
Climate change vulnerability assessment Global Initiatives to climate change mitigation: Kyoto Protocol, carbon trading, clean development mechanism, COP. Indian initiative to support climate change mitigation: Improving energy efficiency, Diversification of energy sources, Modifying industrial processes, a multipronged strategy for sustainable development and Clean Development Mechanism (CDM) in India.

References:

1. Earth: Evolution of a Habitable World, 2nd edn., Cambridge, UK: Cambridge University Press (2013)
2. Jonathan I. Lunine. Evolution of the Earth, McGraw-Hill Education; 8th edition (2009)
3. Donald Prothero, Robert Dott, Jr. A Textbook of Climatology, Wisdom Press (2015)
4. Tapas Bhattacharya Global Warming: The Complete Briefing, Cambridge University Press; 4th edition (2009),
5. John Houghton K. Siddhartha (2020): Climatology, Atmosphere, Weather and Climate. Kitaba Mahal Publication, New Delhi
6. जागतीक तापमान बदल : डॉ. पी. एम. नागतोडे.







Master of Arts (NEP 2020)

M. A. Geography

Semester – I

Total Marks=100 Marks, Credit: 4

Semester Examination =80 Marks

Internal Assessment= 20 Marks

Paper V- (ELECTIVE PAPER -III)

Geography of Soil and Water Resource

Paper Code: PGGE05

Unit – I

Meaning of pedology and soil geography; Definition, components, color, texture and structure of soil; Soil forming processes and factors affecting soil formation; Soil profile and horizons; Classification and distribution of soil. Major Soil types in India.

Unit – II

Soil aeration and temperature; Soil acidity and alkalinity; Soil fertility and Soil quality, health; Soil erosion and its control; Remote sensing in soil studies.

Unit- III

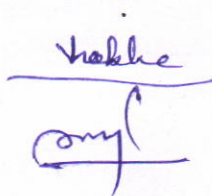
Meaning, scope, and development of hydrology; Pure and applied hydrology; Hydrological cycle and human interference; Global and India's water budget; Evaporation and evapotranspiration; Infiltration and runoff. Groundwater; Groundwater resources of India.

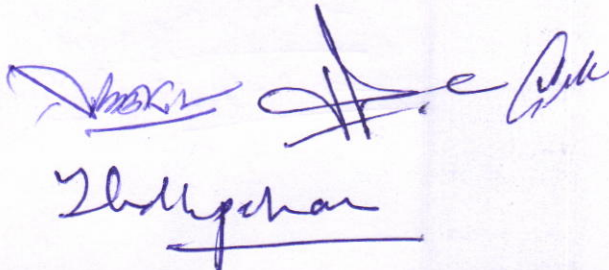
Unit-IV

Flood and drought; water crisis and river water disputes; Integrated water resource management; Watershed and watershed management, Application of remote sensing in hydrological studies.

References:

1. Bedient, Philip B. et al (2020): Hydrology and Floodplain Analysis, 6th Edition, Pearson India Education Services Pvt. Ltd., Noida.
2. Das, Madan and Saikia, Mimi Das (2013): Watershed Management, PHI Learning Pvt. Ltd., New Delhi.
3. Maidment, David R. ed. (1992): Handbook of Hydrology, McGraw Hill Inc. , New York.
4. Murty, JVS (2018): Watershed Management, New Age International Publishers, New Delhi.
5. Raghunath, HM (2022): Hydrology – Principles, Analysis and Design, 4th Edition, New Age International Publishers, New Delhi.
6. Reddy, Dr. P. Jaya Rami (2016): A Textbook of Hydrology, University Science Press, New Delhi.
7. Biswas, TD and Mukherjee SK(2017): Textbook of Soil Science, 2 nd Edition, McGraw Hill Education (India) Pvt. Ltd., Chennai.
8. Bryant, Rechar H. (2018): Physical Geography, Rupa& Co, Mumbai.
9. Das, Dilip (2020): Introductory Soil Science, Kalyani Publishers, Ludhiana.
10. Indian Society of Soil Sciences (2015): Soil Science – An Introduction, New Delhi.
11. Kale, V.B. (2020): Soil Geography, Himalaya Publishing House, Mumbai.
12. Schaetzl, Randall J. And Thompson Michael L. (2015): Soils – Genesis and
13. Geomorphology, 2nd Edition, Cambridge University Press, Cambridge.
14. Tripathi, R.P. and Singh, H.P. (2001): Soil Erosion and Conservation, New Age International (P) Ltd. Publishers, New Delhi.
15. Weil, Ray P. and Brady, Nyle C. (2016): The Nature and Properties of Soil, 15th Edition, Pearson, London.







