Rashtrasant Tukdoji Maharaj Nagpur university Nagpur

Master of Arts (Credit Based Semester Pattern)

M. A. Geography

<u>Semester - I</u>

Total Marks=100 Marks PAPER – I 4 Credits

Semester Examination =80 Marks
Internal Assessment= 20 Marks

History of Geographical Thoughts

Unit - I

The field of geography, its place in the classification of sciences; geography as a social science and natural science. Selected concepts in Philosophy of geography, distributions, relationship, interaction, areal differentiation and spatial organization.

Unit - II

Contributions of different scholars during ancient medieval and modern period. Geography In the 20th century: Status of Indian Geography, Future of Geography, relating to the development of geographic thought with special reference to changing views on man-environment relationship.

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 regional method.

Unit - IV

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

Suggested Reading:

- Albert, Ronald, Adams, John S, Gould, Peter (1971) Spatial Organisation, The Geographers View of the World, Prtentice Hall. N.J
- 2. Ali,S.M.(1966): The geography of Puranas, People Publishing House
- 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 comtemporary 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
- 12. Yeats ,M.(1974): An Introduction to quantitative Analysis in Human Geography, Mcgraw Hill Book Co, New York.
- 13 Minshull R. (1970): The Changing Nature of Geography, Hutchinson University Library London

<u>Semester - I</u>

Marks- 100 PAPER – II 4 Credits

Semester Examination=80Marks
Internal Assessment=20 Marks

OCEANOGRAPHY

Unit - I

Nature and scope of oceanography, History of oceanography. Distribution of land and water; major features of ocean basins, continental margin and deep ocean basins.

Unit - II

Physical and chemical properties of sea 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, Marine Deposits and formation of coral reefs.

Unit - IV

Applied Oceanography – Marine life – factor of Marine Environment, Marine Biozones, law of the sea; exclusive economic zone, Food and Mineral resources of the sea, Oceans and world Geopolitics.

Suggested reading:

Davis Rechardj.A.(1986) Oceanography- An Introduction to the Marin Environment, W.M.C. Brown Iowa.

Garrison T (2001): Oceanography- An Introduction to marine science Books/Cole, Pacific Grove. USA

Savindra Singh: Oceanography

Lal: Oceanography

Duxbary C.A. and Cuxbary B: An introduction to the world's Oceans – C Brown lowa 2nd ed, 1996.

Gross M Grant.: Oceanography a view of the earth, Prantice – Hall inc. New Jersy 1987.

Marks-100 PAPER – III 4 Credits

Semester Examination=80 Marks
Internal Assessment = 20 Marks

GEOMORPHOLOGY

Unit - I

Nature and scope of geomorphology, Geological structures and landforms. Uniformitarianism; multicyclic and polygenetic evolution of landscape; concept of threshold; environmental change – climatic change and geocronological methods- documentary evidence, artifacts, major horizons, dendrocronology, pollen, thermoluminescens.

Unit - II

Earth movements-epirogenic, orogenic and cymatogenic earth movements. Forces of crustal instability, isostacy, plate tectonics, seismicity, volcano city, orogenic structures with reference to the evolution of Himalayas.

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, down wearing, parallel retreat and replacement models.

Unit - IV

Geomorphic processes: dynamics of fluvial, glacial, Aeolian marine and karsts processes and resulting landforms; complexities in geomorphologic processes; Erosion surfaces-techniques of identification and correlation. 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, Londonpta
- 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): Geomorpholgy Longman London

Marks-100 PAPER – IV

(F) Practical record

PRACTICAL - I

1. Basics of computer system: Application in geographical studies. (10 Marks – 2 Periods) Theortical aspect of computer system 2. Study of topographical maps (15 Marks – 2 Periods) 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 - 2 Periods) 4. Morphometric measurement (45Marks – 6 Periods) (A) Graphical methods. (10 Marks) i) Serial profile ii) Superimposed profile iii) Projected profile iv) Composite profile v) Longitudinal profile vi) Transverse profile (15 Marks) (B) Slope analysis by using the following methods. 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 (10 Marks) (D) Drainage basin analysis i) Determination of stream order ii) Stream length and determination of basin area iii) Drainage density and texture of topography E) Viva (10 Marks)

