

SYLLABUS
**THREE YEAR DEGREE COURSE GEOGRAPHY HONOURS &
SUBSIDIARY FIRST YEAR HONOURS COURSE (200 MARKS)**

B.A. – I (Honours)

Paper – I
Physical Geography

75 Marks

The course has been divided into five units. There shall be ten questions of which two questions shall be set from each unit. The examinees shall be required to answer five questions, selecting *one* from each unit. The examination shall be of three hours duration and shall carry 75 marks.

UNIT – 1:-

Nature and scope of Physical Geography; Interrelation of Physical Geography with other branches of Earth Sciences; Origin of the Solar system, Geological timescale; Rocks- Origin and Classification of Rocks, the Rock cycle..

UNIT – 2:-

Origin & classification of Earth movements; Landforms; Volcanoes & Earth quakes; Theory of Isostasy; Wegener's views on Continental Drift; Mountain-building Theories of Kober and Holmes; Plate Tectonics.

UNIT – 3:-

Geomorphic Processes: Agents of Denudation and Weathering; Mass wasting and Landslides; Fluvial, Wind, Glacial, and Karst topography; Normal Cycle of Erosion; Drainage system- its development, patterns and classification.

UNIT – 4:-

Composition and Structure of the Atmosphere; Global Energy Budget; Atmospheric Pressure and Circulations; Winds and its types, Hadley's tri-cellular theory, Monsoons and Jet streams, Land and sea breeze, local winds; Humidity & Precipitation, clouds; Air Masses and Fronts; Cyclones and Anticyclones; Thornthwaite's classification of climate.

UNIT – 5:-

Relevance of Oceanography; Ocean floor configurations: Continental Shelf, Slope, and Deeps; Bottom Relief of the Indian and Atlantic Ocean; Temperature; Salinity; Waves, Tides and Ocean currents; Tsunamis; Ocean Deposits; Coral reefs; Coastal Environment, Ocean as a storehouse of future resource.

Books recommended:-

- P. Dayal - Physical Geography.
- E. Ahmed - Physical Geography.
- Savindra Singh - Physical Geography.
- C. B. Mamma - Physical Geography.
- D. S. Lal - Climatology.
- D. S. Lal - Oceanography.
- Sharma and Vatal - Oceanography for Geographers
- Critchfield - General Climatology.
- Khullar - Physical Geography

Paper – II (A)

Asia: Regional Study

75 Marks

The course has been divided into five units. There shall be ten questions of which two questions shall be set from each unit. The examinees shall be required to answer five questions, selecting one from each unit under Section A and Section B. The examination shall be of three hours duration and shall carry 75 marks.

SECTION A

UNIT-1 :-

Asia- Physiography; Structure; Climate; and Natural Vegetation; Soil; Geographical importance of Asia.

UNIT-2:-

Asia - Agro-climatic regions; Mineral and power resources; Population and its problems.

SECTION B

UNIT – 3 :-

China - Physical regions; Agriculture; Mineral resources; Industrial development and major industries: Iron and Steel, Petrochemical and Consumer industries; Population growth and distribution; Urbanization.

UNIT – 4 :-

Japan – Physical regions; Agriculture and Fisheries; Industrial development and Industrial Regions, Population growth and distribution; Urbanization.

UNIT – 5 :-

Geographical account of Nepal, Bangladesh, Pakistan, Sri-Lanka, Bhutan, Myanmar.

Books Recommended:-

- George B. Cressey – Asia: Land & its People
- C. B. Mardia – Asia
- C. S. Ghor – An Advanced Geography of Asia
- S. D. Maurya – Asia Ka Bhugol
- Ranjit Tirtha – Geography of Asia
- B. C. Jat – Asia ka Bhugol
- Dr. Prem Lal Tamta – Asia ka Pradeshik Bhugol
- Dr. Rajendra Kumar Singh - Asia ka Pradeshik Bhugol
- Devendra Prasad Singh – Asia ka Adhunik Bhugol

Paper :- 1 (B) & 2 (B)
Practical

50 Marks

The course has been divided into four units. There shall be four questions, one from each unit and the examinees shall be required to answer all questions. The examination shall be of three hours duration and shall carry 50 marks.