Master of Arts (NEP 2020)

M. A. Geography

Semester – I

Total Marks=100 Marks, Credit: 4
Semester Examination =80 Marks
Internal Assessment= 20 Marks

Paper V- (ELECTIVE PAPER -IV)

Geography of Tourism

Paper Code: PGGE05

Unit - I

Basics of tourism. Definition of Tourism, factors influencing tourism, historical, natural, Socio-cultural and economic. Motivating factor for pilgrimages, leisure, recreation, elements of tourism.

Unit - II

Geography of tourism :- its spatial affinity, areal and locational dimensions comprising physical, cultural, historical and economic, Tourism types cultural, eco-ethno-coastal and adventure tourism, national and international tourism, globalization and tourism.

Unit - III

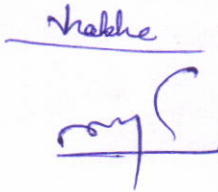
Indian tourism: regional dimensional of tourist attraction, evolution of tourism, promotion of tourism, infrastructure and support system – accommodation and supplementary accommodation, other facilities and amenities, Tourism circuits-short and longer detraction – Agencies and intermediacies – Indian hotel industry.

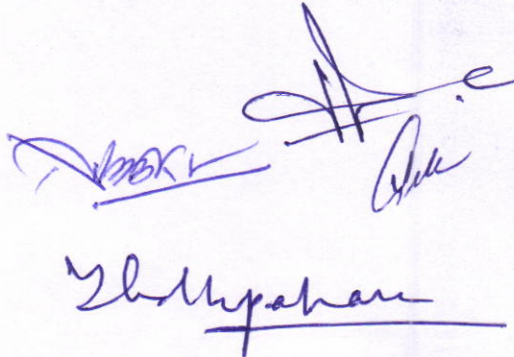
Unit - IV

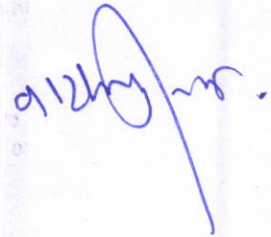
Impacts of Tourism, Physical, economic and social and perceptual positive and negative impacts, Environmental laws and tourism- Current trends, spatial patterns and recent changes, Role of foreign capital and impact of Globalization on tourism.

Suggested reading:

- 1) C. Michell Hall: Tourism Planning, Policies and Relationship
- 2) C. Michell Hall: Tourism
- 3) Geogrey Wall, Alister Mathieun ; Tourism- Change, Impact and Opportunities
- 4) Stephen Page: transport and Tourism
- 5) Stephen Page: Eco- Tourism
- 6) Stephen Page, C Michall Hall: Managing urban Tourism
- 7) Sustainable Tourism ,A Geographical Perspective
- 8) Dr. P.M. Naktode and Dr. D.A. Pardhi :- Paryatan Bhoogol
- 9) पर्यटन भूगोल : डॉ. पी एम नागतोडे







Master of Arts (NEP 2020)

M. A. Geography

Semester – I

Total Marks=100 Marks, Credit: 4
Semester Examination =80 Marks
Internal Assessment= 20 Marks

Paper V- (ELECTIVE PAPER -V)

Population Geography

Paper Code: PGGE05

Unit I -

Population geography: Scope and Objectives, development of population geography. Population geography and demography- Sources of population data, their level of reliability and problems of mapping of population data.

Unit - II

Population distribution: density and growth – Theoretical issues, classical and modern theories in population distribution and growth, world patterns and their determinants, India – Population distribution, density and growth, Concepts of under population and over population.

