# Academic Calendar Year: 2018-19

## P.N.Das College

## Department of Geography SEM-I (HONS) GEOA

### GEOACOR01T –Geotectonic and Geomorphology

4 Credits, 50 Marks [60 classes]

| PAPER | UNIT | SL. NO. | TOPIC | NO. OF LECT. | LECTURER | Exam Schedule | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Test-I | Test-II | Test-III | Remarks |
| | **Unit I:** | | **Geotectonic** | | | | | | |
| GEOACOR01T | | 1 | Earth's tectonic and structural evolution with reference to geological time scale | 5 | RG | | | | |
| GEOACOR01T | | 2 | Earth's interior with special reference to seismology. Isostasy: Models of Airy and Pratt | 8 | RG | | | | |
| GEOACOR01T | | 3 | Plate Tectonics as a unified theory of global tectonics: Processes and landforms at plate margins and hotspots. | 5 | CS | | | | |
| GEOACOR01T | | 4 | Folds and Faults—origin and types | 7 | CS | | | | |
| | **Unit II:** | | **Geomorphology** | | | | | | |
| GEOACOR01T | | 5 | Degradational processes: Weathering, mass wasting and resultant landforms | 7 | CS | | | | |
| GEOACOR01T | | 6 | Development of river network and landforms on uniclinal and folded | 6 | RG | | | | |
| GEOACOR01T | | 7 | Development of landforms on granites, basalts and limestones. | 4 | RG | | | | |
| GEOACOR01T | | 8 | Coastal processes and landforms | 4 | DD | | | | |
| GEOACOR01T | | 9 | Glacial and glacio-fluvial processes and landforms | 4 | DD | | | | |
| GEOACOR01T | | 10 | Aeolian and fluvio-aeolian processes and landforms | 4 | DD | | | | |
| GEOACOR01T | | 11 | Models on landscape evolution: Views of Davis, Penck and Hack | 6 | CS,RG,DD | | | | |

## GEOACOR01P –Geotectonic and Geomorphology

2 Credits, 25 Marks [60 classes]

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| GEOACOR01P | **Unit III**: | 1 | Megascopic identification of (a) *mineral samples*: Bauxite, calcite, chalcopyrite, feldspar, galena, gypsum, hematite, magnetite, mica, quartz, talc, tourmaline; and (b) *rock samples*: Granite, basalt, dolerite, laterite, limestone, shale, sandstone, conglomerate, slate, phyllite, schist, gneiss, quartzite, marble | 30 | RG(M),DD(R) | | | | |
| GEOACOR01P | | 2 | Interpretation of geological maps with unconformity and intrusions on uniclinal and folded structures | 30 | CS | | | | |

# Academic Calendar Year: 2018-19

## P.N.Das College

## Department of Geography SEM-I (HONS)

✧

**GEOACOR02T –Cartographic Techniques**

4 Credit, 50 Marks [60 classes]

| PAPER | UNIT-I | SL. NO. | TOPIC | NO. OF LECT. | LECTURER | Exam Schedule | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Test-I | Test-II | Test-III | Remarks |
| GEOACOR02T | | 1 | Maps: Classification and types. Components of a map | 6 | CS | | | | |
| GEOACOR02T | | 2 | Concept and application of scales: Plain, comparative, diagonal and venire | 12 | CS | | | | |
| GEOACOR02T | | 3 | Survey of India topographical maps: Reference scheme of old and open series. Information on the margin of maps | 8 | DD | | | | |
| GEOACOR02T | | 4 | Coordinate systems: Polar and rectangular | 8 | RG | | | | |
| GEOACOR02T | | 5 | Concept of generating globe and UTM projection | 8 | CS | | | | |
| GEOACOR02T | | 6 | Grids: angular and linear systems of measurement | 8 | DD | | | | |
| GEOACOR02T | | 7 | Map projections: Classification, properties and uses | 10 | RG | | | | |

# Academic Calendar Year: 2018-19

## P.N.Das College

## Department of Geography SEM-I (HONS)

### GEOACOR02P –Cartographic Techniques (Lab)

2 Credits, 25 Marks [90 classes]

| PAPER | UNIT-II | SL. NO. | TOPIC | NO. OF LECT. | LECTURER | Exam Schedule | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Test-I | Test-II | Test-III | Remarks |
| GEOACOR02P | | 1 | Graphical construction of scales: Plain, comparative, diagonal and vernier | 15 | CS | | | | |
| GEOACOR02P | | 2 | Construction of projections: Polar Zenithal Stereographic, Simple Conic with two standard parallels, Bonne's, Cylindrical Equal Area, and Merc | 15 | RG | | | | |
| GEOACOR02P | | 3 | Delineation of drainage basin from Survey of India topographical map. Construction and interpretation of relief profiles (superimposed, projected and composite), relative relief map, slope map (Wentworth), and stream ordering (Strahler) on a drainage basin. | 15 | DD | | | | |
| GEOACOR02P | | 4 | Correlation between physical and cultural features from Survey of India topographical maps using transect chart. | 15 | CS | | | | |