UNIT – 1:-

Enlargement and reduction of maps;Cartograms:Simple, Multiple & Compound Bar diagrams;Pie Diagram; Line graph; Polygraph; Band Graph.

15 Marks

UNIT – 2: -

Interpretation of Topographical maps and Weather maps.

10 Marks.

UNIT – 3: -

Map Projections: Definition, Classification and their merits;Zenithal Equidistant and Equal Area Projections; Simple Conical Projections with one standard, and with two standard parallels.

15 Marks.

UNIT-4: -

Record of Practical work and *Viva voce*.

10 Marks.

Books Recommended:-

- Singh and Kanaujia – Elements of Practical Geography
- J. P. Sharma – PrayogikBhugol
- R. L. Singh – Elements of Practical Geography
- Khullar – Practical Geography
- Md. Ishtiaque – PrayogikBhugol

B.A. – II (Honours)

Paper – III (A)

India and Bihar: Regional Study

75 Marks

The course has been divided into five units. There shall be ten questions of which two questions shall be set from each unit. The examinees shall be required to answer five questions, one from each unit. The examination shall be of three hours duration and shall carry 75 marks.

INDIA

UNIT -1:-

Structure; Physiography; Climate; Origin and Mechanism of Indian Monsoon; Natural Vegetation.

UNIT- 2:-

Agriculture: Major crops; Irrigation; Characteristics of Indian agriculture; Green revolution; Organic farming in India; Problems of Indian agriculture.

UNIT- 3:-

Industries: History of Industrial Development; Power resources; Factors for Localization of industries; Study of following Industries — Iron and Steel, Cotton Textile, Sugar, Cement, Engineering Industries, Fertilizers and Petrochemical industry.

UNIT-4: -

Population: Growth, Distribution, Population problems and policies; types Rural and Urban Settlements; Urban growth; and problems of Urbanization.

UNIT - 5:-

BIHAR: Structure and Relief; Climate; Soil Problems; Major river valley projects; Agricultural regions; Changing land use patterns; Industrial regions of Bihar; Population, Migration and urbanization in Bihar.

Book recommended:-

- Singh, R.L. - India: A Regional Geography.
- Dutt A. - India.
- Ahmad, E. - Bihar: A Physical, Regional and Economic Geography.
- Gopal Singh - Geography of India.
- P. Dayal - Bharat Ka Bhautik Evam Arthik Bhugol.
- U. Singh - Bharat ka Navin Arthik Bhugol.
- Singh and Kumar - A Monograph of Bihar.
- Mamoria - Bharat ka Brihad Bhugol (Hindi).
- Tiwari, R.C. - Advanced Geography of India.
- Alka Gautam. - Bharat ka Bhugol .

Paper – IV (A)

Economic and Resource Geography

75 Marks

The course has been divided into five units. There shall be ten questions of which two questions shall be set from each unit. The examinees shall be required to answer five questions, selecting one from each unit under Section A and Section B. The examination shall be of three hours duration and shall carry 75 marks.

SECTION A

ECONOMIC GEOGRAPHY

UNIT-1 :-

Agriculture: Subsistence, Commercial Grain, Plantation, Dairy and Mediterranean farming; Major agricultural region of the world; Von Thunen's Agricultural Location Theory.

UNIT-2 :-

Industry: Locational factors of Industries, Weber's industrial and, Iron and steel, Cotton textile Sugar; Major Industrial regions of the world.

UNIT-3:-

International trade in Wheat, Cotton, Iron ore and petroleum; Trade routes of North Atlantic, Suez and Panama canals.

SECTION B

RESOURCE GEOGRAPHY

UNIT-4:-

Concept of Resources, Soil, Water and forest resources, their distribution, utilization and conservation. Fisheries of the world; Ecology and ecosystems Renewable non-renewable energy resources.