Unit - III

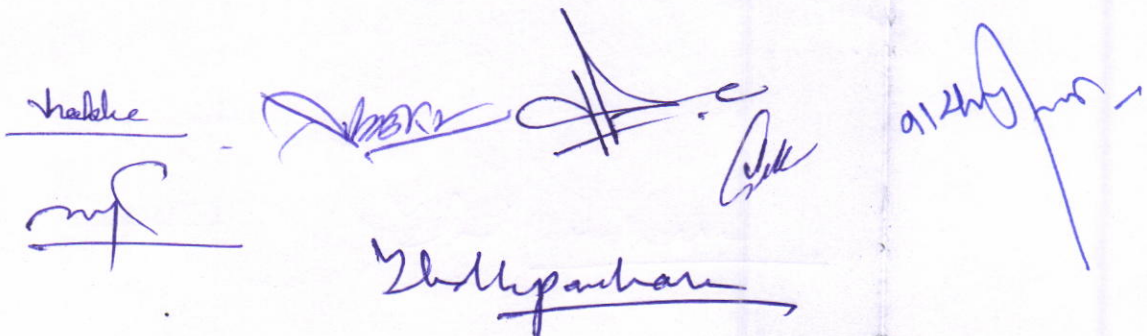
Population composition: age and sex, literacy and education, rural and urban, urbanization, occupational structure, population composition of India, population dynamics; Measurement of fertility and mortality. Migration: national and international Patterns.

Unit - IV

Population and development: resource region and levels of population and socio-economic development, population policies in developed and less developed countries, Human development index and its components, India's population policies.

Suggested reading:

- 1) Bogue, D.J(1969); Principles in Demography, John Wiley, New York.
- 2) Bose, Ashish et al (1974); Population in India's Development(1947-2000), Vikas Publishing House, New Delhi
- 3) Census of India. India; A state Profile, 1991
- 4) Chandna, R.C.(2000): Geography of population; Concept, Determinants and Patterns, Kalyani Publishers, New Delhi.
- 5) Clark, John (1973): Population Geography. Pergamum Press, New York.
- 6) Crook, Nigel (1977): Principles of population and development Pergamum Press, New York.
- 7) Mamoria, C.B.(1981):India's population Problems, Kitab Mahal Delhi
- 8) Premi M.K (1991): India's population. Heading towards a Billion Publishing Corporation
- 9) Shrinivasan. K. (1998) Basin Demographic Techniques and application Sage publication, New Delhi



Master of Arts (NEP 2020)

M. A. Geography

Semester – II

Total Marks=100 Marks, Credit: 4
Semester Examination =80 Marks
Internal Assessment= 20 Marks

(MAJOR PAPER -I)

Applied Geomorphology

Paper Code: PGGE06

Unit – I

Definition, scope, concept and branches of geomorphology; Evolution of geomorphic thought; Geomorphic systems and models; Approaches and techniques of geomorphic analysis; Relationships of geomorphology with other branches of Earth Sciences.

Unit - II

Earth movements-epirogenic, orogenic and cymatogenic earth movements. Forces of crustal instability, plate tectonics, seismicity, isostasy, volcanicity, Evolution of Himalaya.

Unit - III

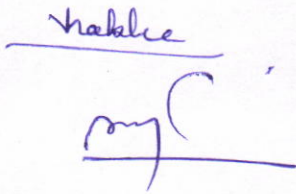
Exogenic processes: Concept of gradation, agents and processes of gradation, causes, types of weathering, mass movement, erosional and depositional processes and resultant landforms and soil formation, slope evolution.

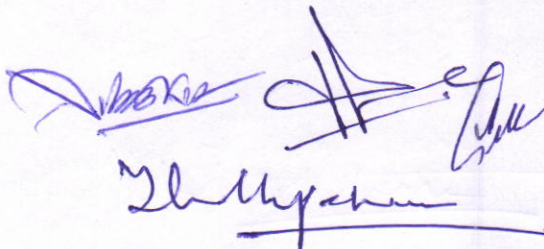
Unit - IV

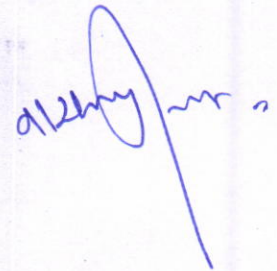
Geomorphic processes: dynamics of fluvial, glacial, Aeolian marine and karsts processes and resulting landforms. Application of geomorphic mapping, terrain evaluation, land capability and land suitability, classification, urban geomorphology and geomorphic hazards.

Suggested Reading :

1. Chorley, R.G.(1972) Spatial Analysis In Geomorphology, Methuen, London
2. Dr,V,S.Kale& Abhijit Gupta: Introduction to Geomorphology
3. Garner H.F. (1974) : The origin of the Landscape- A synthese of Geomorphology, Oxford university Press London
4. Mitchell C.W.(1973):Terrain Evolution, Longman, London
5. Ollier C.D,(1979) : Weathering, Longman London.
6. Sharma. H.S.(Ed)(1980)" Perspective in Geomorphology, Concept, New Delhi
7. Singh Savindra (1998) Geomorphology, Prayag Publication, Allahabad
8. Skinner B.J. and peter S.C. (1995) The Dynamic Earth, John Willey, New York
9. Spark.B.W.(1960): Geomorphology Longman London
10. Naktode P.M., Sheikh J.A. & Dudhapachare Y.Y., Bhurupshashtra va Sagarvidnan.







