

GEOGRAPHY SYLLABUS

B.A. /B.Sc. Part – I

Paper – I Physical Geography

Paper – II Human Geography

B.A. /B.Sc. Part – II

Paper – I Economic Geography

Paper – II Geography of India

B.A. /B.Sc. Part – III

Paper – I Geographical thought

Paper – II Environmental Studies

Paper – III Regional studies of any one of the following

(A) South West Asia

(B) South East Asia

(C) Far East Asia

B.A. /B.Sc. Part – I

Paper – I: Physical Geography

Course Contents:

Part - I Lithosphere: Nature and Scope of Physical Geography: Geological Time Scale, Origin of the Earth, Interior of the Earth, Origin of Continents and Oceans, Isostasy, Earthquakes and Volcanoes, Geosynclines, Mountain Building with special reference to folded mountains, Concept of Plate Tectonics.

Part II Rocks: their origin, classification and characteristics, Earth movements, Folding, Faulting and Wrapping, Weathering and Erosion, Cycle of Erosion by Davis and Penk, Drainage Pattern, Evolution of Land forms by River, Wind, Glacier and Underground water.

Part III Atmosphere: Composition and Structure of atmosphere: Isolation, Horizontal and Vertical distribution of temperature, Atmospheric pressure and winds, Air masses and Fronts, cyclones and anti-cyclones, Humidity, precipitation and rainfall types, Major climate types – Equatorial, Monsoon, Mediterranean, West European and Hot Desert.

Part - IV Hydrosphere: Ocean Bottoms, composition of marine water – temperature and salinity, Circulation of Ocean water – Waves, Currents and Tides, Ocean deposits, Corals and atolls, oceans as storehouse of resources for the future.

Part - V Biosphere: Components of Biosphere, Plants and animal evolution, dispersal and distribution: Biotic succession, Biome types and Zoo-geographical regions of the world, Biosphere as a global Eco-system.

Paper – II: Human Geography

Unit - I Concept and Nature: Meaning, Scope and Development of Human Geography, Man and Environment relationship- Determinism, Possibilism, Neo-determinism, Probabilism, Basic principles – Principle of Activity or Change, Principle of Terrestrial Unity or whole.

Unit - II Habitation (Population and Settlement) Distribution of population and world pattern, global migration – causes and consequences, concept of over population and under population.

Human Settlements – Origin, types (Rural-Urban) characteristics, size and distribution. House types and their distribution with special reference to India.

Unit - III Economy - Evolution of Human Economy: Sequences of human occupation, Primitive Economics – Food gathering, Hunting, Pastoral herding, Fishing, Lumbering and Primitive agriculture. Later major innovations and their impact.

Unit - IV Society and Culture: Evolution of man (Australopithecus, Homo erectus, Hominids). Man's spread over the earth during the Pleistocene) cultural Diffusion, Cultural realms, World Human Races – Classification, Characteristics and Distribution.

Unit - V Population Tribes: Some typical modes of life of world Tribes- Eskimos, Kirghiz, Bushman, Masai, Semang and Pygmies. Habitat, Economy and Society of Indian Tribes – Bhotias, Gaddis, Tharus, Bhils, Gond, Santhal, Nagas (with reference to their present-day transformation)

PRACTICALS

(A) Lab Work

Unit - I The nature and scope of cartography, Scales – Construction of Comparative, Diagonal and Vernier scales, Enlargement and Reduction of maps. Calculation of area of maps of different shapes by graphical and arithmetical methods.

Unit - II Map Projections: General Principles: Classification, properties and choice of map projections- merits and demerits. Construction of Cylindrical Equal area, Mercator's. Conical with two Standard Parallels, Bonne's, Polyconic, Gnomonic Polar Zenithal and Stereographic Polar Zenithal projections.

Unit - III Methods of showing relief: Hachures, shading, contours & layertints; representation of different landforms by contours, Drawing of profiles – cross & long profiles, super imposed, composite & projected profiles. Slopes & gradients.

Unit - IV Topographical Maps Introduction: Expansion and Indexing: Coverage, Scale and Topo Symbols. Study and Interpretation of One Inch/1:50,000 Survey of India Toposheets – representing Plain, Plateau and Mountain areas under the following heads – Relief, Drainage Characteristics, Land-use, Settlement types and patterns, and means of Transport and communication with special reference to recognition of Land forms based on contours and profiles drawn on them.

B.A. /B.Sc. Part – II

Paper – I: Economic Geography

Unit - I Nature, Scope and development of Economic Geography. Major concepts – Economic landscape, Stages of economic development, typology of economic activities (Primary, secondary, tertiary, quaternary) Resource – concept and classification.

Unit - II Soil and major soil types, Forest types and their products. Agricultural land use and Locational theory by Von Thunen; Distribution production and international trade of principal crops rice, wheat, sugarcane, cotton, tea, coffee and rubber, Agricultural regions of the world by Whittlesey.

