



**PANDIT DEENDAYAL UPADHYAYA SHEKHAWATI
UNIVERSITY, SIKAR**

SYLLABUS

M.A./M.Sc. GEOGRAPHY

Annual Scheme

Session 2022-23

MA./M.Sc. (Previous) Examination 2023


**Dy. Registrar
Pandit Deendayal Upadhyaya
Shekhawati University,
Sikar(Rajasthan)**

M.A./M. Sc. Geography (Annual Scheme)

(Regular/Non-Collegiate Candidates)

SCHEME OF EXAMINATION

Each Theory Paper	3 Hrs. Duration	100 Marks
Dissertation if offered in lieu of an elective paper		100 Marks
Practical		100 Marks

N.B. Non-Collegiate candidate are not eligible to offer dissertation as per provisions of 0. 170-A.

1. The number of papers and the maximum marks for each paper/practical shall be shown in the syllabus for the subject concerned. It will be necessary for a candidate to pass in the theory part as well as in practical (wherever prescribed,) of a subject/paper separately.

2. Each theory paper will have a teaching of 4 hrs. per week.

3. A candidate for passing at each of the Previous and the final Examination shall be required to obtain:

(i) At least 36% marks in the aggregate of all the papers prescribed for the examination, and

(ii) At least 36% marks in practical(s) wherever prescribed at the examination, provided that if a candidate fails to secure :at least 25%.marks in each individual: paper at the examination and also in the dissertation/survey report/field Work, wherever prescribed, he shall be deemed to have failed at the examination notwithstanding his having obtained the minimum percentage of marks required in the aggregate for that examination. No division will -be awarded at the Previous and the Final Examination. Division shall be awarded: at the end of the Final Examination on the combined marks obtained :at-the Previous and the Final-Examinations taken together, as noted below:

First Division 60% of the aggregate Marks taken


Second Division 48% together of the Previous and the Final Examination.

All the rest will be declared to have passed the examination.

3. if a candidate clears any Paper(s) Practical(s)/Dissertation prescribed at the Previous and/or Final Examination after a continuous: period of three years, then for the purpose of working out his division the minimum pass marks only viz. 25% (36% in the case of practical) shall be taken' into account in respect of such Paper(s)/Practical(s)/Dissertation are cleared after the expiry of the aforesaid period of three years, provided that in case where a candidate requires more than 25% marks in order to reach the minimum aggregate as many marks in out of those actually secured by him will be taken into account as would enable him to make up the deficiency in the requisite minimum aggregate.


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4. The Thesis/Dissertation/Survey Report/Field Work shall be type written and submitted in triplicate so as to reach the office of the Registrar at least 3 weeks before the commencement of the theory examinations. Only such candidates shall be permitted to offer Dissertation/Field Work/Survey report/Thesis (if provided in the scheme of examination) in lieu of a paper as have secured at least 55% marks in the aggregate of all the papers prescribed for the previous examination in the case of annual scheme I and II semester examination taken together in the case of semester scheme irrespective of the number of papers in which a candidate actually appeared at the examination.
5. The Students are permitted to use simple calculator, Log Table & map stencils in the Examinations if needed
6. Non-collegiate candidates both in previous and final year are required to attend a practical training camp of forty eight hours at the Department of Geography, PDUSU university sikar/ PG Department of geography of government colleges. on payment of fee fixed by the University from time to time The candidate should contact the Head, Department of Geography, PDUSU university sikar/ PG Department of geography of government colleges for practical camps immediately after the filling the examination forms. Head, Department of Geography —will issue a Certificate, to each of the collegiate candidate for successful completion of the training camp. The candidate have to submit the Certificate at the time of practical examination.


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M.A /M.SC Geography

There will be four theory papers and a practical each in Previous and Final Examination. Each of the theory papers will be 100 marks. Each theory paper will be of three hours duration. Candidate will be required to pass both in theory and practical separately.

