

कि.शासकीय कला एवं विज्ञान स्वशासी महाविद्यालय, रायगढ़ (छ.ग.)

अध्ययन मंडल की बैठक

विभाग का नाम - शृंगोल

दिनांक - 24/08/2018

आज दिनांक 24/08/18 को मध्याह्न किरोडीमल शासकीय कला एवं विज्ञान महाविद्यालय रायगढ़ के विभागीय कक्ष में पाठ्यक्रम निर्धारण हेतु अध्ययन मंडल की बैठक आयोजित की गई जिसमें उपस्थिति निम्नानुसार रही -

विभागाध्यक्ष -

डॉ./प्रो. अलका छडीमली अध्यक्ष Madam
 डॉ./प्रो. सोफिया अम्ब्रेला सदस्य Sophia
 डॉ./प्रो. मनेज सादव सदस्य Munej

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विषय विशेषज्ञ -

डॉ./प्रो. डी. डी. कश्यप DDK
 डॉ./प्रो. मनहरण साहू Mansharan

दी.सी. प्रतिनिधि -

डॉ./प्रो. एन. एन. वर्मा N.N. Verma

स्थानन संस्था सदस्य -

श्री./प्रो. विनोद कुमार सिन्हा

भूतपूर्व छात्र सदस्य -

श्री./कु. डॉ. राजेन्द्र चक्रवर्ती

बैठक में सर्वसम्मति से निम्नलिखित कक्षाओं का पाठ्यक्रम प्रस्तावित किया गया-

कक्षा	सेमेस्टर	सत्र हेतु प्रस्तावित
B.Ao	I Sem & II Sem	2018-2019 to 2019-2020
B.Ao	III Sem & IV Sem	2018-2019 to 2019-2020
B.Ao	V Sem & VI Sem.	2018-2019 to 2019-2020

पाठ्यक्रम का विस्तृत विवरण तथा पाठ्यक्रम की हस्ताक्षरित प्रतियाँ संलग्न है ।

नाम

हस्ताक्षर

नाम

हस्ताक्षर

Dr. Rajendra Singh

R. Singh
19/9/18

Approved
202
17-9-18

Rajendra Singh

B7A. 1st - SEMESTER
PHYSICAL GEOGRAPHY
(ELEMENTS OF GEOMORPHOLOGY)

S.C - 8001

UNIT - 1 :

The nature and scope of Physical Geography; Inter relation of Physical Geography with other branches of earth science. The place of Geography in Physical Geography, Origin of earth, importance theories - Nebular, Tidal, Planetesimal Supernova Ottoschmid, Age of Earth, Geological Time Scale, Interior of the earth.

UNIT - 2 :

Origin of Continents & Ocean basin - Wegner's theory of Continental Drift, Plate Tectonics. Isostasy, Earth movements - orogenic and epeirogenic, Fold, Fault, Earthquakes and Volcanoes.

UNIT - 3 :

Rocks - Origin and composition of rocks, weathering, formation of regolith and soils, rocks and relief. Geomorphic agents and processes-erosion, transportation and deposition, mass wasting. Concepts of Cycle of erosion-davis & Penck, interruption of cycle of erosion.

UNIT - 4 :

Function of geomorphic agents (erosion, transportation and deposition) & Evolution of Lands cape - Fluvial, Arid, Glacial.

UNIT - 5 :

Karst topography and Function of Ocean & Coastal topography. Application of Geomorphology to Hydrology, Mining, Engineering Works, Natural Hazards and Management, urbanization.

Prescribed Books :-

1. Sparks, B.W. : Geomorphology Longman, Doldon. 1960.
2. Sharma, H.S. (ed.) : Perspectives in Geomorphology, Concept, New Delhi 1980.
3. Singh, S. : Geomorphology, Prayag Publication, Allahabad 1998.
4. कौशिक, एस.डी. : भू-आकृति विज्ञान।
5. नेगी, बी.एस. : भू-आकृति विज्ञान।
6. दयाल परमेश्वर : भू-आकृति विज्ञान।
7. सिंह, सविन्द्र के. : भू-आकृति विज्ञान, शारदा पुस्तक भवन, इलाहाबाद
8. गायत्री प्रसाद : भू-आकृति विज्ञान।

PRACTICAL GEOGRAPHY :-

1. Nature and Scope of cartography
1. Scale - Definition, Types & Methods of representation. Conversion of Scale - Simple, Comparative & Diagonal.
2. Methods of enlargement and reduction of map, Determination of North.
3. Methods of showing relief - hachure's, Contours; Representation of different land forms.
4. Drawing of profile - Simple.

