

BHUPAL NOBLES' UNIVERSITY,
UDAIPUR (RAJ.)



DEPARTMENT OF GEOGRAPHY
FACULTY OF SOCIAL SCIENCES & HUMANITIES

B.A. GEOGRAPHY

(Three Year Degree Course)

(Courses effective from Academic Year 2017-18)

Proposed Scheme of Courses in Geography Three-Year Pass Course (B. A.) 2017-18

TDC I Year Arts

GEOG-111 : Physical Geography

GEOG-112 : Human Geography

GEOG-113 Practical : Cartography-I (Scales and presentation of geomorphic and climatic data)

TDC II Year Arts

GEOG-221 : Geographical Thoughts and Methodology

GEOG-222 : Economic & Resource Geography

GEOG-223 Practical : Cartography-II (Projections and presentation of socio-economic data & elementary statistical methods)

TDC III Year Arts

GEOG-331 : Geography of India

GEOG-332 : Geography of Rajasthan

GEOG-333 Practical: Surveying and Remote Sensing

Notes:

1. Each theory paper will be of 50 marks each with minimum pass marks of 20
2. The practical will be of 60marks with minimum pass marks of 23.

3. Teaching hours for each theory paper and practical will be three hours per week.
4. Practical batch will comprise of twenty Five students in one batch.
5. Use of map stencils (outline of political boundaries only) and simple function calculators are allowed in the examination.

6. Each theory paper of three hour duration will be divided into five

B.A. First Year
Paper I
GEOG - 111 - Physical Geography

Unit – I

- a) Nature and scope of physical geography. Development of Physical Geography
- b) Geological History of the Earth,
- c) Interior of the earth.
- d) Origin of the continent and oceans:- Wegner's theory of Continental drift and Plate tectonics.
- e) Theories of mountain building:- Geosynclines Organ theory of Kober and Plate tectonic theory.

Unit – II

- a) Isostasy :- Concept and Views of Airy and Pratt.
- b) Earth Movement, Volcanoes. Earthquake
- c) Weathering: - Physical, Chemical and Biological.
- d) Drainage pattern and Cycle of erosion :- Davis & Penck.
- e) Landforms: - Fluvial, coastal and arid.

Unit – III

- a) Composition and structure of the atmosphere.
- b) Atmospheric temperature: – Isolation and heat budget.
- c) Atmospheric pressure :- Vertical and horizontal distribution of air pressure.
- d) Winds: - Planetary, periodic and local winds.
- e) Jet stream.

Unit – IV

- a) Air masses: - Source region and classification of air masses.
- b) Fronts :- Front genesis and frontolysis , Type of fronts.
- c) Cyclones :- Tropical and temperate cyclones.
- d) Anti cyclones.
- e) Climatic classification by Koeppen.

Unit – V

- a) Relief's of the ocean basins - Bottom reliefs of the Indian ocean.

- b) Distribution of temperature and Salinity of oceans.
- c) Ocean currents : - Atlantic ocean and Pacific ocean currents.
- d) Tides :- Type and theory of origin (Progressive wave and Stationary Wave theory.
- e) Coral reefs :- Conditions of growth, types and origin according to Darwin and Murray.

Suggested Readings:

1. Dayal, P., A Text book of Geomorphology, Shukla Book Depot, Patna, 1996.
2. Dury, G. H., The Face of the Earth, Penguins, 1980.
3. Ernst, W.G., Earth Systems: Process and Issues, Cambridge University Press 2000.
4. ICSSR, A Survey of Research in Physical Geography, Concept, New Delhi, 1983.
5. Kale, V. and Gupta, A., Elements of Geomorphology, Oxford University Press, Calcutta, 2001.
6. Monkhouse, F. J., Principles of Physical Geography, Hodder and Stoughton, London, 1960.
7. Pitty, A., Introduction to Geomorphology, Methuen, London, 1974.
8. Sharma, H. S., Tropical Geomorphology, Concept, New Delhi, 1987.
9. Singh, S., Geomorphology, Prayag Pustakalaya, Allahabad, 1998.
10. Small, R. J., The Study of Landforms, McGraw Hill, New York, 1985.
11. Sparks, B. W., Geomorphology, Longmans, London, 1960.
12. Steers, J. A., The Unstable Earth: Some Recent Views in Geography, Kalyani Publishers, New Delhi, 1964.
13. Strahler, A. N., Environmental Geo-Science, Hamilton Publishing, Santa Barbara, 1973.
14. Strahler, A. N. and A. H. Strahler, Modern Physical Geography, John Wiley & Sons, 1992.
15. Summerfield, M. A., Global Geomorphology, Longman, 1991
16. Thornbury, W. D., Principles of Geomorphology, Wiley Eastern, 1969.
17. Wooldridge, S. W. and R. S. Morgan, The Physical Basis of Geography: An Outline of Geomorphology, Longman Green & Co., London, 1959.
18. Wooldridge, S. W., The Geographer as Scientist, Thomas Nelson and Sons Ltd., London, 1956.
19. Barry, R. G. and R. J. Chorley, Atmosphere, Weather and Climate, Routledge, 1998.
20. Critchfield, H., General Climatology, Prentice-Hall, New York, 1975.
21. Das, P. K., The Monsoons, National Book Trust, New Delhi, 1968.
22. Lydolph, Paul E., The Climate of the Earth, Rowman and Allanheld, Totowa, N. J., 1985.
23. Mather, J. R., Climatology, McGraw Hill, New York, 1974.
24. Patterson, S., Introduction of Meteorology, McGraw Hill Book Co., London, 1969.
25. Stringer, E. T., Foundation of Climatology, Surjeet Publications, Delhi, 1982.
26. Trewartha, G. T., An Introduction to Climate, International Students Edition, McGraw Hill, New York, 1980.
27. Anikouchine, W. A. and R. W. Sternberg, The World Oceans: An Introduction to Oceanography, Englewood Cliffs, N. J. 1973.
28. Gerald, S., General Oceanography: An Introduction, John Wiley & Sons, New York, 1980.
33. Shepard, F. P., Submarine Geology, Harper & Sons, New York, 1948.
34. Thurman, H. B., Introductory Oceanography, Charles Webber E. Merril Publishing Co., 1984.

35. Weisberg, J. and Howard, Introductory Oceanography, McGraw Hill Book Co., New York, 1976.
- 36- I folnfa ga %HkkfS-d Hkksy] ol Uqjk idk'ku] xkj [ki g] 1997
- 37- 'kekZ ,p-, l - %HkkfS-d Hkksy ** i pdkhy idk'ku] t; ig
- 38- prHqtqekkfj; k , o tdu %HkkfS-d Hkksy , o at ho e.My] l kfgk; Hkou vlxjk] 1996
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B.A. First Year
Paper: II
GEOG - 112 - Human Geography

Unit – I

- a) Definition and scope of Human geography.
- b) Its relation with other social sciences.
- c) Schools of Human geography: - Determinism, Possibilism and Neo – Determinism.
- d) Concept of Man – Environment relationship.
- e) Fundamental principles of Human geography: Principles of activities, Principle of areal differentiation, Principle of terrestrial unity.

Unit – II

- a) Stages of evolution of man
- b) Races of mankind: - criteria of classification according to G. Taylor
- c) Classification and distribution of races according to G. Taylor
- d) Factors of evolution of human races
- e) Migration zone theory by Griffith Taylor

Unit – III

- a) Distribution of Tribes in the world.
- b) Habitat, Occupation & social organization: Pigmies, Badawins, Eskimos and Khirgiz,
- c) Distribution of Tribes in India
- d) Habitat, economic activities and social organization of Bhil, Naga, Toda and Santhal.
- e) Early economic activities of mankind :- Food gathering, Hunting, Fishing & Shifting cultivation.

Unit – IV

- a) Distribution of population: world distribution pattern physical, economic and social factors influencing spatial distribution.
- b) Concept of over population, under population, optimum population and zero population growth.
- c) Demographic transition theory.
- d) Migration-internal and international, general laws of Migration
- e) Concept of human development and population problems and policy of India.

Unit – V

- a) Settlement: origin and types of settlement.
- b) Rural settlement-Pattern of rural settlements, house types and building materials, rural settlement in India
- c) Urban settlement- origin of towns, patterns of cities.
- d) Functional classification of cities, zoning of cities, Christaller's theory
- e) Urbanization and problems: slums, town planning, concept and principles.