(10 Marks)

CERTIFICATE

Name of	the College	
This is to	certify that this practical record is the	Bonafide Work of Shri/Smt/ Ku
		Class
		, He/she attended/ not attended the Tukdoji Maharaj Nagpur University, Nagpur
Signature	e of the teacher who taught the examin	ee
1)		<u> </u>
2)		
Date:		
Note : In t	he absence of above certificate, Candidate	e will not be allowed to appear in the Practical examination.
Suggested	l Readings:	
Aronoff S.	(1989): Geographic Information System: M	lanagement Perspective, DDI Publication Ottawa.
_	P.A. (1986): principles of Geographic infor press, New York.	mation system for Land Resource Management, Oxford
Barrett E.	C. and L.F Curtis (1992): Fundamentals of F	Remote Sensing and Air photo Interpretation, McMillan New York
Campbell	J(1989): Introduction to Remote Sensing G	Guilford, New York
Clendinni	ng J (1985): Principal and use of Surveying	Instruments 2 nd edition Blockie A
Curran	(1985): Principals of Remote Sensing L	ongman, London
Fraser Tay	vlor D.R. (1991) Geographic In information	system Pergamum Press oxford,1991
Hord R.M	.(1989): Digital Image processing of remote	ely sensed data Academic New York
Hotine, M	ajor M.(1935) : The re-triangulation of Gre	eat Britain Empire Survey Review
Luder D.(1	.955): Aerial Photography Interpretation: F	Principals and Application Mc graw Hill, New York.
Mark S.M	onmoni er (1982): Computer assisted geog	graphy, Prentice Hall, Englewood Cliff, New Jersey.
•	.G.M.F Goodchild and D.W. Rhind (eds)(19	991): geographic information system: Principals and Application

Mishra R.P and Ramesh, A (1986): Fundamentals of cartography.

Mcmillan Co.New Delhi

Mitra R.P and Ramesh: Fundamentals of Geography revised Edition, Concept Publication, New delhi

Monkhouse F.J (1971) Maps and Diagram, Methuen

Negi, Balbir Singh (1995): Practical geography third revised edition Kedarnath and Ramnath, Meerut & Delhi

Pal.S.K(1968): Statistics for Geoscientist_Techniques and Application, Concept, New Delhi

Peuquet 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,

Hyderabad.

Robinson, A.H et al (1995): Element of Cartography, John Wiley & Sons. USA

Sandover, J. A. (1961): Plane Surveying Arnold

Sarkar A.K.(1977): Practical geography: A systematic Approach. Oriental Longman, Calcutta

Singh, R.L. and Dutt P.K. (1968): Elements of Practical Geography, Students Friends, Allahabad

Star J and J Estes (1994); Geomorphic Information system: An Introduction Prentice Hall Englewood Cliff, New Jersy.

Singh and Kanojiya (1972): Map work and practical Geography central Book depot, Allahabad

Thomas M. Lilles and and Ralph W Kefer, (1994): Remote Sensing and Image Interpretation John Wiley & son, New York.

Rashtrasant Tukdoji Maharaj Nagpur university Nagpur Master of Arts (Credit Based Semester Pattern)

M. A. Geography

Semester - II

Marks -100 PAPER - I 4 Credits

Semester Examination=80 marks
Internal Assessment =20 marks

RESEARCH METHODOLOGY

Unit - I

Significance of library in research: Literature survey – Review of work already carried out by others: gaps in research – Formulation of research problem – Objectives and hypotheses: testing of hypotheses.

Unit - II

Characteristics of geographical data – Measurement of data: scales used – 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 – Sampling of points, lines and areas – Data collection techniques through field work and questionnaires.