UNIT- 5:-

Mineral and Power resources: Coal, petroleum, iron ore, bauxite, manganese and copper; their distribution utilization and conservation; Non-conventional sources of energy.

Book recommended:-

- James and Darkenwald - Economic Geography.
- Zimmerman - World resources and Industries.
- Alexander - Economic Geography.
- Kashi Nath Singh - Arthik Bhugol (Hindi)
- Guha and Chatteraj - Economic Geography: A study of resources.
- Negi - Resource Geography (English).
- Kaushik & Sharma - Sansadhan Bhugol (Hindi)
- Mamoria - Arthik Bhugol (Hindi).
- Haggett - Geography: A modern Synthesis.

Paper :- III (B) & IV (B)
Practical

50 Marks

The course has been divided into four units. There shall be four questions one from each unit and the examinees shall be required to answer all questions. The examination shall be of three hours duration and shall carry 50 marks.

Unit—1:-

Cartograms- Spherical Diagrams, Climograph, Hythergraph, Windrose, Isopleths and Choropleth. Age and Sex Pyramid.

15 Marks

Unit— 2:-

Projections- Cylindrical Equal Area and Equidistant, Mercator's Projections.

15 Marks

Unit – 3:-

Simple Statistics— correlation (person and methods) and Regression analysis.

10 marks.

Unit- 4:-

Record of Practical work including field trip and *Viva voce*.

10 marks.

Books Recommended: -

- | | |
|-------------------------|-----------------------------|
| • Singh and Kanaujia | -Practical Geography. |
| • Jagdish Singh & Other | -Prayogik Bhugol (Hindi). |
| • Monkhouse & Wilkinson | - Maps and Diagrams. |
| • Rais and Henry | -Principles of Cartography. |

B.A. – III (Honours)

Paper – V Geographical Thought and Three Southern Continents

100 Marks

The course has been divided into five units. There shall be ten questions of which two questions shall be set from each unit. The examinees shall be required to answer five questions, selecting one from each unit under Section A and Section B. The examination shall be of three hours duration and shall carry 100 marks.

Section A

UNIT-1:- .

Definition of Geography and its relation with other sciences; Contributions of Hettner, Humboldt, Ritter, Ratzel, Vidal de la Blache, and Mackinder; Contributions of Prof. P. Dayal, Prof. R.P. Singh and Prof. Enayat Ahmad .

UNIT-2:-

Determinism vs. Possibilism; Neodeterminism; Dualism in Geography, Physical vs. Human, Regional vs. systematic; Quantitative Revolution in geography.

Section B

UNIT- 3:-

Structure, Physiography, Climate and Vegetation of Africa, Australia and South America.

UNIT- 4:-

Geographical account of selected regions, viz. Nile Basin, Murray-Darling Basin, New South Wales, Argentina- Pampas, Brazil.

UNIT-5:-

Comparative study of Africa, Australia and South America.

Book recommended:-

- Hartshorne - Nature of Geography.
- R. Minshull - Changing Nature of Geography.
- Freeman - A Hundred Years of Geography.
- Preston E. James - All Possible Worlds.
- Wooldridge - Geography in 20th Century.
- Taylor - Geography in 20th Century.
- SD Kaushik - Bhaugolik Bichar Dharayan and Bidhi
- Herbertson - Tantra (Hindi) Three Southern continents.
- Jagdish Singh - Bhaugolik Chintan ka Muladhar
- Majid Hussain - Bhaugolik Chintan
- Chaturbhuj Mamoria - Three southern continents (English & Hindi)

Paper – VI

HUMAN GEOGRAPHY

100 Marks

The course has been divided into five units. There shall be ten questions of which two questions shall be set from each unit. The examinees shall be required to answer five questions, selecting one from each unit under Section A and Section B. The examination shall be of three hours duration and shall carry 100 marks.