PREVIOUS

Paper—I	Evolution of Geographical Thought
Paper II	Physical basis of Geography
Paper—III	Principles and Theory of Economic Geography
Paper—IV	Any one of the following: (a) Advanced Geography of Monsoon Asia (b) Geography of Rural Development (c) Geography of South Asian Countries (Bangladesh, Nepal, Pakistan, Sri Lanka) (d) Man and Natural Environment.

Paper - Practical

Instructions for Geography Practical Examination (Both Regular and Non-Collegiate)

1. The record work should have 50 sheets (1/6th of 20" x 30") and they should cover the total syllabus proportionately. The teacher should revise, fresh exercises every time so that the student may not undertake tracing of old exercise. The work must be done in the class rooms and signed on the same date. This would discourage completing the whole work at the nick of the examination emphasis should be laid on ink; and color maps.
2. The Viva-voce Exam be held to judge the real knowledge of the student and to examine the authenticity of the record work. The marking on the record work and its viva-voce be based on the original work of the candidate and not merely producing the record work got done by any other agency. Marks be deducted for the syllabus not covered.
3. On an average about 20 students be examined in one batch in M.A./M.Sc. Previous & Final. As far as possible practical exercise be set to judge the practical skill through the Practical exercise.
4. (a) The field Survey by instruments in M.A./M.Sc. Final be given 3 hours along with Viva-voce. Each students will have to do exercise on each instrument individually. (b) The practical examination in M.Sc./M.A. (Final) will be conducted in batches of not more than 20 students.
5. The paper for written test in M.A Final be so set that the questions are not duplicated with field exercise.
6. The External examiner be provided detailed syllabus and detailed instruction before the commencement of examination.


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SYLLABUS

M.A./M.Sc. Previous

Paper- I Evolution of Geographical Thought

Unit-I

Definition, scope, nature, purpose and philosophy of geography, fundamental concepts Of geography; ancient Indian geography during 'Vedic and Puranic periods.

Unit-II

Ancient classical age: contributions of Greeks (Herodotus and Eratosthenes) and Romans (Strabo and Ptolemy); medieval geography: contributions of Al Baruni, Al Masudi, Idrisi, Ibn-Batutta, Ibn Khaldun, Geography during the period of Renaissance: contributions of Sebastian Munster;, Philip Cluverious, Nathanael Carpenter, Varenius, Anton friedrich. Bushing, 'emmanuel kant- and Conrad Malte Brun.

Unit-III


Modern geography: geography in Germany-contributions of humboldt and Ritter, Richthofen, Ratzel, Hettner and Schluter; geography as a chorological science.

Unit-IV

Geography in France-Blache and Brunches, geography in Anglo-American- Sauer and Schater, Geography as science of distribution and relationship, geography as chorological science, Geography as science of landscape morphology, Geography as spatial science and human ecology, Dualism in geography: physical and human geography, systematic and regional geography .

Unit V

Environmental determinism and possibilism qualitative and quantitative, reductionism and holism; quantitative revolution; philosophical pluralism- empiricism, logical positivism,
Humanistic geography and structuralism. Approaches in geography, behavioral, radical feminist, Post modern and critical geography Indian geography: development, perspective and prospects.


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Recommended Readings:

1. Adhikari, S. 2009. Fundamentals of Geographical Thought. Chaitanya Publishing House, Allahabad.
 2. बंसल, सुरेश चन्द, 2008 भौगोलिक चिन्तन के मूल तत्व। मीनाक्षी प्रकाशन, मेरठ।
Dickenson, R. E. 1967. The Makers of Modern geography. Rutledge & Kegan Paul Limited. London.
Dear, M.J. and Flusty, S. (ed.) 2002: The spaces of Post modernity: Readings in Hurrah Geography, Blackwell Publishers Ltd, Oxford.
Dikshit, R. D. 2004. Geographical Thought. A Critical History of Ideas. Prentice-Hall of India, New Delhi. (in English and Hindi).
Bolt-Jensen A. 1988. Geography: History and Concept – A student's Guide. Sage Los angles angees (Fourth Edition).
- जैन एस.एम. 2005 भौगोलिक चिन्तन एवं विधि तंत्र। साहित्य भवन पब्लिकेशन्स, आगरा।
James P.F. All Possible Worlds 1972: A History not Geographical Ideas; Odessey Press, 622 pages.
Johnston, R, Gregory D, Pratt G, Watts M. and Whatmore S. (2003): The Dictionary of Human Geography. Blackwell Publishers, Oxford. 5th edition.
कौशिक एस.डी. 2005-06, भौगोलिक विचारधाराएं एवं विधि तंत्र, रस्तोगी पब्लिकेशन्स, मेरठ, आठवां संस्करण (पुनमुद्रित)।
मौर्य, एस.डी. 2007, भौगोलिक चिन्तन का इतिहास, प्रयाग पुस्तक भवन, इलाहबाद।
Majid. H. 2007. Evolution of Geographical Thought. Rawat Publications, Jaipur. Peet, Richard 1998: Modern Geographical Thought. Blackwell. Publishers, USA.
सक्सेना, एल.के. व तिवारी, ए.के. 2003, भौगोलिक चिन्तन। राजस्थान हिन्दी ग्रन्थ अकादमी, जयपुर।


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Paper- II Physical Basis of Geography

Unit – I

Meaning, scope and development of physical geography, approaches and recent trends in physical geography, zoning of the earth's interior and thermal state, isostasy, endogenetic and exogenetic forces, mountain building theories (Kober, Jeffreys, Daly, Joly, Holmes) plate tectonics

Unit – II

Denudation: erosion and weathering: types and processes, models of landscape evolution: Davis and Penck. Erosional and depositional landforms formed, by running water, underground, wind, glacial periglacial; process of desertification, models of slope development (Wood, Davis, Penck, King).

Unit – III

Atmosphere: composition and layers, air temperature, heat balance, adiabatic and non adiabatic processes, stability and instability, evaporation, humidity and condensations
precipitation, world precipitation pattern.

Air pressure variations, pressure belts and planetary wind system. Monsoon winds and local winds, air masses and fronts, secondary circulation: cyclones (Tropical and extra tropical), and anticyclones, world climatic classification: Koppen's and Thornthwaite's Schemes.

Unit – IV

Oceanic bottom relief, oceanic deposits, horizontal and vertical distribution of temperature and salinity, oceanic water currents, tides and tidal theories, atolls and coral islands, theories of coral reef formation, marine resources biotic, mineral and energy resources and their Utilization.

Unit - V

Soils: genesis, classification and distribution, biodiversity loss and measures for conservation, biotic succession and major biotic regions of the world with special reference to ecological aspects of equatorial, savannah, temperate zone and monsoon biomes.

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Recommended Readings:

- Chorley R.J. 1972: Spatial Analysis in Geomorphology. Methuen, London.
- Cooke, R.U. and Doornik, J.C. 1974: Geomorphology in Environmental Management - A introduction. Clarendon Press, Oxford.
- Dury, G.H. 1959: The Face of the Earth. Penguin Harmondsworth.
- Fairbridge, R.W. 1986: Encyclopedia of Geomorphology. Reinhold, New York.
- Garner, H.F. 1974: The origin of landscape-A Synthesis of Geomorphology. Oxford University Press, London.
- Goudie, A. 1993: The Nature of the Environment. Oxford & Blackwell, London. I
- Ollier, C.D. 1979: Weathering. Longman, London.
- Pitty, A.F. 1971: Introduction to Geomorphology. Methuen, London.
- Sparks, B.W. 1960: Geomorphology. Longman, London..
- Sharma, H.S. (ed), 1980: Perspectives in Geomorphology. Concept, New Delhi.
- Skinner, B.J & Porter, S.C. 1995: The Dynamic Earth. John Wiley, New York.
- Stoddart, D.R. (ed) 1996: Process and Form in Geomorphology. Routledge; New York.
- Singh, S. 1998: Geomorphology. Prayag Publication, Allahabad.
- Thornbury, W.D i 1960: Principles of. Geomorphology. John Wiley, New York.
- Young, A. 1972: Slopes. Longmans, London