Unit - III Marine resources and Aquaculture – Major, Fishing Areas, their production and trade. Nature of Occurrence, distribution, production and

trade of minerals-iron ore, Manganese, Bauxite, Copper, Mica and Gold (in major producing countries)

Power Resources - Production and utilization of coal, Petroleum, Hydroelectricity and atomic energy.

Unit - IV Locational factors of Industries and their relative significance, Weber's theory of Industrial location. Types of industries. Location patterns and development trends of Manufacturing industries – iron and steel, Textile, Ship Building, Sugar, Paper and chemicals, Major Industrial regions of U.S.A., U.K. and Japan.

Unit - V Means and modes of transport-major trans continental railways, International Air and Sea routes; inland water ways (Panama and Suez Canals); Changing pattern of international Trades, Major Trade organizations and trade blocks COMECON, EFTA, ASEAN, NAFTA, OPEC – their objectives and trade relations.

Paper – II: Geography of India

Unit - I India in the context of Asia and the world: Structure, Relief and Drainage System; Major Physiographic regions of India; The Indian Monsoon-origin and characteristics, effect of El Nino, climatic division, Soil types and conservation.

Unit - II Forest resources their utilization and conservation; Power resources (water, Coal, Mineral oil and Atomic) and Mineral resources (Iron ore, Bauxite, Mica, Manganese) their reserve, distribution, production, trade and conservation. River Valley Projects; Tehri dam & Narmada Valley.

Unit - III Indian Economy: Agriculture – main characteristics and problems of Indian agriculture; Irrigation, mechanization and Green Revolution; post revolution scenario-recent trends; Major Agricultural regions. Industries – Locational factors; development and spatial pattern of major industries (Iron and Steel, Textiles, Cement, Sugar, Paper, Oil Refinery and Fertilizers) Major

Industrial regions/complexes.

Unit - IV Population-growth, distribution and density, demographic and occupational structure, Literacy, Urbanization with special reference to post-independence period, Population problems. Transport and Trade-Development of Transport Net-work, railway zones, road development and air routes; foreign trade-salient features, recent trends and trade direction, Major ports.

Unit - V Regional development & disparities after independence; Major issues and planning of some problem areas – Flood prone areas, Drought prone areas and Tribal areas. Detailed geographical study of Gangetic Plain with special reference to Rohilkhand Region.

PRACTICALS

(A) Lab Work

Unit - I Statistical Analysis (i) Measures of Central Tendency – Mean, Median, Mode, Measure of Dispersion – Quartile range, Standard Deviation, Variance and Co-efficient of variation. Correlation and Co-efficient of correlation.

(ii) Graphical Representation of Statistical Data-Histogram, Polygon, Frequency Curve, Scatter Diagram.

Unit - II Cartographic Representation of Statistical Data (i) Graphs: Band graph, Hythergraph, Climograph.

(ii) Diagrams: Compound Bar, Wheel, Rectangle, Circle.

(iii) Distribution Maps: Using Dots, Isopleth and Choropleth method.

Unit - III Weather Maps: Use of weather instruments and weather symbols

(India) Study and Interpretation of Indian daily Weather maps/reports especially of January, March, July and October, Weather forecasting.

Geological Maps: Identification of rock-outcomes, bedding planes, drawing of cross-section and determination of dip and bed thickness- simple and folded.

Unit - IV Aerial Photogrammetry and Remote Sensing Terminology, meaning and scope of Remote Sensing. Types and characteristics of aerial photographs, Determination of scales, Image characteristics –Tone, Shadow size, Pattern and their identification.

B.A. /B.Sc. Part – III

Paper – I: GEOGRAPHICAL THOUGHT

Unit - I The field of geography; its place in the classification of sciences; geography as a selected concept of geography - distributions; relationships, interactions, area differentiation and spatial organization.

Unit - II Dualisms in geography; systematic & Regional geography; physical & human geography. Systematic geography & its relation with systematic sciences and with regional geography. The myth and reality about dualism.

Unit - III Geography in ancient period – Contribution of Indian, Greek & Roman geographers, Geography in middle age – Arab geographers, Renaissance period in Europe. Renowned travellers and their geographical discoveries.

Unit - IV German school of thought – Kant, Humboldt, Ritter, Richthofen, Ratzel, Hettner, French school of thought – Contribution of Blache & Brunhes.

Unit - V Soviet geographers, American school – Contribution of Davis, Sample, Huntington & Carl Sauer, British school – Contribution of Mackinder, Herbertson & L.D. Stamp.

Paper – II: Environmental Studies

Unit - I Geography as a study of Environment - concepts & components of environment, Development of environment studies, Approaches to environmental studies, concept of ecology and ecosystem. Man-Environment relationship, Agricultural and Industrial practices, science, technology and environment.