SECTION A

UNIT—1:-

Environmental control of human activity; Human activities in mountain environment, Hot and cold Deserts environment, Equatorial areas, Monsoonlands and Temperate grasslands.

UNIT— 2:-

Patterns of population distribution; Trends of population growth; Demographic Transition and Optimum Population; factors of population mobility—internal and international, rural and urban.

UNIT- 3:-

Evolution of human civilization study of the following races— Oraon, Bushmen, Polynesian, Eskimo; Major Cultural Regions of the World.

SECTION B

UNIT- 4:-

Evolution of Rural settlements; types and patterns of rural settlements in India; Locational and Functional classifications of towns; Urban growth in India; Problems of Urbanization, with special reference to India.

UNIT-5:-

Concept and approaches of Environmental Geography; Ecology and Ecosystem; Environmental Policies and Management — Air and Water Pollution.

Book recommended:-

- Robinson - Human Geography
- Emery Jones - Human Geography.
- Huntington - Principles of Human Geography.
- Z. Ahmad - Bihar ki Jan Jatiya (Hindi)
- S.D. Kaushik. - Manav Bhugol ke Siddhant
- Chandna. - Geography of Population

Elective Paper – VII

100 marks

This paper consists of several optional groups. Candidates are required to select any one of the following groups. Each group carries 100 marks.

GROUP(A)

POPULATION GEOGRAPHY

Time:3 Hours

Full Marks:100

The course has been divided into five units. There shall be ten questions of which two questions shall be required to answer five questions. The examination shall be of three hours duration and shall carry 100 marks.

UNIT-1: -

Meaning, scope of population geography, Science of Demography, Recent growth with special reference to developed and trends of Population developing countries, Sources of Population data, Methods of Population forecasting.

UNIT-2: -

Dynamics of population change- fertility, Mortality, National and International migration, Demographic transition and optimum population.

UNIT -3:-

Distribution and growth patterns of world population problems caused by differential population policy in India.

UNIT-4:-

Population composition — Occupation , literacy, age and sex, Rural urban composition.

UNIT-5:-

Growth of India's Population distribution and density, Rural — urban movement of population, problems of urbanization, urban- Population characteristic in India.

Book recommended:-

- Geography of Population - R.C.Chandna.
- Population studies - A.P.C.S. Swain
- Population Geography - Md. I. Hasan
- Jansankhya Bhugol (Hindi) - S.D. Maurya
- Population Geography - Clarks
- Geography of Population - B.Garnier
- A Geography of Population:
Worlds patterns - G.Trewartha
- Indian's population problems - Agarwal

GROUP (B) **GEOLOGY OF INDIA**

Time:3 Hours

F. M.: - 100 Marks

The course has been divided into five units. There shall be ten questions of which two questions shall be set from each unit; the examinees shall be required to answer five questions. The examination shall be of three hours duration and shall be set from each unit. The examinees shall be required to

answer five questions. The examination shall be of three hours duration and shall carry 100 marks.

UNIT - 1:-

Scope and function of Geology, Standard Stratigraphical scale Indian Stratigraphical Scale. Chronological history of Indian Stratigraphy.

UNIT - 2:-

Minerals— Classification, mode of occurrence and distribution of Iron, copper, mica, manganese, coal petroleum, atomic minerals.

UNIT -3

Petrological characteristics, Classification distribution and economic importance of Dharwar, Vindhyan, Gondwana Deccan, Lava and Tertiary systems, Cuddappah.

UNIT- 4:-

Classification of rocks- Igneous, sedimentary, metamorphic rocks, metamorphism.

UNIT -5:-

Geological Evolution of Himalayas. Chotanagpur, Rajmahal Highland, Deccan Lava, Aravali.