Prescribed Books :-

1. Mishra, R.P. and Ramesh A. : Fundamentals of cartography, Mac millon Co. New Delhi 1986.
2. Singh, R.L. and Dutt, P.K. : Elements of Practical Geography, John Wiley, New York, 1979.
3. Sharma, J.P. : Practical Geography, Vasundhara Prakashan, Allahabad.

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INTRODUCTION TO GEOGRAPHY AND HUMAN GEOGRAPHY**UNIT - 1 :**

The nature of Geography, definition and scope of geography objective and relevance, place of Geography in the classification of Sciences recent trends in Geography with special reference to India, imperatives for the future, career opportunities for Geographers.

UNIT - 2 :

Geography as the study of environment, man - environment relationship; ecology and ecosystems. Environmental determinism possibilism Neo - determinism; Dualism in Geography - Systematic / Regional, Physical / Human, complementarily.

UNIT - 3 :

Human Geography : Meaning/Definition of Human Geography, Scope and relation with other sciences Human Races - Meaning, Cradle of man, Causes & Factors of evolution of human races, Division of mankind into racial group [- Their characteristics and distribution Griffith Taylor, Human races of India - Classification of B.L. Guha.

UNIT - 4 :

Environment & Man relationship - Human adaptation to the environment - Eskimos, Bushman, Pigmy, Khirghiz, Massai, Tribes of India - Nagas, Bhil, Gond.

UNIT - 5 :

Distribution of population world distribution pattern - Physical, Economic and Social Factors influencing Spatial distribution, Growth of Population; Migration - Internal and International, Settlements - Rural & Urban : Types and Pattern.

Prescribed Books :-

1. Hartshorne, R. : Perspectives on Nature of Geography Rand Mc Nally & Co. 1959.
2. Hussain, M. : Evolution of Geographic Thought, Rawat Pub., Jaipur, 1984.
3. Johnston, R.J. : Philosophy and Human Geography, Edward Arnold. London, 1983.
4. माजिद हुसैन : मानव भूगोल।
5. एस.डी. कौशिक : मानव भूगोल।
6. डॉ. रामकुमार गुर्जर, बी.सी. जाट : मानव भूगोल।

PRACTICAL GEOGRAPHY :-

1. Diagrams - Simple Bar Diagram, Compound Bar Diagram, Wind - Vane, Circle population Pyramid.
2. Measurement of Central tendency - Mean, Median, Mode
3. Surveying - Basic Principles of surveying, Chain and Tape survey - Measurement of area.

Prescribed Books :-

1. Monk House F.J. & H.R. Wilkinson : Maps and Diagrams, Methuen, London.
2. Singh, L.R. : Practical Geography.
3. शर्मा, जे.पी. : प्रायोगिक भूगोल।
4. चौहान, पी.आर. : प्रयोगात्मक भूगोल।
5. यादव, हीरालाल : प्रायोगिक भूगोल।

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**B.A. IIIrd - SEMESTER
PHYSICAL GEOGRAPHY
(CLIMATOLOGY AND OCEANOGRAPHY)**

A. CLIMATOLOGY -**UNIT - 1 :**

Weathers and climate; definition and significance of climatology. Elements of weather and climate; their causes. Composition and structure of the atmosphere. Atmospheric Temperature : Insolation and Global energy budget, Vertical, Horizontal and Seasonal distribution of temperature. Atmospheric pressure and winds : Vertical and Horizontal distribution of pressure; planetary, periodic and local winds.