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- Objectives and hypotheses- Results of analysis- Summary of findings in the light of the hypotheses- Conclusion. Writing of references, Bibliography. Suggested reading;

Mishra R.P: Research methodology

Bhandarkar: Research methodology in social science

Kothari: Research Methodogy

Marks-100 PAPER – II 4 Credits

Semester Examination=80Marks
Internal Assessment=20marks

Environmental Geography

Unit-I

Geography as a study of Environment, concepts and components of environment, Development of environmental studies, Approaches to environmental studies, concepts of ecology and ecosystem. Man-environment relationship. Envirmental movements-Chipko Andolan, Narmada dam Andolan, Si lent Valley Movement.

Unit-II

The problems and causes of environmental degradation, Deforestation and man animal conflicts in India ,Soil erosion, Soil exhaustion, Desertification. Air pollution, water pollution, Water borne diseases and diseases due to air pollution, impact of pesticides and fertilizers, impact of illegal sand mining and coal mining, Disposal of solid waste in urban areas.

Unit- III

Environmental management: Environmental education, preservation of ecological balance at local, regional and National level, Major environmental policies and programme. Sample studies: Ganga Action Plan, Tiger Projects in Maharashtra, Drinking water in Rural Areas, Environment laws.

Unit -IV

Emerging Environmental issues: Population explosion, food security, global warming, conservation of bio-diversity, Bio-Diversity Act2002, Sustainable development. Impact of irrigation project on environment. Project impact assessment. Impact of irrigation project on displacement of people, Problem of rehabilitation of people. Environmental Impact Assessment notification 1994.

Suggested reading:

Singh savindra: Environment Geography, Prayag Praksashan

Lal : Environment Geography

Marks -100 Paper III 4 Credits

Semester Examination=80Marks Internal Assessment = 20 Marks

Climatology

Unit - I

Nature and scope of climatology and its relationship with meteorology, Composition, mass and structure of atmosphere.

Insolation: Heat balance of the earth, green house effect; vertical and horizontal distribution of temperature. Atmospheric Pressure and winds, jet stream

Atmospheric moisture; humidity, evaporation, condensation, precipitation; Formation types, world pattern of rainfall.

Unit - II

Concept of air masses and atmospheric disturbances, ocean atmospheric interaction -- EL Nino, southern oscillation (ENSO) and La Nino, monsoon winds, Norwesters, Cyclones – Tropical and Temperate, Climate of India and its controls.

Unit - III

Climatic classification: Koppen's, Thornthwaite's and Genetics. Major climates of the world—tropical, temperate, polar desert and mountain climate.

Unit - IV

Climatic changes: Evidences, possible causes; global warming, environmental impacts and society's response. Applied Geography: Impact of climate on Water Balance Study, Soil, Agriculture Activities, House Types and Health.

Suggested Reading:

- 1 Barry R.G.& R.J.Chorley: Atmosphere, weather and Climate. Methuaan & Col
- 2. Critchfield H.J.: General Climatology
- 3. Trewartha, G.T.: An Introdduction to Climate
- 4. Subrahmanyan, V.P: General Climatolgy Vol 3& 4 Heritage Publication New Delhi.
- 5. Savindra Singh: Climatology
- 6. Lal: Climatology
- 7. Nagtode.P.M, Sheikh, J.A. & Dudhpachare. Y.Y: Bhurupshastra vas agar vigyan, vidya prakashan

Marks- 100 PAPER - IV

PRACTICAL - II

1. Preparation and interpretation of the following maps and diagrams. (20 Marks – 4 Periods)

Group A

i Equivariable

ii Equipluves

iii Frequency graph

iν Rainfall dispersion diagram

٧ Running mean

νi Wind rose and compound wind rose

Group B (10 Marks)

i. Water budget graph

ii. Climatograph

iii. Hythergraph

Taylor's Climograph iv.