Paper III Principles and Theory of Economic Geography

Unit-I

Meaning and scope of economic geography, simple model of economy and spatial Structure of economy, environmental relations of economy, classification of the economies of the world (primary, secondary and tertiary).

Unit-II

Theories, concepts and models of development developed, developing and under developed economies, agricultural typology- with special reference to subsistence agriculture. Plantation agriculture, Mediterranean agriculture, mixed farming, commercial grain farming, livestock rearing.

Unit-III

Energy resources: conventional and non-conventional, spatial patterns and supply problems, manufacturing: factors of production, theories of industrial location: Weber, Hoover, Losch Isard and Smith.

Unit-IV

major industries: iron and steel, aluminum, paper and pulp, cotton textile, chemical and fertilizers, world transport patterns: accessibility and connectivity. Decision making process: Location decision-behavioral view.


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Unit-V

Spatial organization of land use: central place theory of Christaller Von Thünen's Agriculture location theory, emerging Patterns of world trade, barriers to trade, dynamics of blocks, economic development, regional disparities in economic development, economic regionalization for area development and planning-economic regions of India.

Recommended Readings:

- Alexander, J.W. 2001. Economic Geography. Prentice Hall of India, New Delhi.
- Chapman, K and Walker, D. 1991. Industrial Location: Principles and Policies. Blackwell, Oxford.
- Grigg, D. 1995. An Introduction to Agricultural Geography. Second edition, Routledge, London.
- Gupta, P. Sen and Sydasuk, Galyna: Economic Regions and Regionalization in India.
- James, O. W. and Peter, Q. M. __1986. Economic Geography. John Wiley and Sons, New York.
- Jarret, H. R. 1977. A Geography of Manufacturing. Trans-Atlantic Publishers, London.
- Hodder B.W. and Lee, R.1974: Economic Geography. Methuen, London.
- Mandal, R. B. 1982. Land Utilization — Theory and Practice. Concept Publishing Company, New Delhi.
- Scott, A. J. 1988. New Industrial Spaces. Pion, London
- Shafi, M. 2000. Agricultural Geography of south asia,. MacMillan, New Delhi.
- Singh J. and Dhillon, S. S 2004: Agricultural geography..Tata Mc-Graw hill, New Delhi.
- Singh, Kashi Nath and Siddiqui, A.R.: Economic Geography, Prayag Pustak Bhawan Allahabad.
- Smith, D. M. 1981. Industrial Location — an economic, geographical analysis. John Wiley New York.
- Tyagi, B. P. 1998. Agricultural Economics arid. Rural Development. Jai Praksh Nath& Co. Merrut (sixth edition).
- Wheeler, J.O. and Muller, O.P. 1995: Economic Geography. John Wiley, New York.'


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Paper IV Any one of the following:

Paper IV (a): Advanced Geography, of Monsoon Asia

Unit- I

Unity in Diversity in Monsoon Asia, importance of location, geological structure physiographic, drainage basins, climate regions, natural 'vegetation, mineral Wealth.

Unit- II

population and its characteristics, power resources, agricultural characteristic, importance of Monsoon lands with respect of food stuffs and raw materials, natural rubber Land with respect to good stuffs and raw materials, natural rubber and its world trade, tea, coffee spices, developments of transportation and accessibility.

Unit- III

Singapore-problems of industrial expansion, port developments, human resource, Philippines-population and food problem and development programme, Thailand- problem of urbanization and regional division and development programmes Indonesia-population Densities and its trends, mineral resources, type of agriculture, sugar industry.