Book recommended:-

- A Text book of Geology -P.K. Mukharjee
- Geology of India -D.N. Wadia
- Geology of India and Warma -M.M. Krishnan
- Bhart ka Bhuvagyanicprichay (Hindi) – D.P. Singh
- Physical Geology - A.K. Datta

GROUP (C)

LAND USE AND AGRICULTURE

Time:3 Hours

F. M.:- 100 Marks

The course has been divided into five units. There shall be the questions of which two questions shall be set from each unit. The examinees shall be required to answer five questions. The examination shall be of three hours duration and shall carry 100 marks.

UNIT-1:-

Meaning and scope of land use and agricultural geography. History of land use Land use survey of England, World Land use Survey Pattern of Land Use in India.

UNIT-2:-

Factors of Land use: Physical and cultural. Land capability, classification Population and land resource requirements.

UNIT- 3:-

Origin and History of agriculture, Diffusion of commercial grain farming. Plantation : Irrigation and Fertilizers.

UNIT-4:-

Types of farming- Subsistence farming, commercial grain farming plantation agriculture, Dairy farming.

UNIT- 5:-

Development of agriculture in India. Crop- combination in India. Agricultural regions of India. Agricultural planning in India. Agriculture and food supply in India.

Book recommended:-

- L.D. Stamp - Land of Britain : Its use and misuse
- L.D.Stamp -Applied Geography
- Symons -Agriculture Geography
- Majid Husain -Agriculture Geography
- B.B. Singh - Krishi Bhugol(Hindi)
- B.S. Negi -Natural Resources

GROUP (D) **CARTOGRAPHY AND MAP MAKING**

Time:3 Hours

F. M.:- 100 Marks

The course has been divided into five units. There shall be the questions of which two questions shall be set from each unit. The examinees shall be required to answer five questions. The Examination shall be of three hours duration and shall carry 100 marks.

UNIT-1:-

Definition of astronomical terms and their relations.

UNIT – 2:-

Determination of latitude with the help of meridian altitude and solar time, sidereal time, equation of time.

UNIT-3:-

Principles and nature of map projections. Mathematical construction. Properties and use of the following map projections (but not co-ordinates), Zenithal-equal, area following map projections (but not co-ordinates), Zenithal- equal area Gnomonic, conical, simple conical projection with one standard parallel Bonne's projection, constant of cone. Cylindrical—equal area and Mercator's.

UNIT-4:-

Acquaintance with Theodolite, Sextant, principle of determination of shape and size of the earth, Scale and their types- scale of sphere and cube, scale of circle and square, Vernier scale, Logarithmic scale.

UNIT-5:-

Mechanism for the construction of maps and Atlas. Symbols. Format of map. Survey of India map, Modern techniques of map making, Photogrammetry and interpretation of areal photograph.

Book recommended:-

- Jameson and Ormsby - Mathematical Geography Vol. i and ii
- R.P. Mishra - Fundamentals of Cartography
- Kanetkar - Surveying
- R.L.Singh - Fundamentals of Practical Geography
- Prayogic Bhugol - J.P.Sharma

GROUP (E)

POLITICAL GEOGRAPHY

Time:3 Hours

F. M.: - 100 Marks

The course has been divided into five units. There shall be the questions of which two questions shall be set from each unit. The examinees shall be required to answer five questions. The examination shall be of three hours duration and shall carry 100 marks.

UNIT -1:-

Meaning and Scope of Political Geography. Contributions of Ratzel, Haushofer, Mackinder, Mahan and Spikeman.

UNIT-2:-

Concept of state and nation, Location , shape and size of the state. Capital and core areas, Population growth and Size. Language and religion.

UNIT-3:-

Distinction between frontiers and boundaries. Evolution of boundaries, Function of boundaries. Delimitation of the territorial water and problems involved. Right to passage across straits and narrow areas.

UNIT - 4:-

Federation , Unitary system. Power Blocks, Economic Grouping, Political Groupings.

UNIT - 5:-

Tension in the Middle East, South Africa, India's boundary problem Political Geography of the Indian Ocean. National Integration in India.