٧. Compound columnar graph

vi. Index of aridity and index of moisture

2. Study of Indian daily weather map and weather analysis. (15 Marks – 2Periods)

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

- S. W. Monsoon Season (a)
- (b) Summer season
- (c) Transition period
- (d) Cyclonic
- 3. Advanced techniques of spatial analysis:

(15 Marks -2 Periods) (a) Remote sensing Definition of remote sensing. Remote sensing platforms and scanners. Electromagnetic radiation and

physics of remote sensing. Arial remote sensing data products- Arial photographs, types, scales, displacement, parallax, aerial mosaics, radial line methods (graphical) (exercise).

Air photo interpretation, instruments used. Elements of photo interpretation (exercises)

(b) Geographical information system

(10 Marks – 2 Periods)

(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. Editing and topology creation. Entering non-spatial data. Thematic mapping.

4. Excursion: (20 Marks - 2 Periods)

Visit to any plain, plateau, hilly, desert and coastal area. (Visit to local area will be not allowed)

- (A) Collection of data through interview techniques, Processing of raw data and tabulation of data for any research problem
- (B)Writing of report of the selected research problem on basis of research methodology by incorporating research design

5. Viva Voce (10 Marks)

6. Practical Record (10 Marks)

CERTIFICATE

Name of the College	
This is to certify that this practical record is the Bo	onafide Work of Shri/Smt/ Ku Class
	, He/she attended/ not attended the
field work/ Study tourPrescribed by Rashtrasant Tu	
Signature of the teacher who taught the examinee	<u>.</u>
1)	
2)	
3)	Head of the Department
	(Seal or Stamp)
Date:	
Campbell J(1989): Introduction to Remote Sensing Guil Clendinning J (1985): Principal and use of Surveying Institution (1985): Principals of Remote Sensing Lon Fraser Taylor D.R. (1991) Geographic In information system (1989): Digital Image processing of remotely Hotine, Major M.(1935): The re-triangulation of Great Luder D.(1955): Aerial Photography Interpretation: Principals (1982): Computer assisted geography	note Sensing and Air photo Interpretation, McMillan New York ford, New York struments 2 nd edition Blockie A gman, London stem Pergamum Press oxford,1991 sensed data Academic New York Britain Empire Survey Review ncipals and Application Mc graw Hill, New York. phy, Prentice Hall, Englewood Cliff, New Jersey.
Mcmillan Co.New Delhi	061.
Pal.S.K(1968): Statistics for Geoscientist_ Techniques a	
Peuquet D.Jand D.F. Marble (1990): Introductory teach	ing in Geographic Information system. Taylor& Fransis
Washinton Pratt W.K. (1978): Digital Image Processing, Wiley, New	y York.
Rao D.P(ed)(1998): Remote Sensing for Earth Resource	
	em: 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.

Rashtrasant Tukdoji Maharaj Nagpur university Nagpur Master of Arts (Credit Based Semester Pattern)

M. A. Geography

Semester - III

Marks-100 PAPER – I 4 Credits

Semester Examination=80Marks
Internal Assessment=20 Marks

Geography of Manufacturing and Transport

Unit - I

Scope, content and recent trends in economic geography, relation of economic geography with economics, classification of economies sectors of economy (primary, secondary, tertiary). Factors of location industries –physical, social, economic and cultural.

Unit - II

Classification of industries. Theories of industrial location-Weber, Loach, case studies of selected industries- Iron and steel. Oil refining and petrochemical, textile.

Unit - III

Modes of transportation, characteristics and relative significance. Transport cost, accessibility connectivity – network analysis. International, inter and intra regional, comparative cost advantages.

Unit - IV

Economic development of India, regional disparities, impact of green revolution and on Indian economy, globalization and Indian economy.

Suggested Readings:

Alxander: Economic Geography

Derze. J and Sen, A (1966): India _Economic development and Social opportunity, Oxford University Press, New York

Hurst E (1974): transport geography- Comments and reading. McGraw Hill New York.

Mamoria, C.B.: Economic Geography

Rostov, W.W.(1960): The stages of economic Growth, Cambridge university press. London.