*Note – Stencils are to be permitted in the examination.

Suggested Readings:

1. Brunhes, J. : Human Geography
2. Huntington, E.: The Principles of Human Geography, John Wiley & Sons, N.Y.
3. Perpillou, A.V. : Human Geography, Longmans, 1965
4. Money, D.C.: An Introduction to Human Geography; U.I.P. London
5. Karan, M.P. : Manav Bhugol ke Siddhant, Kitabghar, Kanpur
6. Mamoria, C.B. : Principles of Human Geography
7. Negi, B.S. : Human Geography- An Ecological Aproach, Kedarnath Ramnath, Meerut, 1982
8. Dwivedi, R.L. & Singh, R.L. : Manav Bhugol ki Samiksha
9. Blache Vidal de la : Manav Bhugol ke Siddhant (in Hindi)

B. A. First Year
Practical
GEOG -113-Cartography-I
(Scales and presentation of Geomorphic and climatic data)

Practical: Cartography-I (Scales and presentation of geomorphic and climatic data)
The art and science of cartography; history; techniques and preparation of maps and their classification.

1. Scales: plain, diagonal, comparative, time and Venire's (two exercises of each scale and two scales on each sheet). (10 exercises)
2. Enlargement, reduction and combination of maps (2 exercises)
3. Methods of representation of relief: hachure, form line, contour and layer tint methods. (4 exercises on two sheets)
4. Composite features to be drawn with the help of contours based on topo sheets representing the typical areas of glaciated region, arid region, region and fluvial region (any one of either youth, mature and old stage). (4 exercises)
5. Drawing of profiles: serial (at least four), composite, superimposed and projected. (4 exercises on two sheets)
6. Knowledge of principles and working of weather instruments including self-recording instruments: thermometer, thermograph, barometer, barograph, hygrometer, hygrograph, rain gauge, rainograph, wind vane and cup anemometer.
7. Weather symbols: based on Indian weather maps. (one exercise)
8. Study and interpretation of Indian weather maps: One each of December-January and July August. (2 exercises)
9. Representation and interpretation of climatic data:
10. (a) Rainfall histogram (b) Hyther graph, (c) Climograph, (d) Rainfall variability graph (departure from mean). (4 exercises)

Notes:

1. Candidates will be examined by an External Examiner in consultation with the Internal Examiner.
2. Each exercise should be drawn on 1/4th of a full drawing sheet.
3. The test paper of practical will be of two hours duration and candidates will be required to answer three questions out of five.
4. The distribution of marks will be as follows:
 - a. Paper
 - b. Record work*
 - c. Viva-voce **

*Record work will be assessed by the teacher in-charge of the practical group and the external examiner.

**Viva-voce will be based on the record work and weather instruments.

- Ex-students will have to complete the prescribed practical work under the guidance of the Head of the Department of the respective college and to produce a certificate to that effect before the commencement of the examination.

Suggested Readings:

- Monkhouse, F. J., Maps and Diagrams, Methuen & Co. Ltd., London.
- Robinson, A. R., Elements of Cartography, Chapman & Hall.
- Singh, R. L., Elements of Practical Geography, Kalyani Publishers.
- Raize, E., General Cartography, McGraw Hill Book Co., London.
- Singh, R. N. and Kanaujia L. R. S., Map Work & Practical Geography, Central Book Depot, Allahabad.
- Mishra, R. P. and A. Ramesh, Fundamentals of Cartography, Concept Publishers, New Delhi.
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B.A. Second Year
Paper I
GEOG - 221 - GEOGRAPHICAL THOUGHTS AND METHODOLOGY

Unit - I

- a) The nature of Geography : definitions, meaning and philosophy.
- b) Objectives and relevance of geography.
- c) Place of geography in the classification of sciences natural and social sciences.
- d) Relations with other social sciences with references with reference to nature, content and methods.
- e) Elements of geography: location on the surface of the earth, physical conditions, forms of life, and human responses.