UNIT - 2 :

Atmospheric Moisture : Humidity, Evaporation; and condensation; hydrological cycle; types of precipitation, world patterns of rainfall : Regional and Seasonal distribution Air masses and Fronts origin Classification and properties. Atmospheric disturbances; tropical and temperate cyclones; - theories of their origin and associated weather Thunderstorms and Tornadoes.

UNIT - 3 :

Climatic classification, basis of koppen's classification and types-distribution, characteristics and related plant and animal life. Role of climate in human life; Atmospheric pollution and global warming, general causes, Consequences and measures of control.

B. OCEANOGRAPHY -**UNIT - 4 :**

Relevance of oceanography and atmospheric science. Definition of oceanography, Surface configuration of the ocean floor, continental shelf, continental slope, abyssal plain, mid-oceanic ridges and oceanic trenches. Relief of Atlantic, Pacific and Indian oceans. Distribution of temperature and salinity of oceans and seas.

UNIT - 5 :

Circulation of oceanic waters : waves, tides and currents, currents of the Atlantic, Pacific and Indian ocean, marine deposits and coralreefs, coastal environment, ocean as storehouse of resources for the future.

Prescribed Books :-**CLIMATOLOGY**

1. Barry, R.G. & Chorley, R.J. Atmosphere, Weather and Climate, Routledge, 1998.
2. Das, P.K. : The Monsoons, National Book Trust, New Delhi, 1968.
3. सिंह सविन्द्र : जलवायु विज्ञान।
4. गौतम अलका : भौतिक भूगोल।
5. गुप्ता एच.एस. एण्ड गौतम : यूनिफाईड भूगोल

OCEANOGRAPHY

1. Grald, S. : General Oceanography - An Introduction, John Wiley & Sons, New York, 1930.
2. Garrison. T. : Oceanography Wards worth.com., U.S.A., 1998.
3. सिंह सविन्द्र : भौतिक भूगोल, वसुन्धरा प्रकाशन, गोरखपुर।

PRACTICAL GEOGRAPHY :-

1. Interpretation of weather Maps : Use of Metrological instruments.
2. Representation of Climate data - Hyther graph, Climograph, representation of temperature & rainfall by Line and Bar Diagram.
3. Map Projections : Definition and classification, Cylindrical projections-simple cylendrical, True cylendrical, equal area cylendrical, marcator's, Gall's.

Prescribed Books :-

1. Monk House F.J. & H.R. Wilkinson : Maps and Diagrams, Methuen, London.
2. Singh, L.R. : Practical Geography.
3. शर्मा, जे.पी. : प्रायोगिक भूगोल।
4. चौहान, पी.आर. : प्रयोगात्मक भूगोल।
5. यादव, हीरालाल : प्रायोगिक भूगोल।

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REGIONAL GEOGRAPHY WITH SPECIAL REFERENCE TO NORTH AMERICA

UNIT - 1 :

Regional concept, Bases of regionalization, North America-structure, relief, climate and soil, Drainage.

UNIT - 2 :

Forests, Distribution and Production of Mineral and Energy Resources (Iron ore, Manganese, Copper Coal, Petroleum and Hydro-electricity) of North America.

UNIT - 3 :

Major Crops; Agricultural belts, Live stock and Dairy Farming in North America.

UNIT - 4

Industries of North America - Localization, development & Production (Iron & Steel, Cotton textile, Heavy Engineering Industries), Industrial Regions, Population, Trade and Transport.

UNIT - 5 :

Detailed study of the following regions of North America : California valley, New England Region, Lake Region, Alaska, Prairie Region and St. Lawrence Valley.

Prescribed Books :-

1. गुप्ता हरिशंकर : उत्तरी अमेरिका का प्रादेशिक भूगोल।
2. गुप्ता एच.एस. एवं शिवानंद गौतम : युनिफाईड भूगोल साहित्य भवन।
3. ममोरिया चतुर्भुज : यूनिफाईड भूगोल

PRACTICAL GEOGRAPHY :-

1. Mapping Techniques : Distribution Maps : Choropleth & Isopleths, Dot Map.
2. Statistical Methods : Quartile : Mean deviation, standard deviation and quartile deviation relative variability and co-relation.
3. Surveying-Prismatic Compass Survey : Open and closed traverse, correction of bearing, calculation of interior angles.