Master of Arts (NEP 2020)

M. A. Geography

Semester – II

Total Marks=100 Marks, Credit: 4
Semester Examination =80 Marks
Internal Assessment= 20 Marks

(MAJOR PAPER -II)

Remote Sensing & GIS

Paper Code: PGGEO07

Unit – I

Definition, types, development, advantages, and limitations of remote sensing; Principles of remote sensing and remote sensing sensors; Remote sensing platforms; Capturing and processing of drone image.

Unit – II

Thermal, infrared, and microwave remote sensing; Digital image processing and analysis; Principles of image interpretation.

Unit – III

GIS Data Analysis: Input; Geo-referencing; Editing, output, and query; Overlays. Application of GIS: Land use mapping, urban sprawl analysis, forest monitoring, and natural disasters; Future of GIS; GIS in India.

Unit - IV

Geographical Information System (GIS): Definition, components, and historical development; Definition and need of Land Information System. (LIS). GIS Data Structure: Types (spatial and non-spatial), raster and vector data structure.

Suggested Readings:

1. Bhatta, B. (2010): Analysis of Urban Growth and Sprawl from Remote Sensing, Springer, Berlin.
2. Burrough, P.A. and McDonnell, R.A. (2000): Principles of Geographical Information System – Spatial Information System and Geo-statistics, Oxford University Press, Oxford.
3. Chang, Kang-tsung (2015): Introduction to Geographic Information System, 8th Edition, McGraw Hill, New York.
4. Das, Chandan Surabhi and Mallick, Debojyoti (2020): Geospatial Techniques and Research in Geography, Enova Publications, Kolkata.
5. Garg, P.K. (2019): Principles and Theory of Geoinformatics, Khanna Book Publishing Co. (P) Ltd., New Delhi.
6. Gomasca, M. A. (2009); Basics of Geomatic, Springer Science, New York.
7. Heywoods, I, Cornelius, Sand Carver, S. (2011): An Introduction to Geographical Information System, Prentice Hall, Upper Saddle River, NJ.
8. Maltiar, K.K and Maltiar (Mrs) S.R. (2022): Concepts of Cartography, Remote Sensing and GIS, Rajesh Publications, New Delhi.

Semester – II

Marks- 100, Credit: 04

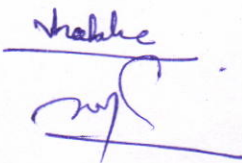
PAPER – III

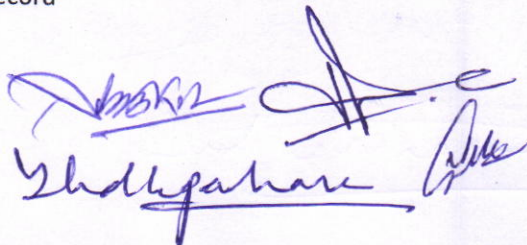
Morphometric Analysis

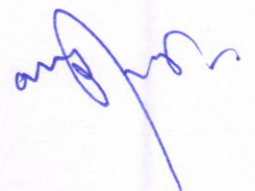
Paper Code: PGGEO08

PRACTICAL – II

1. Basics of computer system: Application in geographical studies. (10 Marks)
Theoretical aspect of computer system
2. Study of topographical maps (10 Marks)
Interpretation of maps: Topographical maps. Aspects of Physical and Human Environment.
(Note: - Teachers should select Topographical maps from plains, plateaus, mountains and coastal regions of India.)
3. Measurement of area by graphical methods. (10 Marks)
4. Morphometric measurement (15Marks)
 - (A) Graphical methods.
 - i) Serial profile
 - ii) Superimposed profile
 - iii) Projected profile
 - iv) Composite profile
 - v) Longitudinal profile
 - vi) Transverse profile
 - (B) Slope analysis by using the following methods. (15 Marks)
 - i) Wentworth's method
 - ii) Raisz and Henry's method
 - iii) G. H. method
 - (C) Drawing and interpretation of following graphs. (10 Marks)
 - i) Hypsographic curve
 - ii) Altimetric Frequency graph
 - iii) Area Height Diagram
 - (D) Drainage basin analysis (10 Marks)
 - i) Determination of stream order
 - ii) Stream length and determination of basin area
 - iii) Drainage density and texture of topography
 - (E) Viva-Voce on Practical Book (10 Marks)
 - (F) Practical record (10 Marks)