Unit - II- Brief survey of evolution of geographical ideas:

- a) Beginning of classical geography : contribution of Greeks, Romans
- b) Geography in middle ages: Europe, Middle East, China, India.
- c) Age of exploration and impact of discoveries.
- d) Founders of modern geography: Humboldt and Ritter.
- e) Modern period: major traditions of geographical Studies.

Unit - III - Major themes and sub-themes in geography.

- a) Man-environment relocations: determinism and possibilism and neo-determinism.
- b) Areal differentiation and spatial organisation.
- c) Dualism and complementarily in geography: Physical/human: systematic/regional.
- d) Radicalism in geography.
- e) Behaviourism in geography.

Unit - IV: Major concepts in geography.

- a) Concept of terrestrial unity and interconnections.
- b) Concept of activity and change.
- c) Concept of region and types of region.
- d) Concept of culture and acculturation.
- e) Spatial interaction and gravity model.

Unit - V: Methodological issues:

- a) Explanations in natural and social sciences : routes to scientific explanation.
- b) Explanatory forms in geography.
- c) Sources of data.
- d) Cartographic techniques & quantitative methods.

e) Remote sensing and geographical information system.

Suggested Reading :

1. Abler, Ronald F. et al, Geography's Inner Worlds: Pervasive themes in contemporary American Geography, Routledge, New Jersey, 1992.
2. Dikshit R.D.: Geographical Thought - A Contextual History of Ideas, Prentice Hall of India Pvt. Ltd., 2000
3. Dikshit R.D.: The Art and Science of Geography: Integrated Readings, Prentice Hall of India, New Delhi, 1994
4. Dohrs, F.E. and Sommers, L.W. (eds.) Introduction to Geography, Thomas Y. Crowell Co., New York, 1967.
5. Hartshorne, Richard, Perspective on the Nature of Geography, Rand McNally and Co., Chicago, 1959
6. Harvey, David, Explanation in Geography, Edward, Arnold, London, 1972
7. Holt-Jensen, A., Geography : Its History and Concept, Longmans, 1980
8. Husain, Majid, Evolution of Geographical thought Rawat Publications, Jaipur, 1984.
9. James, P.E., All Possible Worlds: A History of Geographical Ideas, Sachin Publication, Jaipur, 1980
10. Johnstone, R.J. and Claval, R (eds.), Geography Since the Second World War, Croom Helm London/Bernes and Noble, N.J., 1984
11. Jones, P.A. : Field Work in Geography, Longmans, 1968
12. Lowmsburg, J.F. and Aldrich, F.T., Introduction to Geographical Methods and Techniques, Charles Merrill, Columbus, 1979.
13. [Illegible text]
14. [Illegible text]
15. [Illegible text]
16. [Illegible text]
17. [Illegible text]

B. A. SECOND YEAR
Paper-II
GEOG - 222- Economic & Resource Geography

Unit – I

- a) Definition, nature and scope of economic geography
- b) Recent trends in economic geography; its relation with economics, and allied subjects.
- c) Classification of economies and spatial organization.
- d) Sectors of economy: primary, secondary and tertiary.
- e) Impact of economic activities on environment.

Unit – II

- a) Natural resources: meaning; Classification of resources.
- b) Conservation of resources; Water and forest resource conservation.
- c) Changing nature of economic activities: Mining and forestry,
- d) Changing nature of economic activities: Agriculture and industry.
- e) Changing nature of economic activities: Trade and transport.

Unit – III

- a) Agricultural types and classification.
- b) Agriculture: physical, social, cultural environment influencing crop production.
- c) Spatial distribution, production and international trade of rice and wheat
- d) Spatial distribution, production and international trade of cotton and rubber.
- e) Spatial distribution, production and international trade of coffee and tea.

Unit – IV

- a) Classification of minerals; distribution, production and trade of iron ore and bauxite.
- b) Distribution and production of coal, petroleum and hydroelectricity.
- c) Factors of localization of industries; iron and steel industry.
- d) Chemical and cement industries.
- e) Textile and ship building industries.

Unit – V

- a) Trade and transport: geographical factors in their development.
- b) Major water, land and air transport routes.
- c) Internal and international trade.
- d) World Trade Organization (WTO) and globalisation.
- e) Impact of WTO and globalisation on developing countries of the world.