Book recommended:-

- R.D. Dixit - Political Geography
- S. Adhikari - Political Geography
- Pounds N.J. - Political Geography
- Weight - Principles of Political Geography
- Percy - World Political Geography
- Srivastava - Rajnaitik Bhugol

GROUP (F)

REGIONAL PLANNING

Time:3 Hours

F. M.: - 100 Marks

The course has been divided into five units. There shall be the questions of which two questions shall be set from each unit. The examinees shall be required to answer five questions. The examination shall be of three hours duration and shall carry 100 marks.

UNIT - 1:-

Definition, Scope and content of regional planning, Methods and Technique used in regional surveys, Census and sample surveys.

UNIT - 2:-

Planning in India, Regional imbalances and inequalities in India. five years plans, Multi-level planning in India.

UNIT-3:-

Regional Planning in Agriculture, community development projects, Green Revolution, Integrated rural development program.

UNIT-4:-

Regional Pattern of industrial development in India, Factors of industriallocation. Rural industrialization, Service industries.

UNIT – 5:-

Urbanization in India, Central places and growth poles city region. Conceptand methods of delimitation, Metropolitan planning and development.

Book recommended:-

- Freeman - Natural Resources and Urban Development
- E. Ahamad - Regional Planning
- R.P.Misra - Regional Planning
- Prakash Rao - Regional Planning
- R.L.Sharma - Town and Regional Planning
- Sundaram - Regional Planning

GROUP (G)

URBAN GEOGRAPHY AND PLANNING

Time:3 Hours

F. M.:- 100 Marks

The course has been divided into five units. There shall be the questions of which two questions shall be set from each unit. The examinees shall be required to answer five questions. Three examination shall be of three hours duration and shall carry 100 marks.

UNIT – 1:-

Concept and scope of Ocean geography. Origin and Evolution of towns.Site and situation, Locationalclassification of towns.

UNIT – 2:-

Urban population growth, structure and characteristics of Indian towns.Urban growth concept. Theories of Burgess. Hoyt and Harris Ullman.

UNIT – 3:-

Urban land use, urban functions and functional classification urbanmorphology.

UNIT - 4:-

Inter- town and town- country relationship, city region and umlandconcept,core and fringe area concept, metropolitan region, conurbation.

UNIT – 5:-

Urban and regional survey planning concept, urban planning Metropolitanplanning and regional survey planning. Towns and cities and central placesand growth poles, Master plans.

Book recommended:-

- Freeman - Natural Resources and Urban Development
- Smailes - Geography of Towns
- Taylor - Urban Geography
- Dickinson - City, Region and Regionalism
- Bansal - NagariyaBhugol

GROUP (H)

RACIAL AND TRIBAL GEOGRAPHY

Time:3 Hours

F. M.: - 100 Marks

The course has been divided into five units. There shall be ten questions of which two questions shall be set from each unit. The examinees shall be required to answer five questions. The examination shall be of three hours duration and shall carry 100 marks.

UNIT – 1:-

Definition and scope of Racial and Tribal Geography, its relation with Anthropology, Sociology and Psychology. Evolution of man, man's place among primates, emergence of later man, prehistoric man.

UNIT - 2:-

Concept to trace- physical determinants. Classification of living races of the world, race and culture, races or prehistoric India. Paleolithic and Mesolithic. Controversy regarding classification of Indian races.

UNIT – 3:-

Study of the following races- Bushmen, Hottentots. Polynesian and Eskimos- their Physical, economic and social characteristics.

UNIT-4:-

Tribes of India- Habitat, Economy, Society, economic grading tribal organization, social structure and customs.

UNIT – 5:-

Study of following tribes of Bihar: Munda, Oraon, Santhal their physical, economic, social and political characteristics, Impact of urbanization and industrialization on tribes of Bihar.

Book recommended:-

- Croeber - Anthropology
- R.P.Singh & A. Singh - Manav Udbhav Evam Prajatiya Adhyan
- M.Prasad - Tribals: Their Environment and Culture
- Sachindranandan - Profiles of tribal culture in Bihar

GROUP (I)

ENVIRONMENTAL GEOGRAPHY

Time:3 Hours

F. M.: - 100 Marks

UNIT – 1:-

Environmental geography — concept, scope and approaches, Ecology and Ecosystems .