Prescribed Books :-

1. Monk House F.J. & H.R. Wilkinson : Maps and Diagrams, Methuen, London.
2. Singh, L.R. : Practical Geography.
3. शर्मा, जे.पी. : प्रायोगिक भूगोल।
4. चौहान, पी.आर. : प्रयोगात्मक भूगोल।
5. यादव, हीरालाल : प्रायोगिक भूगोल।

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SC - 8004 (B)
IVth - SEMESTER
OPTIONAL PAPER - I
ECONOMIC GEOGRAPHY

UNIT - 1 :
Definition, Scope and Content of geography, Relations of Economic Geography with their disciplines,
Geography of Primary Production : Agriculture, Cotton, Rubber.

UNIT - 2 :
Mining Economy : World Production and distribution of Iron and Copper, Power resources-World distribution of Coal and Petroleum, Importance of Minerals resources and conservation.

UNIT - 3 :
Industries : Manufacturing Industries : Iron, Textile Industry, Cement Industry, Fertiliser Industry, Factors affecting the location of industries.

UNIT - 4
Trade : World Trade Policy, World Trade, Pattern of Cotton, Wheat, Petroleum, Tea, Changes in World Economy in the context of Globalisation.

UNIT - 5 :
Transport : Factors affecting the land, Air and Water Transport, World Oceanic Routes, Importance of Inland water ways.

Prescribed Books :-

1. Ali, S.M. : Resources For Future Economic Growth, Vikas Publishing House Pvt. Ltd., New Delhi, 1979.
2. Duncun, G. : "Resource Utilization and the Conservation Concept" in Reading in Economic Geography, New York, 1967.
3. Smith, G.H. (Ed.) : Conservation of Natural Resources, John Wiley and Sons, New York, 1950.
4. Stringer, E. and Davies, J.S. : Geography of Resources, Carsell, London, 1966.
5. Zimmerman, E.W. : World Resources and Industries, Harper, New York.
6. सिंह, के.एन एवं सिंह, जे. : आर्थिक भूगोल के मूल तत्व, तारा प्रेस, वाराणसी, 1982।

PRACTICAL GEOGRAPHY :-

1. Diagrams - Water Balance, Ergograph, Rainfall dispersion diagram.
2. Geological Map - basics of Geological Maps - Conformable and unconformable Structure.
3. Computer Cartography - Making of Graphs.

Prescribed Books :-

1. Monk House F.J. & H.R. Wilkinson : Maps and Diagrams, Methuen, London.
2. Nag, P. : Thematic Cartography and Remote Sensing, Concept, New Delhi.
3. शर्मा, जे.पी. : प्रायोगिक भूगोल।
4. चौहान, पी.आर. : प्रयोगात्मक भूगोल।
5. यादव, हीरालाल : प्रायोगिक भूगोल।

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SC-8004 (c)
IVth - SEMESTER
OPTIONAL PAPER - II
POPULATION GEOGRAPHY

UNIT - 1 :

Population Geography - Definition and scope of population geography relation of population geography with other subjects of social sciences, sources of population data, (India) census and its history,

UNIT - 2 :

Distribution of Population - The concept of Population density and its types, factors affecting population distribution of population in the world. Growth of Population - Population Growth in India.

UNIT - 3 :

Population Theories - Malthusian Theory & Demography Transition, Population Composition - In Term of age and Sex, Rural and Urban.

UNIT - 4

Population Dynamics : Measurements of fertility mortality, migration - National & International Patterns.

UNIT - 5 :

Population Resources - Concept of optimum, Over Population, Under Population, Population Resources region, Population Region of India, Population Policy in India.