Sharma and Countino: Economic Geography.

Semester - III

Marks-100 PAPER – II 4 Credits

Semester Examination=80 marks
Internal Assessment=20 marks

GEOGRAPHY OF TOURISM

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 perceptional 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;

C.Michell Hall: Tourism Planning, Policies and Relationship

C.Michell Hall: Tourism

Geoggrey Wall, Alister Mathieun; Tourism- Change, Impact and Opportunities

Stephen Page: transport and Tourism

Stephen Page: Eco-Tourism

Stephen Page, C Michall Hall: Managing urban Tourism

Sustainable Tourism ,A Geographical Perspective

Dr. P M Nagtode, D A Pardhi, Geography of tourism

Semester - III

Marks-100 PAPER –III 4 Credits

Semester Examination=80 Marks
Internal Assessment =20 Marks

URBAN GEOGRAPHY

Unit - I

Nature, scope and development of Urban geography. Factor of urban growth and process of urbanization, from the early to the modern times recent trends of urbanization.

Unit - II

Location, size and spacing of urban settlement. Factor in the location of cities – urban hierarchy and central place theory. 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 function. Central area / CBD, its characteristics and delimitation. Residential and industrial and other types of land use within the cities. Demographic structure of the city. The density and distribution population distance decay function. Age, sex and occupational, composition of urban population. Social and economic segregation within the city. Over population. Congestion and slum areas.

Unit - IV

A real expansion of cities suburbs. Conurbation and mega polis development. Rural and 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, Bombay, Tata nagar, Hyderabad, Secunderabad, Jaipur and Nagpur.

Suggested reading:

Bose, A: Urbanisation in India

Bourne and Symmons; Systems of Cities

Carter: urban Geography

Chapin, F.S. Urban landuse Planning

Dentler, R.A.: Urban problems

Deshpande. C.D. Cities

Dickinson, R.S.: City. Region and Regionalism Gunn, A.B. Simonisner: Planning and Design Garnier and Chabbot urban Geography

Johnson J.; Urban Geography

Jones E: Town and Cities

Mayer and Kohn: Reading in Urban Geography

Northam, R.M.: Urban Geography

Prakashrao, V.L.S.: Urbanisation in India: A spatial Approach

Pigott, S: Town and cities of Ancient India

Rao, M.S.A.: Urban Sociology in India. Orient Longman

Roy, Turner : India's urban Future

Smails; Geography of Towns

Taneja Kusumlata: Morphology of Indian Taneja Kusumlata: Morphology of Indian Cities

Wison, A.G.: Urban and regional Model in Geography.

<u>OR</u>

Marks-100 PAPER –III 4 Credits

Semester Examination = 80 Marks Internal Assessment= 20 Marks

AGRICULTURAL GEOGRAPHY

Unit - I

Nature, Scope, significance and development of Agriculture geography, Approaches to the study of agricultural geography; systematic and regional. Origin and dispersal of agricultural.

Unit - II

Determinants of agricultural land use- Physical, economic, social and technological. land use policy and planning. Selected agricultural concepts and their measurements, Cropping pattern, Crop concentration, Intensity of cropping, degree of commercialization, diversification and specialization, efficiency and productivity, Crop combination regions and agricultural development. Green Revolution- and White revolution with reference to India.

Unit - III

Theories of Agricultural Location based on several multi-dimensioned factors; Von Thune's theory of agricultural location and its recent modifications, Whittlesey's classification of agricultural regions, land use and capability.

Unit - IV

Contemporary issues: Food, Nutrition and hunger, Food security, drought and food security, food aid programmes, role of irrigation fertilizers, insecticides, Technological Know-How

Suggested readings:

Gregor, H.P(1970): geography of Agriculture Prentice Hall, New York

Grigg, D.B. (1974): The Agriculture system of the world, Cambridge University Press New York

Hartshone, T.N. and Alexander J.W (1998) Economic geography Prentice Hall, New York

Mannion, A.M. (1995): Agricultural and environment change, , London ,Jon Wiley

Morgan W.B. and Norton, R.J.C(1995): Agricultural geography, mathuen, London

Morgon, W.B.(1978): Agricultural in the thirld world – A spatial analysis, west view Press, Boulder

Sauer, C.O(1969): Agricultural origin and Dispersal M.I.T press. Mass.