Unit- IV

Burma-regional divisions, agricultural, forest and mineral resources, Hong Kong-urban growth, changing trade industrial development, changing land use pattern, Korea-agricultural and industrial development.

Unit V

China state farms and people communes, population and food supply industrialization, changing pattern of industrial complex, Red Basin, the Hwango Ho, Yagize Kiang and Sikiang basins, Japan-Coal resources, water power, conservation of forest, copper production, tea, soybean and rice culture, fishing industry, motor vehicle steel and industries, industrial belts.

Recommended Readings :

Hussain, M. 2004: World Geography. Rawat Publication, Jaipur.

Johnson, D.L. et al 2012: World Regional Geography: A Development Approach.

PHI Learning Pvt. Ltd., New Delhi.

ममोरिया एवं अग्रवाल 2012, एशिया का भूगोल। साहित्य भवन, जयपुर।

राव, बी.पी. एवं सतपथी, डी.पी. 2002, एशिया की भौगोलिक समीक्षा। वसुन्धरा प्रकाशन, गोरखपुर।

सतपथी, डी.पी. 1995, चीन की भौगोलिक समीक्षा। वसुन्धरा प्रकाशन, गोरखपुर।

सक्सेना, एच.एम. 2010-11, विश्व का प्रादेशिक भूगोल। रस्तोगी पब्लिकेशन, मेरठ।

Shafi, M. 2000: Agricultural Geography of Asia.. Macmillan, Delhi.

Tikkha, R.N. 1997: World Regional Geography. New Academic Publishing

Company Jalandhar.

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Paper IV (b) Geography of Rural Development

Unit I

Geography and rural development, agricultural geography and 'rural' development, agricultural location theory, rural land use, agricultural, pastoral, forestry and land use competition, land use and landscape.

Unit-II

approaches to rural development, growth center approach, infrastructure reformist, rural settlement, housing, population add employment, rural transport service provision, recreation, health and nutrition.

Unit-III

Rural planning and land management: resource development and integrated rural development: crop and soil management, live stock range and management.

Unit IV

Water management, ecological management, desertification monitoring and its Control

Unit V

Rural development in Rajasthan: major tools and techniques, rural development schemes-Irrigation and land development schemes, drought prone areas schemes, desert development programme, integrated rural development in Rajasthan, tribal areas development, wasteland development.

Recommended Readings;

Association. Of Councils 1979: Rural Deprivation, London, ACC.

Allan, J.A. 1980: Remote Sensing in Land in Landuse Studies, 'Geography.

Anderson, J,R.L.J. 1977: Hardarkar- Agricultural decision Analysis, Ames, Lows StateUniversity Press.

Andrease, B. 1981: Farming Development and Space-World Agricultural Geography, NEW York, Water Cryter.

Bowler, I.R. 1948: Agricultural Geography, Progress in Human Geography 8.

Grigg, D.B.. 1974: The Agricultural Systems of the World, 'Cambridge University Press:.

Grigg, D.B. 1984: An Introduction to Agricultural Geography, London Hutchinson.

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Paper IV (C) Geography of South Asian Countries (Bangladesh Nepal, Pakistan, Sri Lanka)

Unit I

Geographical realms of South Asia, homogeneity and diversity.

Unit II

study of Pakistan under the following heads-geographical and political units, climate and climatic regions, vegetation, agriculture, livestock, mineral resources, power resources, industries, trade population and natural regions, political relations,

Unit III

Study of 'Bangladesh under the following heads-geographical and political units, climate and climatic regions, vegetation, agriculture, livestock,' mineral resources, industries, trade, population, natural regions, political relations.

Unit IV

Study of Nepal, Srilanka under the following heads- geographical and political units, climate, vegetation- agriculture, Irrigation, 'livestock, industrial economy, trade, population, political relations.