Suggested Readings : -

1. Bogue, D.J. : Principles in Demography. John Wiley, New York 1969.
2. Bose, Ashish et. al. : Population in India's Development (1947-2000) Vikas Publishing House, New Delhi 1974.
3. Chandana, R.C. : Geography of Population : Concept Determinants and pattern Kalyani Publishers, New York 2000.
4. Clark. John I. : Population Geography, Pergamon Press, Oxford 1973.
5. Garnier, B.J. : Geography of Population Longman, London 1970.
6. Mamoria, C.B. : India's Population : Kitab Mahal, New Delhi, 1981.
7. Dundaram K.V. and Sudesh Nangia (Ed.) : Population Geograph Heritage Publication, Delhi, 1986.
8. Woods, R. : Population Analysis in Geography, London, 1979.

PRACTICAL GEOGRAPHY :-

1. Basic Principles of Land Surveying.
2. Dumpy Level - Leveling of Nearby Area - RISE and FALL Method.
3. Theodolite - Measurement of Building Height.

Prescribed Books :-

1. Monk House F.J. & H.R. Wilkinson : Maps and Diagrams, Methuen, London.
2. Singh, L.R. : Practical Geography.
3. शर्मा, जे.पी. : प्रायोगिक भूगोल।
4. चौहान, पी.आर. : प्रयोगात्मक भूगोल।
5. यादव, हीरालाल : प्रायोगिक भूगोल।

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IVth - SEMESTER
OPTIONAL PAPER - III
EVOLUTION OF GEOGRAPHICAL THOUGHT

UNIT - 1 :

The field of geography, Selected concepts in the Philosophy of geography : - Distribution, Relationship, Interactions, Areal differentiation and Spatial Organization.

UNIT - 2 :

Dualism in Geography : - Determinism/Possibilism Systematic/Regional, Scientific Explanation (Inductive/Deductive).

UNIT - 3 :

Major Schools of Geography : - Greek and Roman with special reference to the work of Herodotus, Eratosthenes, Ptolemy, Strabo and Ptolemy.

Contribution by Arab Geographers - Al - Beruni, Idrisi Ibnbatuta.

UNIT - 4

German School of Geographic Thought Homboldt and Ritter.

French School of Geographic Thought - Blache, Brunhes.

American Geographic thought - Davis, Sample.

British Geographic Thought - Mackinder, Harbertson, Stamp.

UNIT - 5 :

Geography in Ancient Indian Period study of Geography in Modern India.

Suggested Readings : -

1. Ali, S.M. : The Geography of Puranas, Peoples Publishing House, Delhi, 1968.
2. Hartshorne, R. : Perspectives on Nature of Geography, Rand Mc Nally & Co., 1959.
3. Husain, M. : Evolution of Geographic Thought, Rawat Pub., Jaipur, 1984.
4. Ali, S.M. : Arab Geography.
5. Taylor, G. : Geography in the 20th Century.

PRACTICAL GEOGRAPHY :-

1. Conduct a field Survey to acquire knowledge of the surrounding area and collection of Primary data on Socio-Economic Characteristic of Area.
2. Data Processing : Editing, Coding, Tabulation of Primary/Secondary Data.
3. Quantitative Techniques : Running Mean, Mean Centre, Lorence Curve, Chi Square Test.
4. Rank Size Rule, Centrality Index, Crop Combination, Crop Diversification.
5. Crop concentration, Agricultural Efficiency.

Prescribed Books :-

1. Monk House F.J. & H.R. Wilkinson : Maps and Diagrams, Methuen, London.
2. Singh, L.R. : Practical Geography.
3. शर्मा, जे.पी. : प्रायोगिक भूगोल।
4. चौहान, पी.आर. : प्रयोगात्मक भूगोल।
5. यादव, हीरालाल : प्रायोगिक भूगोल।

Geography
B.A. Vth - SEMESTER S.C - 8005
RESOURCES AND ENVIRONMENT

A. RESOURCES -

UNIT - 1 :

Meaning, nature and components of resources and environment, Resources and environment interface. Classification of resources : renewable and nonrenewable : biotic (forests, wild-life, live-stock, fisheries, agricultural crops) and abiotic (land, water, mineral)

UNIT - 2 :

Distribution and utilization of water mineral and energy resources, their economic and environmental significance and conservation. Types and distribution of forests, fauna and fisheries, their economic, and environmental significance and conservation. Major soil types and their distribution; problems of soil erosion and soil conservation.