Suggested Readings:

1. Bengston, N. A. and V. L. Royen, Fundamental of Economic Geography, Prentice Hall, New York.
2. Boesch, H., A Geography of World Economy, D. Van-Nostrand Co., New York, 1964.
3. Chapman, J. D., Geography and Energy, Longman, London, 1989.
4. Gregor, H. F., Geography of Agriculture, Prentice Hall, New Jersey, USA, 1970.
5. Griggs, D. B., The Agricultural Systems of the World, Cambridge University Press, New York, 1974.
6. Hartshorne, T. N. and J. W. Alexander, Economic Geography, Prentice Hall, New Delhi, 1988.
7. Jones, C. F. and G. G. Darkenwald, Economic Geography, McMillan Co., New York. 1975.
8. Millar E., Geography of Manufacturing, Prentice Hall, New York, 1962.
9. Pickes, L. D., The Wealth of The World, Dan & Co., London.
10. Raza. M. and Y. Agrawal, Transport Geography of India, Concept, New Delhi, 1986.
11. Robinson, H., Economic Geography, Longmans.
12. Smith, D. M., Industrial Location - An Economic Geographical Analysis, John Wiley, New York, 1971.
13. Stamp, L. D., A Commercial Geography, Longmans.
14. Thomas, R. S., The Geography of Economic Activities, McGraw Hill, New York 1962.
15. UNO, Statistical Year Book (Latest Edition).
16. nkl] xlrk , o a diij % vkfFkdZ vkj okf.kT; Hkksy] , l pin , .M dEi uh] fnYyh
17. ncqs jkeukFk %/kFkdZ &okf.kT; Hkksy] fdrkc egy] bykgkcn
18. uxskh % a k/ku Hkksy
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22. dkfSkd] , l - Mh- % a k/ku Hkksy

B.A. Second Year
GEOG - 223 -Practical: Cartography-II
(Projections and Presentation of socio-economic data)

Map projections:

1. Meridians and parallels: definition, and characteristics.
2. Map projections: meaning, compromises, classification,
3. Characteristics, use and graphical construction along with outline map of the following

projections:

- i. Zenithal projections: orthographic, stereographic and gnomonic (both polar and equatorial cases) (6 exercises)
- ii. Conical projections: Bonne's and polyconic (2 exercises)
- iii. Mercator's projections (1 exercise)
- iv. Globular projection (1 exercise)
- v. Gall's projection (1 exercise)
- vi. Mollweide's projection (1 exercise)
- vii. Sinusoidal projection (1 exercise)

Presentation socio-economic data:

1. Thematic maps: Elements and characteristics of thematic maps.
2. Drawing and use of dot, choroschematic, chorochromatic, choropleth and isopleth maps (6 exercises)
3. Diagrams: elements and characteristics of diagrams.
4. Drawing of diagrams along with appropriate scales:
 - i. One dimensional (2 exercises)
 - ii. Two dimensional (3 exercises)
 - iii. Three dimensional (3 exercises)
 - iv. Traffic flow diagram (1 exercise)
5. Graphs: elements and characteristics of graphs.
6. Drawing of poly, band, and triangular graphs. (3 exercises)

Basic statistical methods:

1. Frequency distribution and its presentation.
2. Measures of central tendency: Arithmetic mean, mode and median.
3. Measures of dispersion: Standard deviation and coefficient of variation.
4. Measures of correlation: Rank correlation and product moment correlation.

Notes:

1. Candidates will be examined by an External Examiner in consultation with the Internal Examiner.
 2. Each exercise should be drawn on 1/4th of a full drawing sheet.
 3. The test paper of practical will be of two hours duration and candidates will be required to answer three questions out of five.
 4. The distribution of marks will be as follows:
 - a. Paper 36 Marks
 - b. Record Work* 14 Marks
 - c. Viva-voce** 10 Marks
- * Record work will be assessed by the teacher in-charge of the practical group and the external examiner.
- ** Viva-voce will be based on the record work.
5. Ex-students will have to complete the prescribed practical work under the guidance of the Head of the Department of the respective college and to produce a certificate to that effect before the commencement of the examination.