Singh, J.R. (1988): Agricultural geography, T ata McGraw Hill Publication, New Delhi

Tarrant, J.R. (1974): Agricultural Geography, Wiley, New York

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PAPER -VI

PRACTICAL - III

1. Economic maps and Diagrams

(10 Marks – 2 Periods)

1. Lorenz curve 2. Ergo graph 3. Triangular graph 4. Isochors and Isochrones 5. Simple and semi log graphs.

2. Population maps and Diagrams

(10 Marks – 2 Periods)

- 1. Dependency ratio map 2. Isopleths of population potential 3. Demographic transition model
- 4. Superimposed pyramid.5. natural replacement graph of population.

3. Settlement maps and Diagrams

(10 Marks – 2 Periods)

Spatial mean centre – standard distance map 2. Distance decay graph 3. Dispersion of settlement
 Concentration of settlement 5. Reilly's Low of retail gravitation.

4. Cartographic methods

(20 Marks – 4 Periods)

- (i) Agricultural geography and regional development and planning
 - A) Index of concentration
 - B) Index of diversification
 - C) Index of crop -combination
 - D) Agricultural efficiency

OR

- (ii) Urban geography
- A. Index of centrality
- B. Near neighbor analysis.
- C. Shop rent Index
- D. K3, K4 and K7 Value computation
- E. Rank Size Rule.

5. Field Work: (30 Marks – 2 Periods)

Visit to a field on some aspects of M. A. Part II theory paper and writing of a field work report.

(A) Collection of data , processing and tabulation of data- (10 Marks)

(B) Writing of field work report (20 Marks)

6. Viva Vice (10 marks)

7. Practical Record (10 Marks)

Marks-100 PAPER –I 4 Credits

Semester Examination=80Marks
Internal Examination =20 Marks

POPULATION GEOGRAPHY

Unit I - 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:

Bogue, D.J(1969); Principles in Demography, John Wiley, New York.

Bose, Ashish et al (1974); Population in India's Development(1947-2000), Vikas Publishing House, New Delhi

Census of India. India; A state Profile, 1991

Chandna, R.C. (2000): Geography of population; Concept, Determinants and Patterns, Kalyani Publishers, New Delhi.

Clark, John (1973): Population Geography. Pergamum Press, New York.

Crook, Nigel (1977): Principles of population and development Pergamum Press, New York.

Mamoria, C.B. (1981): India's population Problems, Kitab Mahal Delhi

Premi M.K (1991): India's population. Heading towards a Billion Publishing Corporation

Shrinivasan. K. (19980 Basin Demographic Techniques and application Sage publication, New Delhi

Marks-100 PAPER –II 4 Credits

Semester Examination=80marks
Internal Assessment = 20 marks

GEOGRAPHY OF SETTLEMENT

Unit - I

Nature, Scope and significance and development of settlement geography, Approaches to rural settlement geograph. Histogensis of rural settlements, Spatio – temporal dimensions and sequent occupance. Defination and chacterstics 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:

Singh R.Y: Geography of Settlements

Mondol, R.B.: Selltlement Georaphy

Taylor: Urban Geography

Northam: Urban Geography

K.Siddarth& Mukherjee: urbanisation, system and process

Tiwari: Settlement Geography

Marks-100 PAPER –III 4 Credits

Semester Examination=80marks
Internal Assessment= 20marks

SOCIAL GEOGRAPHY

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 Reading:

Azzaudin Ahmad: Social Geography

Smith, David; Social geography; A Welfare Approach, Edward Arnold. 1977

Sopher ,David : An exploration of India, Corenell University,1980

Wankhede Deepak M.(2008): Socio-Economic Development of Scheduled Castes, Gautam Book centre Publication, New Delhi

OR

Marks-100 PAPER –III 4 Credits

Semester Examination=80 marks
Internal assessment =20 marks

REGIONAL PLANNING

Unit - I

Regional concept in geography, conceptual and theoretical framework, merits and limitations forapplication to regional planning and development, concept of space, area and locational attributes.