UNIT – 2:-

Man-Environment relationship in Equatorial, Mountain, Desert, Coastal and Monsoon regions.

UNIT—3:-

Environmental programs and Policies — Developed & Developing countries.

UNIT- 4:-

Environmental Problems- Air, Water and Soil Pollution, their causes and impact; Redressal of Environmental problems

UNIT—5:- ,

Environmental Policy of India; Government's recent initiatives on environment.

Book recommended:-

- UNED (2007) Global Environment outlook :- Environment for development, University press, Cambridge.
- Hudson, T.(2011), Living Neil Earth :- An introduction to Environmental zoology PHI Learning PVT Ltd. New Delhi,
- Singh, RB (1993) Environmental geography, Heritage Publishes New Delhi.
- Singh Shaviridra (2001) Prayavaran Bhogol, Prayag Puslak Bhawan Allahabad.

Paper —VIII

PRACTICAL

100 Marks

The course has been divided into five units. There shall be ten questions of which two questions shall be set from each unit. The examinees shall be required to answer five questions. The examination shall be of three hours duration and shall carry 75 marks.

UNIT—1:-

Surveying- Plane Table Survey, Resection with Plane Table. Open and closed Traverse Prismatic Compass, 25 Marks.

UNIT—2:-

Geological Section and Interpretation of Geolog 1ca1 Sheets. 15 Marks

UNIT—3:-

Meaning, types and objection & of Field work, field work methods and techniques importation of field work in Geography. 10 Marks.

UNIT—4:-

Project Report A Short analysis With maps based on field study and collection of data on any topic approved by the Head. 10 Marks.

UNIT—5:-

Record of Practical work and *Viva voce*. 20 Marks.

Books recommended:—

- Singh and Dutta — Elements of Practical Geography.
- Singh and Kanaujia - Practical Geography.
- Jagdish Singh and — Prayogik Bhogol.
- P. Satpathi — Ganitik Bhugol Pt. 1 & 11.

Paper —VIII

PRACTICAL

100 Marks

The course has been divided into five units. There shall be ten questions of which two questions shall be set from each unit. The examinees shall be required to answer five questions. The examination shall be of three hours duration and shall carry 75 marks.

UNIT—1:-

Surveying- Plane Table Survey, Resection with Plane Table. Open and closed Traverse Prismatic Compass, 25 Marks.

UNIT—2:-

Geological Section and Interpretation of Geological Sheets. 15 Marks

UNIT—3:-

Meaning, types and objection & of Field work, field work methods and techniques importation of field work in Geography. 10 Marks.

UNIT—4:-

Project Report A Short analysis With maps based on field study and collection of data on any topic approved by the Head. 10 Marks.

UNIT—5:-

Record of Practical work and Viva — voce. 20 Marks.

Books recommended:—

- Singh and Dutta — Elements of Practical Geography.
- Singh and Kanaujia - Practical Geography.
- Jagdish Singh and - Prayogik Bhogol.
- P. Satpathi - Ganitik Bhugol Pt. 1 & 11.

B.A. (Subsidiary)

Students who have offered Honours in any subject other than Geography, shall have to appear in two papers of 100 marks each, with examination in one paper each in the first two years of the plus three course. The distribution of marks shall be as follows:

1st Year- 75 Marks Theory, 25 Marks Practical

2nd Year- 75 Marks Theory, 25 Marks Practical

Paper I (A)

Theory- 75 Marks

The course has been divided into five units. There shall be ten questions of which two questions shall be set from each unit. The examinees shall be required to answer five questions, selecting three from Section A and two from Section B. The examination shall be of three hours duration and shall carry 75 marks.

SECTION A

Unit-1:-

Isostasy; Continental Drift; Kober's and Holmes' theories of mountain-building, Internal structure of the Earth.