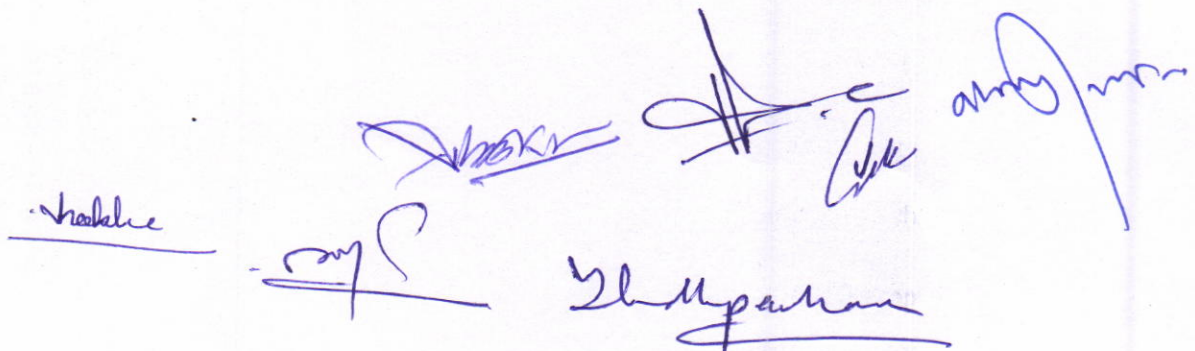



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Suggested Readings:

1. Aronoff S.(1989): Geographic Information System: Management Perspective, DDI Publication Ottawa.
2. Burrough P.A. (1986): principles of Geographic information system for Land Resource Management,Oxford University press, New York.
3. Barrett E.C. and L.F Curtis (1992): Fundamentals of Remote Sensing and Air photo Interpretation,McMillan New York
4. Campbell J(1989): Introduction to Remote Sensing Guilford, New York
5. Clendinning J (1985): Principal and use of Surveying Instruments 2nd edition Blockie ACurran (1985): Principals of Remote Sensing Longman, London
6. Fraser Taylor D.R. (1991) Geographic In information system Pergamum Press oxford,1991Hord R.M.(1989): Digital Image processing of remotely sensed data Academic New York Hotine, Major M.(1935) : The re-triangulation of Great Britain Empire Survey Review
7. Luder D.(1955): Aerial Photography Interpretation: Principals and Application Mc graw Hill, New York.Mark S.Monmoni er (1982): Computer assisted geography, Prentice Hall, Englewood Cliff, New Jersey.
8. MaquireD.G.M.F Goodchild and D.W. Rhind (eds)(1991): geographic information system : Principals andApplication Taylor& francis Washington.
9. Mishra R.P and Ramesh,A (1986) : Fundamentals of cartography.Mcmillan Co.New Delhi
10. Mitra R.P and Ramesh : Fundamentals of Geography revised Edition, Concept Publication, New delhiMonkhouse F.J (1971) Maps and Diagram, Methuen
11. Negi, Balbir Singh (1995): Practical geography third revised edition Kedarnath and Ramnath, Meerut&Delhi
12. Pal.S.K(1968): Statistics for Geoscientist_ Techniques and Application, Concept, New Delhi
13. Peuquet D.Jand D.F. Marble (1990): Introductory teaching in Geographic Information system. Taylor&Fransis Washinton
14. Pratt W.K. (1978): Digital Image Processing, Wiley, New York.
15. Rao D.P(ed)(1998): Remote Sensing for Earth Resources, Association of Exploration Geophysicist,Hyderabad.

The bottom of the page features several handwritten signatures in blue ink. On the left, there is a signature that appears to be 'Shahid'. In the center, there is a signature that looks like 'S. S. S.'. To the right of that, there is a signature that appears to be 'Shyam'. Further right, there is a signature that looks like 'S. S. S.'. On the far right, there is a signature that appears to be 'S. S. S.'. There are also some other scribbles and marks in blue ink scattered around these signatures.