# Academic Calendar Year: 2018-19

## P.N.Das College

## Department of Geography SEM-I (GENERAL) GEOG

### GEOGCOR01T–Physical Geography

6 Credit, 75 Marks [90 classes]

| PAPER | UNIT | SL. NO. | TOPIC | NO. OF LECT. | LECTURER | Exam Schedule | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Test-I | Test-II | Test-III | Remarks |
| | Unit I: | | **Unit I: Geotectonics and Geomorphology** | | | | | | |
| GEOGCOR01T | | 1 | Physical Geography –Definition and Scope, Components of Earth System. | 8 | DD | | | | |
| GEOGCOR01T | | 2 | Internal Structure of Earth based on Seismic Evidence, Plate Tectonics and its associated Features | 9 | DD | | | | |
| GEOGCOR01T | | 3 | Influence of rocks on topography: Limestone and Granite | 9 | DD | | | | |
| GEOGCOR01T | | 4 | Evolution of landforms under fluvial process, Normal Cycle of Erosion of Davis | 10 | DD | | | | |
| GEOGCOR01T | | 5 | Formation of erosional and depositional landforms by coastal and aeolian processes | 12 | DD | | | | |
| | Unit II: | | **Unit II: Climatology and Oceanography** | | | | | | |
| GEOGCOR01T | | 6 | Insolation and Heat Balance. | 8 | RG | | | | |
| GEOGCOR01T | | 7 | Horizontal and Vertical distribution of temperature and pressure | 8 | RG | | | | |
| GEOGCOR01T | | 8 | Planetary wind system, characteristics of Monsoon and Tropical Cyclone | 10 | CS | | | | |
| GEOGCOR01T | | 9 | Climatic Classification: Köppen | 5 | CS | | | | |
| GEOGCOR01T | | 10 | 11. Hydrological Cycle, Ocean Bottom Relief Features, ocean currents. | 11 | CS | | | | |

# Academic CalenderYears: 2018-19

## P.N.Das College

## Department of Geography SEM-II(HONS)GEOACOR03T –Human Geography 6 Credits, 75 Marks [90 classes]

### Unit I: Nature and Principles

| Paper | UNIT | SL. NO. | Topic | No. of Lect. | Lecturer | Exam Schedule | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Test-I | Test-II | Test-III | Remarks |
| GEOACOR03T | UNIT-I | 1 | Nature, scope and recent trends. Elements of Human Geography | | DD | | | | |
| GEOACOR03T | UNIT-I | 2 | Approaches to Human Geography; Resource, Locational, Landscape, Environmental | | DD | | | | |
| GEOACOR03T | UNIT-I | 3 | Concept and classification of race; ethnicity | | CS | | | | |
| GEOACOR03T | UNIT-I | 4 | Space, society and cultural regions (language and religion) | | DD | | | | |
| | | | **Unit :II: Society, Demography and Ekistics** | | | | | | |
| GEOACOR03T | Unit :II | 5 | Evolution of human societies: Hunting and food gathering, pastoral nomadism, subsistence farming and industrial society | | RG | | | | |
| GEOACOR03T | Unit :II | 6 | Human adaptation to environment: Eskimo, Masai and Maori | | DD | | | | |
| GEOACOR03T | Unit :II | 7 | Population growth and distribution, composition; demographic transition | | RG | | | | |
| GEOACOR03T | Unit :II | 8 | Population–Resource regions (Ackerman) | | CS | | | | |
| GEOACOR03T | Unit :II | 9 | Types and patterns of rural settlements | | CS | | | | |
| GEOACOR03T | Unit :II | 10 | Morphology of urban settlements | | RG | | | | |