Unit - II The problems and causes of environmental degradation, Deforestation, soil erosion, soil exhaustion, Desertification, Air pollution, water pollution, Disposal of solid waste, Population pressure.

Unit - III Environmental management: Environmental education, preservation of ecological balance at local, regional and National level, Major environmental policies and programmes.

Unit - IV Sample studies – Ganga Action Plan, Tiger project, Tehri dam & Narmada Valley project.

Unit - V emerging environmental issues; population explosion, food security, global warming, bio-diversity and its conservation, sustainable development.

Paper – III:

Regional Studies of any one of the following Regions

(A) South West Asia

Unit - I Region as a geographical entity and as a component of global system. Basis of regionlisation, grouping of countries –Geographical, political, historical, cultural etc.

Unit - II Structure Relief, climate and climatic regions, vegetation. Irrigation, Power and Mineral resources.

Unit - III Population distribution, growth, distribution pattern, migration. Agriculture, Industries, Transport and Trade.

Unit - IV Strategic importance of the region, Suez Canal, Geographical background of the modern problems.

Unit - V Detailed regional study of Turkey. Iraq, Israel and Saudi Arabia.

(B) South East Asia

Unit - I Region as a geographical entity and as a component of global system. Basis of regionalization, grouping of countries. Geographical, political, historical, cultural etc.

Unit - II Structure, Relief, Climate and climatic regions, vegetation. Irrigation power and Mineral resources.

Unit - III Population – distribution, growth, distribution pattern, migration – Agriculture, Industries, Trade and Transport.

Unit - IV Strategic importance of the region, Geographical background of the modern problems.

Unit - V Detailed regional study of Myanmar, Thailand, Malaysia and Indonesia.

(C) Far East Asia

Unit - I Region as a geographical entity and as a component of global system. Basis of regionalization, grouping of countries geographical, political, historical, cultural etc.

Unit - II Structure, Relief, climate and climatic regions, vegetation, Irrigation, Power and Mineral resources.

Unit - III Population – distribution, growth, distribution pattern, migration, Agriculture, Industries, Trade and Transport.

Unit - IV Strategic importance of the region, Geographical background of the modern problems.

Unit - V Detailed regional study of China and Japan.

PRACTICALS

(A) Lab Work

Unit - I Plane table Surveying; Radiation, Inter section & Resection method with three Points problem.

Unit - II Surveying by Prismatic Compass, open traverse, Close traverse, Elimination of error. Bowditch Method.

Unit - III Use of Sextant; measurement of height-accessible and inaccessible

Method. OR Indian clinometers: Measurement of height-accessible and inaccessible method.

(B). Field Study Tour and Report:

Field study tour shall be arranged for about one week duration in an areanormally different geographically from the native region. Students will prepare field study report based on primary data and first hand observations of physical, environmental and socio-economic characteristics of the landscape of geographical area/region visited, surveyed and studied. The findings should be well supported by suitable maps and diagrams.

Course outcomes (Geography)

B.A. (Geography) CO1 भौतिक भूगोल— पृथ्वी की उत्पत्ति, महाद्वीप व महासागरों की उत्पत्ति तथा पृथ्वी के स्थलमण्डल, जल मण्डल, वायुमण्डल तथा जैवमण्डल का ज्ञान प्रदान करना

B.A. (Geography) CO2 मानव भूगोल— पृथ्वी पर मानव के उद्भव से लेकर वर्तमान समय तक मानव के क्रियाकलापों का ज्ञान प्रदान करना।

B.A. (Geography) CO3 आर्थिक भूगोल— मानव की विभिन्न आर्थिक क्रियाओं तथा उसके औद्योगिक क्रिया कलापों को समझाना।

B.A. (Geography) CO4 भारत का भूगोल— भारत देश की भूगर्भिक संरचना, जलवायु, मिट्टी, प्राकृतिक-वनस्पति उद्योग धंधों, खनिज संसाधनों व जनसंख्या आदि पक्षों की विश्लेषण सम्पूर्ण जानकारी देना

B.A. (Geography) CO5 भौगोलिक विचारधारा— भूगोल के विकास क्रम को समझाना।

B.A. (Geography) CO6 पर्यावरण अध्ययन— मानव के चारों ओर फैले पर्यावरण, उसके तत्व और पर्यावरण के संघटकों के ज्ञान से परिचित कराना।

B.A. (Geography) CO7 सुदूर पूर्वी एशिया— पूर्वी एशिया के महाद्वीप के 2 देशों जापान और चीन के सम्पूर्ण भौगोलिक ज्ञान से छात्रों को परिचित कराना

M.A. (Geography) CO1 पृथ्वी, महाद्वीप, महासागरों की उत्पत्ति तथा पृथ्वी के धरातल पर मौजूद विभिन्न स्थलाकृतियों की निर्माण प्रक्रिया का सम्पूर्ण ज्ञान प्रदान करना