Types of regions; Formal and functional, uniform and nodal, single purpose and composite region, in the context of planning, regional hierarchy, special purpose regions.

Unit - II

Physical regions, resource regions, regional division according to variation in levels of socio-economic development, Special purpose regions – river valley regions

Unit - III

Approaching to delineation of different types of region and their utility in planning. Planning process – sectoral, Temporal and spatial dimensions, short – term and long term perspective of planning for a region's development and multi – regional plan in a national context. Indicators of development and their data sources, measuring levels of regional development and disparities.

Unit - IV

Concept of Multi-level planning: decentralized planning; People participation in the planning process, Panchayat Raj system, role and relationship Panchayat Raj, Institutions (Village Panchyat, Panchyat samitee and Zilla Parishad) and administrative structure (Village, Block and District). Regional development in India – Problems and prospect.

Suggested reading:

Bhat, L.S. (1973); Regional Planning in India, Statistical Publishing Society, Calcutta

Bhat, L.S. et.al.(1976); Micro-level Planning: a case study of Karnal Areas, Harayana K.B.Publications New Delhi

Friedman J and Alonso W (1967): Regional Development and Planning, A case study of Venezuela M I T Press Cambridge Mass.

Glikson Arthur (1955) Regional Planning and Development, Netherland Universities foundation fro International cooperation. London

Government of India Planning commission (1961); Third Five year Plan, Chapter on Regional imbalances in Development, New Delhi

Marks-100 PAPER –IV

PRACTICAL - IV

1. Statistical techniques

(40 Marks – 8 Periods)

Study of practical problems on the following particular emphasis on the optional subject offered by the student. (Data and problems attempted should be from the respective optional subject offered by the student

 Collection and organization of statistical data. Majors of central tendencies and dispersion. Statistical significance The normal frequency distribution curve and its use. Probabilities statements.

Methods of sampling - A. Numerical B. Aerial distribution

(12 Marks – 2 Periods)

2. tests: A. students T test, B. Chi-square test C. F – test

(8 Marks – 2 Periods)

- Correlation A. Pearson's product moment correlation B. Spearman's rank correlation.
 Correlation significance test (10 Marks 2 Periods)
- 4. Regression line

Confidence limits

(10 Marks – 2 Periods)

2. Project: (40 Marks – 4 Periods)

Writing of at least one **Project** on any one of the Six theory (Semister III & IV)Papers of the syllabus.

(A) Collection of data & Data Processing and Tabulation

(15 Marks)

(B) Writing of Project Report

(25 Marks)

3. Viva (10 Marks)

4. Practical Record (10 Marks)

Model question paper for Semester Pattern examination

Rashtrasant Tukdoji Maharaj Nagpur University

M.A.Geography

Paper

GEOMORPHOLOGY

Time- 3Hours Marks: 80

Note:

- 1. All question are compulsory
- 2. All question carry equal Marks
- 3. Credit will be given to suitable sketches and diagrams
- 1. Discuss the nature and scope of Geomorphology.

OR

Discuss the concept of Uniformitarian with suitable examples

2. Discuss the Plat tectonic Theory. Give recent evidences of Plate tectonic theory

OR

Discuss the orogenic structures of Himalayas

3. Why Mechanical weathering is more dominant in the world. Give suitable examples?

OR

Discuss the theories of slope Evolution

4. Discuss critically the concept of Cycle of Erosion of Davis W.M Davis

OR

Discuss the relevance of geomorphic mapping and terrain evaluation in Modern research.