Unit V

Study of Pakistan, Bangladesh under the following heads- geographical and political units, climate, vegetation- agriculture, Irrigation 'livestock, industrial economy, trade, population, political relations.

Recommended Readings:

- Ahmed, N. 1958: Economic Geography of East Pakistan, Oxford' University Press, London.
Cooke: Ceylon.
Johson, B.L.C. 1975: Bangladesh, Heinemann Education Books, London.
Johnson, B.L.C. 1970: Geography of South Asia.
Karan, P.P.: The Himalayan, Kingdom.
Kulshrestha, S.H. 1983: Simple Geography of Nepal Educational .Enterprise Pvt. Ltd.,Kathmandu
Rashid, R.E. 1977: Geography of Bangladesh, University Press Ltd., Bangladesh.
Spencer, J.E. 1962: Asia East by South, John. Wiley and Sons; London.

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Paper IV (D): Man and Natural Environment

Unit I

Definition and scope of environmental geography its relation With Other Subjects elements of the environment, man and environmental relationships: environmental determinism, possibilism and neo determinism.

Unit II

Biosphere and its components, concept of ecology and ecological succession, types of ecosystems, energy flow in the ecosystem, soil system, geobiochemical cycles, major biomes of the world .

Unit III

Environmental degradation and natural disasters, environmental crises: Ozone depletion, green house gas effects, El-Nino, global warming and climate change, water scarcity, acid rain, sea level change, desertification.

Unit IV

Environmental pollutions: water, air, Soil, noise and radioactive. Environmental quality, sustainable development, environmental management.

Unit V

Soil and forest resources management, water management, wildlife conservation, biodiversity and its conservation, environmental awareness and education, 'international efforts 'of environmental conservation.

Recommended Readings:

Agarwal, A_ and Narain, S. 1997: Dying Wisdom: Rise, fall and Potential Traditional Water Harvesting System. Centre for Science and Environment, New Delhi

Detwyler. J.R. 1975: Man's Impact on Environment. John Wiley and Sons, New York

Economic, and social commission for Asia and the Pacific United Nations 1989: For the preparation of National Master Water Plans.

Govt. of India, 1980: Ministry of energy and Irrigation. Rashtriya Barh Ayog Report.

National Commission of Floods. Vol. I& II, New Delhi).

Govt. of India, 1972: Ministry of Agriculture Report of the Irrigation Commission. Vol. I to

IV, New- Delhi.

Gulhati, N.D 1972: Development of Inter-State Rivers: Law and Practice in India.

Allied Pub., Bombay.

Harvey, B. And Hallet, J.D. 1977: Environment and Society: An Introductory Analysis Macmillan, London.

International Water Resource Association and Central Bdard of Irrigation & Power; Water of Human Needs, 1975: Vols. I to V proceedings of the second World Congress on Wather Resources, 12-16 December, New Delhi.

Jones, J.A. 1997: Global Hydrology: Processes; Resources and Environmental Management Longman.


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- Kates R.w. and Burton, I. (ed.) 1980: Geography, Resource and Environment. Ottawa.
- Matter, J.R., 1984: Water Resources Distribution, Use and Management. John wiley, Marylane.
- Rao, K.L. 1979: India's Water Wealth. Orient Longman New Delhi.
- सिंह, जगदीश, 2003 पर्यावरण एवं संविकास। ज्ञानोदय प्रकाशन, गोरखपुर।
- शर्मा, पी.डी. 2009: पारिस्थितिकी एवं पर्यावरण। रस्तोगी पब्लिकेशन्स मेरठ।
- Singh, R.A. and Singh, S.R. 1979: Water Management :Principles and Practices: Tara Publication, Varanasi.
- Singh, Savindra 2006: Environmental Geography :Prayag Pustak Bhawan, Allahabad,
- Smith, K. 1972: Water in Britain. A Study in Applied Hydrology and. Resource Geography, McMillan, London.
- श्रीवास्तव, वी.के. एवं राव, बी.पी, 2002: पर्यावरण और पारिस्थितिकी। वसुन्धरा प्रकाशन, गोरखपुर।
- Tebbutt, T.H.Y. (ed.) 1985: Advances in Water Engineering. Elsevier Applied Science London.
- Thomas, W.L. (ed) 1956: Man's Role in Changing the.: Face of the Earth; University pg Chicago Press, Chicago.
- Todd, D.K. 1959: Ground Water Hydrology. John Wiley, New York.
- U.S.D.A. 1955: The Year Book of Agriculture: Water. Oxford and I.B.H. Publishing Co- New Delhi.
- Vergheese, B.G. 1990: Water of Hope: Integrated Water Resource Development and Regional Co-operation within the Himalayan-Ganga. Brahmaputra-Barak Basin Oxford IBH, New Delhi,