M.A. (Geography) CO2 पृथ्वी तल पर उपस्थित समस्त संसाधनों के उत्पादन एवं वितरण सम्बन्धी सम्पूर्ण ज्ञान से परिचित कराना।

M.A. (Geography) CO3 पृथ्वी पर मानव के उद्भव, विविध की समग्र जनसंख्या एवं जनसंख्या संसाधनों का विविध ज्ञान से परिचित कराना

M.A. (Geography) CO4 पृथ्वी के पर्यावरण के विभिन्न संघटकों तथा पारिस्थितिकी तथा पारिस्थितिक तंत्र में ऊर्जा प्रवाह, खाद्य श्रृंखला ऊर्जा पिरामिड, प्राकृतिक आपदाएँ व चरम घटनाओं की सम्पूर्ण जानकारी देना

M.A. (Geography) CO5 भूगोल के विकास क्रम को समझाना तथा भौगोलिक विधितन्त्र की सम्पूर्ण जानकारी प्रदान करना।

M.A. (Geography) CO6 भारत देश की भूगर्भिक संरचना, स्थिति एवं विस्तार, जलवायु, वनस्पति मिट्टी, उद्योग धंधे कृषि, यातायात-साधन विदेशी व्यापार व भारत में निकाले जाने वाले खनिज संसाधनों के विविध ज्ञान से परिचित कराना

M.A. (Geography) CO7 पृथ्वी की जलवायु तथा जलवायु प्रदेशों तथा महासागरों, उच्चावच, महासागरीय ज्वार भाटा, घाटाये और समुद्री निक्षेपों का विविध ज्ञान से परिचित करना, मानव-वातावरण सम्बन्ध पर्यावरण का मानव पर प्रभाव तथा मानवीय क्रियाकलापों का पर्यावरण पर प्रभावों का छात्रों का ज्ञान कराना

Programme outcomes (Geography)

B.A. (Geography) PO1 पृथ्वी के जलमण्डल, स्थल मण्डल और वायुमण्डल तथा जैव मण्डल के उद्भव और पृथ्वी के धरातल मानवीय क्रिया कलापों के ज्ञान से परिचित

B.A. (Geography) PO2 मानव की विभिन्न आर्थिक क्रियाओं तथा भारत राष्ट्र के सम्पूर्ण क्षेत्रीय भौगोलिक ज्ञान से छात्रों को परिचित कराना।

B.A. (Geography) PO3 भूगोल विषय के विकास क्रम, पृथ्वी के पर्यावरण संघटकों का तथा चीन और जापान देशों का क्षेत्रीय भौगोलिक ज्ञान से छात्रों को परिचित कराना

M.A. (Geography) PO1 उत्पन्न पृथ्वी की विभिन्न भू-आकृतियों की निर्माण-प्रक्रिया, विभिन्न भू-गर्भिक कालों में विविध ज्ञान प्रदान कराना।

M.A. (Geography) PO2 पृथ्वी तल पर उपस्थित समस्त प्रकार के संसाधनों उसकी उपयोगिता संसाधन प्रबन्धन एवं संरक्षण आदि का विशद ज्ञान से परिचित होना

M.A. (Geography) PO3 भूगोल विषय के ऐतिहासिक विकास क्रम, भौगोलिक सम्प्रदाय व भौगोलिक विधि तन्त्र आदि बहुमुखी ज्ञान से छात्रों को परिचित कराना पृथ्वी तल पर मानव के उद्भव उसके विकास क्रम, मानव प्रजाति तथा जनसंख्या संसाधन प्रदेशों का विविध ज्ञान

Programme specific outcomes (Geography)

B.A. (Geography) PSO1 सामान्य ज्ञान में बढ़ते भौगोलिक प्रश्नों के छात्रों को भौगोलिक ज्ञान में प्रवीण व दक्ष बनाना।

B.A. (Geography) PSO2 विभिन्न प्रतियोगी परीक्षा जैसे— **I.A.S, P.S.C., Railway, SSC. and Banking** में सफलता हेतु छात्रों क भौगोलिक ज्ञान में अधिकाधिक वृद्धि करना

M.A. (Geography) PSO1 भौगोलिक विधितन्त्र क ज्ञान से परिचित कराकर छात्रों को भाोध करने हेतु मानसिक रूप से तैयार करना

M.A. (Geography) PSO2 नेट (यूजीसी) व स्लेट प्रतियोगी परीक्षाओं के लिए विषुद्ध रूप से तैयार करना

M.A. (Geography) PSO3 मानचित्रकार (**Cartographer**)] सर्वेक्षक जसे पदों क लिये अच्छे रोजगार अवसर हेतु उन्हें मानचित्रकला में दक्ष करना