Master of Arts (NEP 2020)

M. A. Geography

Semester – II

Total Marks=100 Marks, Credit: 4

PAPER – IV (ON JOB TRAINING/ FIELD PROJECT)

Paper Code: PGGE009

**OJT (On Job Training) and Field Project Submission of the Dissertation: 100 marks
Distribution of OJT / Field Project Marks**

Sr. No.	Particulars	Marks
1	Introduction & Review of Literature:	10
2	Statement of the Problems/ Hypothesis	10
3	Methodology Used, representation of data & statistics	10
4	Use of Geo-Spatial Technology & Computer based applications	10
5	Results and Discussion	10
6	Conclusion & Recommendations	10
7	References and Citations	10
8	Relevance of the Project with present issues	10
9	Viva-Voce by External Examiner	20
Total		100

Note: The college / departments must identify and adopt some geographic areas falling within the jurisdiction. Such geographic areas can be Land survey, Agro-based industries /Organization or Forest based industries/ Organization or Any local industry / Organization or Ngo village survey/ educational excursion Report in Dissertation form. The University will appoint the External Examiner to examine the students and carry out the viva-voce.

Examples for topic of OJT study report.

1. Forest: Study of Forest based industries in Chandrapur-Gadchiroli District
2. Forest: The Role of forest in livelihood of tribals in Gadchiroli district
3. Forest: The study of forest management by villagers in Mendha Lekha in Gadchiroli
4. Land Survey: The role of Bhumi Abhilekh offices in XYZ Taluka of Chandrapur district.
5. Land Survey: Bhu-Naksha of XYZ Talukas, Saza and its help to the farmers
6. Industries: Agro Based Industries in Sindewahi Taluka of Chandrapur
7. Industries: Distribution of rice mill in Chandrapur-Gadchiroli district
8. Industries: Location of Ginning Millis in Chandrapur District
9. Organization: The role of Environmental Organizations in Water Conservation in Gadchiroli
10. Organization: A study of 'Amhi Amchya Arogyasathi' organization in reference to eradicate the rural health issues.
11. Organization: A special study of SEARCH organization in bringing down the child mortality in Gadchiroli district.
12. Survey: Socio-economic survey of XYZ village
13. Survey: Land use survey of XYZ village
14. Survey: A survey of Bhamragad Taluka with reference to tribal culture.
15. Survey: A productivity survey of villages in command area of Naleshwar Dam in Sindewahi taluka

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Master of Arts (NEP 2020)

M. A. Geography

Semester – II

Total Marks=100 Marks, Credit: 4
Semester Examination =80 Marks
Internal Assessment= 20 Marks

PAPER – V (ELECTIVE PAPER -I)

Geography of Resource

PAPER CODE: PGGEO10

Unit I :-

Nature and scope of Geography of Resource, Significance of Resource, Concept of Resource, utilization of Resources; factors affecting on utilization of Resources classification of Resources. Natural Resources – Renewable resources.

Unit II:-

Land – a Resources, soil formation and composition, classification of soil, world soil distribution soil erosion, causes soil, conservation importance, water resources – distribution economic relation of man and water resources water conservation.

Unit III:-

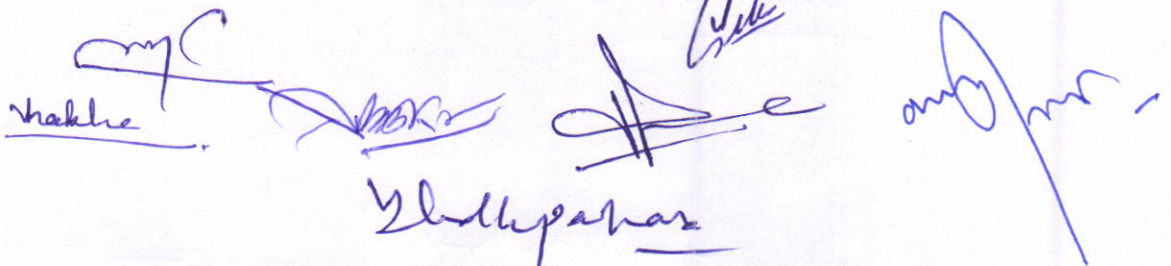
Mineral Resource – Importance of mineral Resource Type, characteristics, uses, world distribution, Iron ore, Manganese, Bauxite copper, Mica. Environmental effect of mineral production, conservation Power Resources – classification – coal, mineral oil, natural gas Hydro-Electricity.