Suggested Readings:

1. Ahmed, K. S., Simple Map Projection, Friends Book House, Aligarh.
2. Bygott, J., An Introduction to Map Work and Practical Geography, University Tutorial Press, London.
3. Meux, A. H., Reading Topographical Maps, University of London Press.
4. Mishra, R. P. and A. Ramesh, Fundamentals of Cartography, Concept Publishers, New Delhi.
5. Monkhouse, F. J., Maps and Diagrams, Methuen & Co. Ltd., London.
6. Raize, E., General Cartography, McGraw Hill Book Co., London.
7. Robinson, A. R., Elements of Cartography, Chapman & Hall.
8. Singh, R. L. and P. K. Dutt, Elements of Practical Geography, Student Friends, Allahabad
9. Singh, R. L., Elements of Practical Geography, Kalyani Publishers.
10. Singh, R. N. and L. R. S. Kanaujia, Map Work & Practical Geography, Central Book Depot, Allahabad.
11. Tamaskar E. G. and V. M. Deshmukh, Geographical Interpretation of Indian Topographical Maps, Orient Longman.
12. 'kek]Z t-sih- %ik; kfsxd Hkxksy] jLrksch idk'ku] ejB
13. t& 'kisey %ik; kskRRed Hkxksy] l kfgR; Hkou vlxjk
14. HkYy]k] ,y- vkj- %ik; kskRRed Hkxksy] d-M/h- idk'ku] vtej
15. ekekfj; k prHtq %ekufp= foKku ,o aik; kskRRed Hkxksy] l kfgR; Hkou] vlxjk
16. iokj] vkj- ,l- %ekufp= foKku ,o aik; kskRRed Hkxksy] ryd' h idk'ku] ejB
17. oek]Z ,y ,u-o vkj- ,e yk<k %ik; kskRRed Hkxksy] jkt- fglnh xUFk vdkneh] t; ij
18. fl ga] ,y-vkj-(%ekufp= ,o aik; kskRRed Hkxksy] l US/y cdqfMi k]s bykgkckn
19. fl ga ,o adlufst; k %ik; kskRRed Hkxksy dh : ijs[kk] l US/y cdqfMi k]s bykgkckn

B.A. Third Year
Paper-I
GEOG - 331- Geography of India

Unit – I

- a) India in the context of Southeast and South Asia.
- b) India: a land of diversities; unity within diversities.
- c) Major terrain elements of India and their role in shaping physical landscape of India.
- d) Drainage systems of India and their functional significance.
- e) The morphological regions of India.

Unit – II

- a) Regional and seasonal variations of climate: the monsoon, western disturbance, norwesters, climatic regions of India.
- b) Soil types of India: their distribution and characteristics
- c) Vegetation types and their distribution; forest resources
- d) Status, use and need for conservation of mineral resources
- e) Status, use and need for conservation of power resources

Unit – III

- a) Spatial distribution of population and density; socio-economic implications of population growth; urbanization;
- b) Changing nature of Indian economy.
- c) Agricultural growth during the plan period; Green Revolution vis-à-vis traditional farming;
- d) Major crops and their status; wheat, Rice, Sugarcane, cotton
- e) Regionalization of Indian agriculture;

Unit – IV

- a) Industrial development and Indian economy.
- b) Industrial regions of India and their industrial structure.
- c) Major industries: Iron and steel, Cotton, cement, chemical Industries
- d) Means of transportations: Roads, Railways and Railways
- e) Composition of Domestic and International trade.

Unit – V

- a) Basis of regional divisions of India.
- b) Classification of Economic Regions of India: P. Sen Gupta
- c) Comparative Analysis of macro regions. d) Resource regions of India.
- e) Planning region of India

Suggesting Readings:

1. Deshpande, C. D., India - A Regional Interpretation, Northern Book Centre, New Delhi, 1992.
2. Farmer, B. H., An Introduction to South Asia, Methuen, London, 1983.
3. Govt. of India, India - Reference Annual, Pub. Div, New Delhi, (latest edition)
4. Govt. of India, National Atlas of India, NATMO Publication, Calcutta.
5. Govt. of India, The Gazetteer of India, Vol. I & III Publication Division, New Delhi, 1965.
6. Khullar, D. R., India: A Comprehensive Geography, Kalyani Publishers, Ludhiana, 2000.
7. Learmonth, A. T. A. et al (ed), Man and Land of South Asia, Concept, New Delhi.
8. Manorama Press, Manorma Year Book, Kottayam (Kerala), (Latest Edition).
9. Mitra, A., Levels of Regional Development of India, Census of India, Vol. 1, Part I-A (i) and (ii), New Delhi, 1967.
10. Routray, J. K., Geography of Regional Disparity, Asian Institute of Technology, Bangkok, 1993.
11. Shafi, M, Geography of South Asia, McMillan & Co., Calcutta, 2000.
12. Singh, G., Geography of India. Atmaram & Sons, Delhi.
13. Singh, R. L. (ed), India: A Regional Geography, National Geographical Society, India,
14. Spate, O. H. K. and Learmonth, A. T. A., India and Pakistan - Land, People and Economy Methuen & Co., London, 1967.
15. Times of India Press, Times of India Year Book, Bombay (Latest Edition)
16. Vaidiya, K. S., Dynamic Himalaya, University Press, Hyderabad, 1998,
17. Wadia, D. N., Geology of India, McMillan & Co., London, 1967.
- 18- xkM dik'kdj % Hkkjr dh HksSksfyd l eh{kk} fglrh ipkj i{rdky;} okjk.kl h
- 19- ekSj; k prHkt % Hkkjr dk vkfFkd HkkSj] vlxjk cp LVkj] vlxjk
- 20- nq; jkeukFk % Hkkjr dk vkfFkd HkkSj] fdrk egy] bykgckn
- 21- frokj fo'oukFk % Hkkjr dk ogn-HkkSj] jkeid kn , .M l UI] vlxjk
- 22- pksjku] ohjbnfl ga % fo'kky Hkkjr] jLrsh , .M dEi uh] ejB
- 23- pksjku] rst fl ga % Hkkjr dk HkkSj] foKku izdku] t; ij

B. A. Third year
Subject: Geography
Paper-II
GEOG - 332: Geography of Rajasthan

Unit – I

- a) Rajasthan in the contest of India; diversity and unity; history of emergence.
- b) Location, physiographic regions, Geological structure, relief features.
- c) Climate, climate and man, drainage system and lakes..
- d) Natural vegetation types and distribution forests.
- e) Soil types and regions, erosion and conservation.

Unit – II

- a) Population growth, distribution and density.
- b) Rural and Urban.
- c) Population characteristics : gender, literacy and workforce.
- d) Social and cultural status of major tribes Bhil, Grassia, Meena and Saharia.
- e) Population growth and solutions.

Unit – III

- a) Agriculture and economy of Rajasthan
- b) Principal crops wheat, Maize, pluses and oilseed crop.
- c) Irrigation sources spatial aspects of development of ground water: Major irrigation.
- d) Livestock products and dairy development
- e) Major agricultural problems and their solution.

Unit – IV

- a) Distribution and production of minerals - Metallic and non metallic.
- b) Detailed study of minerals: rock phosphate, mica, marble, soapstone
Power resources coal, petroleum and natural gas..
- d) Detailed study of industries: zinc, cement, chemical, cottage and small-scale industries.
- e) Industrial problems and prospects of the state.

Unit – V

- a) Tourism: basis of tourism in Rajasthan; Cultural heritage and tourism industry.
- b) Transportation : railways and roads, their pattern and accessibility.
- c) Droughts in Rajasthan: nature, causes, implications and coping measures.
- d) Basis of regions of Rajasthan and study of different schemes of regionalization.
- e) A detailed of Marusthali and Aravalli regions.