Unit-2:-

Arid Topography; Glacial topography, Volcanic topography, Coastal topography, Karst Topography, Normal Cycle of Erosion.

Unit 3:-

Salinity of Ocean Water, Ocean Deposits, Coral reef and Atolls, Koppen's Classification of climate, evidences of climate change, Classification of Airmasses and Fronts.

SECTION B

Unit 4:-

Agriculture – Subsistence, Commercial Grain and Dairy Farming; Minerals – Coal, Petroleum, Iron ore-their distribution and production

Unit 5:-

Industry – Iron and Steel, Cotton Textile and Sugar Industry; Trade Routes- North Atlantic and Suez Canal

Book recommended:-

- Woolridge and Morgan - Physical Basis of Geography
- Strahler and Strahler - Physical Geography.
- D.S.Lal - Climatology
- Sharma and Vatal - Oceanography for Geographers
- Savindra Singh - Bhu-Akriti Vigyan
- B.S.Negi - Climatology and Oceanography (Hindi)
- K.N.Singh - ArthikBhugol

Paper I (B)

Practical – 25 Marks

The course has been divided into three units. There shall be three questions, one from each unit and the examinees shall be required to answer all questions. The examination shall be of two hours duration and shall carry 25 marks.

Unit 1:-

Enlargement and Reduction of Maps; Cartograms- Compound Bar, Proportionate Pie and Dot, Band Graph.

10 Marks

Unit 2:-

Interpretation of Topographical Maps and Weather Maps.

10 Marks

Unit 3:- Record of Practical work and *Viva voce*

5 Marks

Book recommended:-

- Singh and Dutta - Elements of Practical Geography
- J. P. Sharma - PrayogatmakBhugolkiruprekha

B.A- II (SUBSIDIARY)

Paper—II(A)

Theory -75 Marks

GEOGRAPHY OF INDIA

The Course has been divided into five units. There shall be ten questions of which two questions shall be set from each unit. The examinees shall be required to answer five questions, selecting two from Section A there from Section B. The examination shall be of three hours duration and shall carry 75 marks.

Unit 1:-

Physiography , Structure, Climate, Soil and natural Vegetation.

Unit 2:-

Major crops —Rice , Wheat , Tea, Sugarcane. Major Industries—Iron and steel, Cotton textile and sugarcane.

Unit 3:-

Major Mineral — Coal, Petroleum, Iron ore, Manganese and Mica, their production and distribution.

Unit 4:-

Population— Growth, distribution, Population problem and policy,Types of rural settlements, urban growth.

Unit 5:-

Bihar — Physiography and structure, climate, natural vegetation,agriculture, industries, minerals Iron ore & Mica.

Book recommended:-

- Gopal Singh - Geography of India.
- P. Dayal - Bharat ka Arthik Avam Pradeshik Bhugol (Hindi)
- E. Ahmad -Bihar: A Physical, Regional and Economic Geography. '
- Singh and Kumar - A monograph of Bihar.
- C. B. Mamoria - Bhart Ka Bhugol(Hindi)

Paper-II(B) Subsidiary

Practical-25 Marks

The course has been divided into three units. There shall be three questions, one from each unit and the examiners shall be required to answer all questions. The examination shall be of three hours duration and shall carry 25 marks.

UNIT-1:-

Map Projections- cylindrical equal area and equidistant, zenithal equal area and equidistant, Conical projection with one and two standard parallels.10 marks

UNIT-2:-

Simple Statistics— Mean, Median and Mode, Quartiles and standard deviation. 10 marks

UNIT-3:-

Record of practical work and Tour report and Viva- voce. 5 marks

Book recommended:-

- Singh and Dutta -Element of Practical Geography.
- Singh and Kanaujia -Practical Geography.
- Jagdish Singh & other -Prayogik Bhugol (Hindi).
- D. D. P. Satpathi - Ganitik Bhugol Pt.1 &1 I(Hindi)