Unit :-

Ocean as a resource, Animal resources, forest Resources – use of forest resources, type of forest, forest conservation man as a resource, distribution of Human resources problems of population and resources. Agriculture Resources – factors affecting on agriculture types.

Reference :

- 1) Economic Geography – Alexander J.
- 2) Economic Geography – B. Agunachalam
- 3) Basic of Economic Geography – Boyce, Renold, Red.
- 4) Economic and commercial Geography - Dasgupta.
- 5) Economic and commercial Geography – R.S. Dube, R.L. Singh.
- 6) Economic Geography – H. Robinson
- 7) Economic Geography – Jones and Darkenwald
- 8) Economic Geography – Leong Cheng.
- 9) Geography of Resources – Balbir Negi.
- 10) Geography of Resources – M.P. Karan.
- 11) Geography of Resources – Dr. Kaushik.



Master of Arts (NEP 2020)

M. A. Geography

Semester – II

Total Marks=100 Marks, Credit: 4

Semester Examination =80 Marks

Internal Assessment= 20 Marks

PAPER – V (ELECTIVE PAPER -II)

Medical Geography

Paper Code: PGGE010

Unit – I

Introduction to Human Health and Geography – Meaning and Definition in Geography of Health – Objectives – Nature, Scope of Geography of Health – Significance of Geography of Health – Approaches of Study of Geography of Health, Factors Influencing on Human Health.

Unit – II

Nutrition and Food: Meaning of Nutrition and Food – Nutrition Elements of Food Purpose of Balance Diet – Significance of Nutrition in Food; Epidemiology of Communicable. Disease; Meaning – Classification – Types Causes and Distribution – Prevention and Eradication Programmes in India.

Unit – III

Epidemiology of Non-Communicable disease: Meaning – classification of disease (Congenital and Acquired Disease), Malnutrition: Types of Malnutrition – Classification of Malnutrition – Causes and Symptoms of Malnutrition – Effect of, Malnutrition, Distribution of malnutrition – Prevention and Eradication Programare in India.

Unit- IV

Health care System; Meaning of Health care, different types of Health care system; Health care Planning & Management; Meaning and Objectives of Health care Planning, Health Education, and National Health Policy in India. Health Management, Health Organization. (WHO)

Suggested Readings:

1. Melinda Meade, Robert J Earickson, Medical Geography, Ravat Publication, Jaipur, 2010
2. A Companion to Health and Medical Geography, Tim Brown, Sara McLafferty, Graham Moon First published: 11 November 2009 Print ISBN: 9781405170031
3. Majid Husain, Medical Geography, Amol Publication, New Delhi.
4. R P Mishra, Geography of Health, Concept Publication Company, New Delhi, 2007
5. C M Lakshmana, Population Change and Healthcare, Rawat Publication, Jaipur

Master of Arts (NEP 2020)

M. A. Geography

Semester – II

Total Marks=100 Marks, Credit: 4
Semester Examination =80 Marks
Internal Assessment= 20 Marks

PAPER – V (ELECTIVE PAPER -III)

Bio-Geography

Paper Code: PGGE010

Unit – I

Nature and scope of Bio Geography – Biosphere and its characteristics, meaning and functions of Soil formation and soil characteristics, Soil profile, soil fertility and productivity; Classification of Soil.

Unit – II

Plants – Their evolution, grouping and importance. Environmental factors influencing plants and their distribution. Major vegetation types – Forest, grassland and desert vegetation and their economic importance.

Unit – III

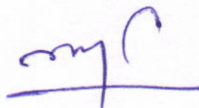
Animals – Environmental factors influencing their distribution, The Zoo- geographical realms and types of animal Ecology – ecosystem and ecological Balance with reference to plants and animals.

Unit – IV

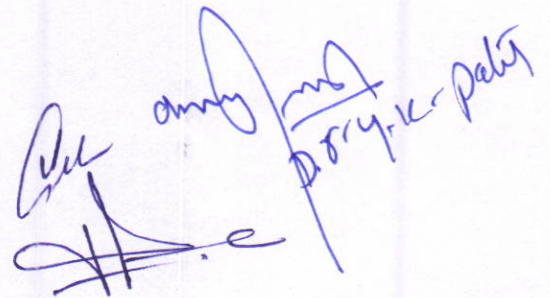
Man – Environment relationship - Meaning and characteristic features of environment, use of environment by man. Concept of determinism and possibilism – Ecological adaptation. Global warming and its consequences. Environmental degradation. Concept of conservation - with reference to soil, plants and animals.