Suggesting Readings:

1. Bhalla, L. R., Rajasthan ka Bhugol, Kuldeep Publication, Ajmer (Hindi).
2. Census of India, Rajasthan Series, General Population Tables of 1961 to 2001.
3. DST (Govt. of Rajasthan), Resource Atlas of Rajasthan, Jaipur.
4. Govt. of Rajasthan, Statistical Abstract (latest edition), Jaipur.
5. Mishra, V. C., Geography of Rajasthan, National Book Trust, New Delhi.
6. NCEAR, Techno-economic Survey of Rajasthan, Vol. I and II, New Delhi.
7. Publication Division, Govt. of India, India (Latest edition), New Delhi.
8. Spate, O. H. K., India and Pakistan, Methuen, 1960.
- 9- p[ro]k[ur] rst fl ga %jktLFkku dk Hk[ar]k[ur]] foKku izdk'ku] tks'ki j
- 10- yk<k] jktey , o aegsojh] fnid %jktLFkku dk Hk[ar]k[ur] fgek'hu ifCyd'ku]] mn; ij
- 11- ekefj; k] prH[ar]to t[ur] 'kiey %jktLFkku dk Hk[ar]k[ur]] l kfgR; Hkou ifCydstu]] vkxjk
- 12- l DI uk] , p-, e- %jktLFkku dk Hk[ar]k[ur]] jktLFkku fgluh xbfk vdkneh] t; ij
- 13- fot; oxh[] jke j{kiky %jktLFkku dk Hk[ar]k[ur] foKku , oa [fut l Elnk] jktLFkku fgluh xbfk vdkneh] t; ij

B. A. Third year
Practical
GEOG - 333 - Surveying, Topographical Maps and Remote Sensing

I. Topographical maps:

1. A brief history of Survey of India; scheme of topographical maps; and conventional symbols. (2 exercises)
2. Scale of slopes. (1 exercise)
3. Study and interpretation of Survey of India 1:50,000 or 1:63,360 topographical maps representing typical areas of Rajasthan in respect of relief, drainage, land use, settlement and means of transport (2 exercises)

II. Surveying:

Objectives; primary division and classification of surveying; principles of surveying.

III. Plane table survey:

- i. Radiation; intersection; open and close traverse with a minimum of five stations. (4 exercises)
- ii. Resectioning: three point problem by mechanical and graphical methods of Bessel and Llano. (3 exercises)

IV. Prismatic compass survey:

- i. Types of bearings and conversion of bearings.
- ii. Radiation; intersection; open and close traverse (with a minimum of five stations). (4 exercises)
- iii. Calculation of included angles; correction of bearing; closing of the error. (1 exercise)

III. Air Photographs :

1. Air Photography Remote Sensing and G.I.S.
2. Methods and types of Air Photography
3. Progresses and Elements of Remote sensing.
4. Geographical Information system: Definition, scope, elements and data model. (2 exercises)

Notes:

1. Candidates will be examined by an External Examiner in consultation with the Internal Examiner.
2. Each exercise should be drawn on a full drawing sheet.
3. The test paper of practical will be of two hours duration and candidates will be required to answer three questions out of five.
4. The distribution of marks will be as follows:

- a. Paper
- b. Record Work*
- c. Viva-voce**
- d. Field survey and viva-voce.

* Record work will be assessed by the teacher in-charge of the practical group and the external examiner.

** Viva-voce will be based on the record work.

Suggesting Readings:

1. Cole, John P. and Cuchlaine A. M. King, Quantitative Geography: Techniques and Theories in Geography, John Wiley & Sons Ltd., London, 1970.
2. Hammond, Robert and McCullagh Patrick, Quantitative Techniques in Geography: An Introduction, Clarendon Press, Oxford, 1978.
3. Kanetkar, T. P., Surveying and Levelling, Vol. I, A. V. Griha Prakashan, Bombay, 1985.
4. Nag, Prithvish and M. Kudrat, Digital Remote Sensing, Concept Publishing Company, New Delhi, 1998.
5. Singh, R. L., Elements of Practical Geography, Student Friends, Allahabad.
- 6- fl ga ,o a dukfs t ; k %ekufp= rFkk ik ; kxkRed Hkxky] l Uv/y cdqfMikjs bykgkcn
- 7- frokjhl fo"oukFk %ik ; kfxd Hkxky] jkeid kn , .M l d] vkxjk
- 8- oekjZ , y- , u- , o ayk<kj vkj- , e- %ik ; kxkRed Hkxky] jktLFkku fglUnh xUEk vdkneh t ; ij
- 9- 'kekjZ t-ih- %ik ; kxkRed Hkxky] jLrksxh izdk'ku] ejB