



OPSC Geography Optional Syllabus

OPTIONAL SUBJECTS FOR MAIN EXAMINATION

Total number of questions in the question papers of optional subjects will be eight. All questions will carry equal marks. Each paper will be divided into two parts, viz. Part A and Part B, each part containing four questions. Out of eight questions, five questions are to be attempted. One question in each part will be compulsory. Candidates will be required to answer three more questions out of the remaining six questions, taking at least one question from each part. In this way, at least two questions will be attempted from each part i.e. one compulsory question plus one more.

Geography Optional Papers is divided into two parts i.e. Paper-1 & Paper-2.

Paper-I (Principles of Geography)

Paper-II (Geography of India with special reference to Odisha)

Paper-I (Principles of Geography)

Section-A

Physical Geography

i) Geomorphology: Origin of the earth, Physical conditions of the earth's interior; continental drift; isostasy; plate tectonics; mountain building; volcanism and earthquakes; weathering and erosion, Concepts of geomorphic cycles (Davis and Penck), Landforms associated with fluvial, arid, glacial, coastal and karst region, Polycyclic landforms.

ii) Climatology: Temperature and pressure belts of the world; heat budget of the earth; atmospheric circulation; planetary and local winds; monsoons and jet streams; air masses and fronts; temperate and tropical cyclones; types and distribution of precipitation; Koppen's and Thornthwaite's classification of world climate; hydrological cycle; climatic change.

iii) Oceanography: Bottom topography of the Atlantic, Indian and Pacific Oceans; temperature and salinity of the oceans; ocean deposits; ocean currents and tides; marine resources and their utilizations, Coral reefs;

iv) Biogeography: Genesis of soils; classification and distribution of soils; soil profile;

soil erosion and conservation; factors influencing world distribution of plants and animals; problems of deforestation and conservation measures; social forestry, agroforestry.

v) Environmental Geography:

Concept and types of environment, Environmental degradation and management. Ecosystems and their management; Energy flow and Biogeo- chemical cycles, Global ecological imbalances–problems of pollution, global warming, reduction in bio-diversity and depletion of forests.

Section-B

Human Geography

i) Perspectives in Human

Geography: Areal differentiation; regional synthesis; dichotomy and dualism; environmentalism; quantitative revolution and locational analysis; radical, behavioural, human and welfare approaches; Cultural regions of the world, Human development indicators.

ii) Economic Geography: World economic development– measurement and problems; world resources and their

distribution; energy crisis; the limits to growth; World agriculture–typology of agricultural regions; Von-Thunen’s theory of agricultural location; World industries– locational patterns and locational theories of Weber; Hoover, Losch and Smith, Patterns of world trade.

iii) Population Geography:

Growth and distribution of world population; demographic attributes; causes and consequences of migration; concepts of over-, under- and optimum population; world population problems. Races of man kind.

iv) Settlement Geography:

Types and patterns of rural settlements; hierarchy of urban settlements; Cristaller’s Central Place Theory, concept of primate city and rank-size rule; functional classification of towns; sphere of urban influence; rural-urban fringe; satellite town; problems of urbanisation.

v) Regional Planning: Concept of region; types of regions and methods of regionalisation; growth centres and growth poles; regional imbalances; multi-level planning; planning for sustainable

development. Rostov Model of Stages of Growth.

Note: Candidates will be required to answer one compulsory map question pertinent to subjects covered by this paper

Paper-II (Geography of India with special reference to Odisha)

Section-A.

i) Physical Aspects: Structure and relief; drainage system and watersheds; physiographic regions; mechanism of Indian monsoons; tropical cyclones and western disturbances; floods and droughts; climatic regions; natural vegetation, soil types and their distributions.

ii) Resources: Concept and types of resources, land, water, energy, minerals, and biotic resources, their distribution, utilisation and conservation; energy crisis.

iii) Agriculture: Infrastructure—irrigation, seeds, fertilizers, power; Types of crops agricultural productivity, agricultural intensity, crop combination, land capability; agro and social forestry; Green Revolution - its socio-economic and ecological implications; significance of dry

farming; livestock resources and White Revolution; Blue Revolution; agricultural regionalisation; agro-climatic zones.

iv) Industry: History of industrial development; locational factors of cotton, jute, iron and steel, fertilizer and paper, industries, industrial complexes and industrial regionalisation; new industrial policy; role of multinationals, liberalization and globalisation.

v) Transport, Communication and Trade: Road, railway, waterway, airway and pipeline networks and their complementary roles in regional development; growing importance of ports on national and foreign trade, trade balance; free trade and export promotion zones; developments in communication technology and its impact on economy and society.

Section-B

i) Cultural Setting: Racial and ethnic diversities; major tribes, tribal areas and their problems; role of language, religion and tradition in the formation of cultural regions; growth, distribution and density of

population; demographic attributes—sex-ratio, age structure, literacy rate, work-force, dependency ratio and longevity; migration (interregional, intra-regional and international) and associated problems, population problems and policies.

ii) Settlements: Types, patterns and morphology of rural settlements; urban development; Census definition of urban areas; morphology of Indian cities; functional classification of Indian cities; conurbations and metropolitan regions; urban sprawl; slums and associated problems; town planning; problems of urbanisation.

iii) Regional Development and Planning: Experience of regional planning in India; Five Year Plans; integrated rural development programmes; Panchayati Raj and decentralised planning; command area development; watershed management; planning for backward area, desert, drought-prone, hill and tribal area development; multi-level planning; geography and regional planning.

iv) Political Aspects:
Geographical basis of Indian

federalism; state reorganisation; regional consciousness and national integration; international boundary of India and related issues; disputes on sharing of water resources; India and geopolitics of the Indian Ocean.

v) Contemporary Issues:

Environmental hazards—landslides, earthquakes, Tsunami, cyclones, floods and droughts, epidemics. Issues related to environmental pollution; changes in patterns of land use; principles of environmental impact assessment and environmental management; population explosion and food security; environmental degradation; Disasters in India and their management. Problems of agrarian and industrial unrest; regional disparities in economic development; concept of sustainable growth and development.

Note: Candidates will be required to answer one compulsory map question pertinent to subjects covered by this paper.