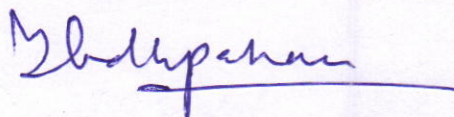
Suggested Readings:

- 1) Biogeography – H. Robinson
- 2) Biogeography, Natural and Cultural – Strahler
- 3) Biogeography – A Study of Plants in the Ecospher – Tivy, Joy
- 4) One earth one failure – East West Press New Delhi
- 5) Environmental Pollution – N. Manivasakun.
- 6) Fundamentals of Biogeography – Huggett R. J.
- 7) Essential of Biogeography – H. S. Mathur
- 8) Man and Environment in India through ages – D. P. Agrawal.


Shakhe




Dory, K. Palit


Shalpanan

Master of Arts (NEP 2020)

M. A. Geography

Semester – II

Total Marks=100 Marks, Credit: 4

Semester Examination =80 Marks

Internal Assessment= 20 Marks

PAPER – V (ELECTIVE PAPER -IV)

Social Geography

Paper Code: PGGEO10

Unit – I

Nature and development and social geography, Philosophical bases of social geography – Positivist, Structuralist, radical, humanist, post – modern and post structuralist; social geography in the realms of social sciences.

Unit – II

Space and society, Understanding a society and its structure and process. Geographical bases of social formations, contribution of social geography to social theory, power relations and space.

Unit – III

Towards social geography of India. Social differentiation and region formation, evolution of socio – cultural regions of India bases of social region formation role of race, caste, ethnicity, religion and languages, India unity and diversity, social transformation and change in India.

Unit- IV

Social well-being: Concepts of social well-being, Physical quality of life, Human development: Measurement of Human development with social, economic and environmental indicators, Rural Urban deprivation in India with respect to health care: education and shelter; deprivation and discrimination issues relating to women and under prevailed groups: Patterns and bases of rural and urban society.

Suggested Readings:

1. Azzaudin Ahmad: Social Geography
2. Smith, David; Social geography; A Welfare Approach, Edward Arnold. 1977
3. Sopher, David: An exploration of India, Corenell University, 1980
4. Wankhede Deepak M.(2008): Socio-Economic Development of Scheduled Castes, Gautam Book center Publication, New Delhi

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Master of Arts (NEP 2020)

M. A. Geography

Semester – II

Total Marks=100 Marks, Credit: 4
Semester Examination =80 Marks
Internal Assessment= 20 Marks

PAPER – V (ELECTIVE PAPER -V)

Urban Geography

Paper Code: PGGE010

Unit – I

Nature Scope and Development of urban geography, different approaches and recent trends in urban geography, Origin and growth of urban settlements: bases and process of urbanization from the ancient, medieval and modern period, and development, Classification of urban settlements on the basis of size and function: urban system

Unit – II

Location, size and spacing of urban settlements, Factors in the location of cities: urban hierarchy and central place theory of Christaller and Losch, rank size rule – urban function and Functional classification of towns.

Unit – III

Urban Morphology – economic based and the functional organization of the city. Models of the city structure. basic and non basic functions. central area/CBD – its characteristics and delimitation. residential and industrial and other types of land use within the cities. Contemporary urban issues, urban poverty, urban sprawl, transportation, housing – Slums, environmental pollution: Air, Water, Noise, Solid Based, Urban Crime, issues of Environmental Health

Unit – IV

Areal Expansion of cities suburbs. conurbation and mega polis development. Rural – urban fringe. centrifugal and centripetal force. the regional relation of the city. concept of city region, – growth and morphological study of the following Indian cities – New Delhi, Chandigarh, Mumbai, Hyderabad, Secunderabad, Jaipur, and Nagpur.

Suggested Readings:

1. Bose, A. Urbanization in India
2. Bourne and Symmons, Systems of Cities
3. Carter, Urban Geography
4. Chapin F. S., Urban Land use Planning
5. Dentler, R. A., Urban Problems
6. Deshpande C. T., Cities
7. Johnson, J., Urban Geography.
8. Jones, E. Town and Cities
9. Mayer and Kohn, Reading in Urban Geography.
10. Northom, R. M., Urban Geography.
11. Prakashrao, B. L. S., Urbanization in India A Spatial Approach.
12. Rao. M. S. A., Urban Sociology in India, Orient Longman.

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9/12/2020
Dr. Y. K. Patil