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Practical's

Scheme of examination

Min. Pass Marks :36 Regular Candidates Non-Collegiate candidates Max. Marks – 100

Bifurcation of Marks

Written Test	40	60(6 Questions)Time- 4hrs.
Record work and Viva voce	20+10	30+10
Project report and viva voce	20+10	--

N.B. In written test there shall be 2 questions from each Section. Candidates have to answer 4 questions selecting at least one question from each section. All questions carry equal marks. Examination be conducted in batches of not more than 20 candidates in any case. 12 hours of teaching practicals be provided for a batch of 20 students per week.

SYLLABUS

Unit - I

The art and science of cartography, history of maps, material, techniques and preparation maps, enlargement, reduction and finding of area of maps, use of planimeter, Study of geological maps and preparation of their section and interpretation, interpretation- of weather maps and weather forecast.

Unit II

Map projections (mathematical construction): classification and characteristics of any three from each of the four classes of projections.

I Conical Projections:

1. Equal area with the one standard parallel (Lambert's Projections)
2. Equal Area with two standard parallels (Alber's Projections)
3. Bonne's
4. Polyconic

II Cylindrical Projections:

1. Cylindrical Equal Area
2. Mercator's
3. Gall's Stereographic

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Unit III

III Zenithal Projections:

1. Gnomonic: (a) Polar Case
 2. Stereographic : (a) Polar Case
 3. Orthographic: (a) Polar Case
 4. Equal Area: (a) Polar Case
 5. Equidistant : (a) Polar Case
- (b)-Eq. Case
(b) Eq.. Case
(b) Eq. Case
(b) Eq. Case

Iv. Conventional Projections:

1. Sinusoidal
2. Mollweide

3. Interrupted Sanson Flemsteed (Homoclosine) choice of projections, used for maps produced in India.

Unit IV

Geographical maps and diagrams: computation of data, preparation of frequency tables, representation of data by histograms and ogives, finding skewness, computation of mean, median and mode, deviation-standard deviations and mean deviations, theoretical basis of nearest neighbor analysis, practical exercises of nearest neighbor analysis, location analysis of urban centers, coefficient variation, All these be computed from the Statistical data, preferably based on State, District, Tehsil and community Development Block as unit areas and the following types of maps and diagrams be prepared.

Unit V

Maps and their interpretations: isopleths, choropleth and chorochromatic, choroschematic and isochoric map, population pyramids map.

Three dimensional diagrams of economic and social data, accessibility and flow maps

Diagrams: Polygraph semi-log and log graphs, trilinear chart, circular graph, climatograph, Hythergraph, climograph, annual water deficiency and water surplus graph.

Project Report: A regular candidate is to prepare project report of -a Village area. The candidate is free to select any supervisor amongst the staff members of the project. A supervisor can take only 5 candidates, the marking On the project report will be awarded by the external examiner in consultation with the supervisor concerned. The .project should be based on primary data obtained by the candidates, the data should be represented by suitable cartographic methods.

N.B. Project Report is not applicable in case of non-collegiate candidates.


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Recommended Readings:

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