# Academic CalenderYears: 2018-19

## P.N.Das College
## Department of Geography SEM-II(HONS)GEOACOR04T – Cartograms and Thematic Mapping

**GEOACOR04T –Cartograms and Thematic Mapping ,4 Credits, 50 Marks [60 classes]**

| Paper | UNIT | SL. NO. | Topic | No. of Lect. | Lecturer | Exam Schedule | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Test-I | Test-II | Test-III | Remarks |
| **GEOACOR04T** | | 1 | Concepts of rounding, scientific notation, logarithm and anti-logarithm, natural and log scales | | DD | | | | |
| **GEOACOR04T** | | 2 | Diagrammatic representation of data: Line, Bar, Isopleths | | RG | | | | |
| **GEOACOR04T** | | 3 | Representation of area data: Dots and spheres, proportional circles and Choropleth | | CS | | | | |
| **GEOACOR04T** | | 4 | Preparation and interpretation of land use land cover maps | | RG | | | | |
| **GEOACOR04T** | | 5 | Preparation and interpretation of socio-economic maps | | CS | | | | |
| **GEOACOR04T** | | 6 | Bearing: Magnetic and true, whole-circle and reduced | | RG | | | | |
| **GEOACOR04T** | | 7 | Basic concepts of surveying and survey equipment: Prismatic Compass, Dumpy Level, Theodolite | | RG,CS,RG | | | | |
| **GEOACOR04P –Cartograms and Thematic Mapping (Lab), 2 Credits, 25 Marks [60 classes]** | | | | | | | | | |
| **GEOACOR04P** | | 1 | Thematic maps: | | | | | | |
| | | | Choropleth showing density of population | | RG | | | | |
| | | | Dots and Spheres diagram showing distribution of rural and urban population | | CS | | | | |
| | | | Proportional pie-diagrams representing economic data and land use data | | CS | | | | |
| **GEOACOR04P** | | 2 | Traverse survey using prismatic compass | | RG | | | | |
| | | | Profile survey using dumpy Level | | CS | | | | |

# Academic CalenderYears: 2018-19

## P.N.Das College
## Department of Geography SEM-II(GEN)(GEOGCOR02T) –Human Geography, 6 Credits, 75 Marks [90 classes]

**Unit- I Population and Social Geography**

| Paper | UNIT | SL. NO. | TOPIC | No. of Lect. | Lecturer | Exam Schedule | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Test-I | Test-II | Test-III | Remarks |
| GEOGCOR02T | UNIT-I | 1 | Factors of Growth and distribution of world population. Demographic Transition Theory | | DD | | | | |
| GEOGCOR02T | UNIT-I | 2 | World Population Composition: Age, Gender and Literacy | | DD | | | | |
| GEOGCOR02T | UNIT-I | 3 | Migration**:** Types, causes and consequences. | | DD | | | | |
| GEOGCOR02T | UNIT-I | 4 | Space and Society: Cultural Regions; Race; Religion and Language | | DD | | | | |
| GEOGCOR02T | UNIT-I | 5 | Contemporary social issues: Illiteracy and Poverty | | | | | | |

**Unit II Economic and Settlement Geography**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| GEOGCOR02T | UNIT-II | 6 | Sectors of the economy: primary, secondary, tertiary and quaternary | | RG | | | | |
| GEOGCOR02T | UNIT-II | 7 | Types of agriculture: Intensive subsistence rice farming, Plantation agriculture (Tea and Coffee) | | RG | | | | |
| GEOGCOR02T | UNIT-II | 8 | Location, problems and prospects of Indian industries — Cotton textile, Petroleum refining, Locomotive | | CS | | | | |
| GEOGCOR02T | UNIT-II | 9 | Types and Patterns of Rural Settlements | | CS | | | | |
| GEOGCOR02T | UNIT-II | 10 | Classification of Urban Settlements; Trends and Patterns of World Urbanization | | CS | | | | |