UNIT - 3 :

Number, density, growth and distribution of population; population pressure and resource utilization.

B. ENVIRONMENT -

UNIT - 4

Classification of environment : Natural and Human. Man environment interrelations with respect to population size, types of economy and technology; exploitation of natural resources and environmental hazards.

UNIT - 5 :

Emerging environmental issues - population explosion; food security; deforestation; global warming, conservation of bio-diversity; sustainable development.

PRACTICAL GEOGRAPHY :-

1. Map Projection : Conical Projection : One standard parallel, two standard parallels, Bonne's Polyconic, Polar Zenithal Projections : Gnomonic, Stereographic and Orthographic.
2. Study and Interpretation of Indian topographical sheets : Classification and numbering system, Interpretation of topographical sheets with respect to cultural and physical features.
3. Fundamental of Remote Sensing & GIS.

Prescribed Books :-

1. Monk House F.J. & H.R. Wilkinson : Maps and Diagrams, Methuen, London.
2. Singh, L.R. : Practical Geography.
3. शर्मा, जे.पी. : प्रायोगिक भूगोल।
4. चौहान, पी.आर. : प्रयोगात्मक भूगोल।
5. यादव, हीरालाल : प्रायोगिक भूगोल।

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GEOGRAPHY OF INDIA WITH SPECIAL REFERENCE TO CHHATTISGARH**UNIT - 1 :**

Physical features : Structure, Relief and Physiographic regions, Drainage, Climate-origin and mechanism of monsoon, and regional and seasonal variation.

UNIT - 2 :

Natural resources : Soils - types, their distribution and characteristics, water resources (major irrigation and hydel power projects); Forests-types, distribution, economic significance and conservation. Mineral and Power resources-Iron-ore, Manganese, Copper, Coal, Petroleum and Natural Gas, Non conventional sources of energy.

UNIT - 3 :

Cultural Features : Agriculture-Major crops, impact of green revolution and Agriculture regions; Industries - Iron and steel, Cotton Textile, Cement, Sugar. Population - Growth, Density and Distribution. Transport, Foreign Trade.

UNIT - 4

Chhattisgarh : Physical Features : Structure, Physiography, Drainage, Climate, Soils, Natural vegetation, Water resources - availability and development. Mineral and Power resources, Power Projects.

UNIT - 5 :

Chhattisgarh : Cultural features : Agriculture, Industries, Population - growth, distribution and density, social groups, literacy and sex-ratio, urbanisation. Major tribes-their habitat, economy and society. Transport and Tourism.

Suggested Readings : -

1. Sharma, T.C. and Coutinho, O. : Economic and Commercial Geography of India, Vikas Pub. Houdw, New Delhi, 1988.
2. Singh, R.L. (Ed.) : India : A regional Geography, Nat. Geog. Soc. of India, Varanasi, 1971.
3. प्रमिला कुमार (सम्पादक) : मध्यप्रदेश का प्रादेशिक भूगोल, म.प्र. हिन्दी ग्रंथ अकादमी, भोपाल।
4. ममोरिया चतुर्भुज : भारत का भूगोल।
5. गौतम अलका : भारत का भूगोल।
6. तिवारी विजय कुमार : छत्तीसगढ़ का भूगोल।

PRACTICAL GEOGRAPHY :-

1. Scale : Square root scale, Cube root scale, Vernior scale, Scale of Slope.
2. Diagrams : Circle, Sphere diagram.
3. Plane Table Survey : Basic Principles of Plane table survey, Plane Table surveying including intersection and resection.
4. Importance of Field work in Geography, Field work and field Report : Physical, Social and economic survey of a micro-region & Excursion.

Prescribed Books :-

1. Monk House F.J. & H.R. Wilkinson : Maps and Diagrams, Methuen, London.
2. Singh, L.R. : Practical Geography.
3. शर्मा, जे.पी. : प्रायोगिक भूगोल।
4. चौहान, पी.आर. : प्रायोगिक भूगोल।
5. यादव, हीरालाल : प्रायोगिक भूगोल।

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