# ACADEMIC CALENDER, 2018-19, PART-II, HONS

| PAPER | GROUP | TOPIC | NO.OF LECTURES | NAME OF LECTURER | | |
|---|---|---|---|---|---|---|
| | | | | | TEST | REMEDIAL CLASS |
| 3 | **GROUP-A** | **CLIMATOLOGY** | | | | |
| | | 1. Nature, composition and layering of the atmosphere. | 3 | CS | | |
| | | 2.Factors affecting insolation & heat budget of the atmosphere | 3 | CS | | |
| | | 3. Horizontal and vertical distribution of temperature, inversion of temperature | 6 | CS | | |
| | | 4. Green house effect on global environment, importance of ozone layer. | 4 | CS | | |
| | | 5. Planetary wind system with special reference to tri-cellular model, Rossby Waves, Jet Streams | 5 | CS | | |
| | | 6.Genesis of Monsoon and its relation with Jet Stream, El Nino and La Nina | 5 | CS | | |
| | | 7.Processes of condensation and mechanism of precipitation: Bergereon-Fiendison, Collision-Coalescence theories. . | 5 | CS | | |
| | | 8. Tropical and mid latitude cyclones. | 6 | CS | | |
| | | 9.Climatic classification after Koppen and Thornthwaite | 4 | CS | | |
| 3 | **GROUP-B** | **SOIL GEOGRAPHY** | | | | |
| | | 1. Soil: Definition, factors and processes of formation. | 3 | DD | | |
| | | 2.Concept of zonal, azonal and intra-zonal soils, profile development under different conditions – Podzols, Chernozems and Laterites | 6 | DD | | |
| | | 3.Physical properties of soil: texture, structure, colour and moisture | 5 | DD | | |
| | | 4. Chemical properties of soil: pH and organic matter. | 3 | DD | | |
| | | 5. Soil erosion: types, factors and management. | 3 | DD | | |
| | | 6. Principles of soil classification: Genetic and Taxonomical – with special reference | 3 | DD | | |
| | | 7. Principles of land classification: USDA | | DD | | |
| 3 | **GROUP-C** | **BIO-GEOGRAPHY** | | | | |
| | | 1. Definitions of biosphere and biogeography. Concept of ecosystem – basic ecological principles – ecotone, communities, niche, succession, and habitat | 3 | RG | | |
| | | 2. Ecosystem and energy: Energy sources, laws of energy exchange, food chains and food web | 2 | RG | | |
| | | 3. Concept of Biomes: study of Tropical rainforest, Taiga, Savannah, Desert, Tundra and Temperate grasslands | 8 | RG | | |

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|---|---|---|---|---|---|---|
| | | 4. Spatial distribution of world fauna | 2 | RG | | |
| | | **5.** Concept of Biodiversity and wildlife conservation in India, Projects and their importance – Project Tiger and Man and Biosphere Programme. | 4 | RG | | |
| 4 | | **PRACTICAL** | | | | |
| | | **1.Scales:** Linear, diagonal and vernier, enlargement and reduction of map | 10 | DD | | |
| | | **2.Megascopic analysis of minerals and rocks :** | | | | |
| | | a) Rocks – Granite, Basalt, Dolerite, Shale, Sandstone, Limestone, Conglomerate, Slate, Phyllite, Schist, Marble, Quartzite, Gneiss. | 4 | DD | | |
| | | b) Minerals and ores – Talc, Gypsum, Calcite, Mica, Feldspar, Quartz, Chalcopyrite, Hematite, Magnetite, Bauxite, Galena. | 4 | DD | | |
| | | **3.Interpretation of topographical maps of Plateau region with R.F 1: 50,000:** | | | | |
| | | a) Demarcation of drainage basin (not more than 4th order, based on Strahler | 4 | CS | | |
| | | b) Construction of profiles: superimposed, projected, composite and long profile of river (length of the river not more than 10 km). | 4 | CS | | |
| | | c) The morphometric analysis to be done in 10 X 12cm grid | | CS | | |
| | | i ) Drainage density (to be shown by isopleth) | 2 | CS | | |
| | | ii) Average slope (Wentworth's method to be shown by isopleth | 3 | CS | | |
| | | iii) Relative Relief (to be shown by isopleth) | 2 | CS | | |
| | | d) Road density (to be shown gridwise). | 2 | CS | | |
| | | e) Interpretation of relief, drainage and vegetation characteristics | 2 | CS | | |
| | | f) Interpretation of settlement, transport and communication systems. | 2 | CS | | |
| | | g)Relationship between physical and cultural elements (Transect Chart, not more than 8 km). | 2 | CS | | |
| | | **4.Cartograms and thematic mapping :** | | | | |
| | | a) Choropleth showing density of population | 3 | RG | | |
| | | b) Dots and Spheres diagram showing distribution of rural and urban population | 4 | RG | | |
| | | c) Proportional pie-diagrams representing economic data and landuse data | 3 | RG | | |
| | | 5. Projections: | | RG | | |
| | | a) Concept, classification, constructions and suitability | 4 | RG | | |
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|---|---|---|---|---|---|---|
| | | b) Construction and properties of: Zenithal Gnomonic and Stereographic (Polar Case), Simple Conic (with one standard parallel), Bonne's, Sinusoidal, Polyconic, Cylindrical Equal Area and Mercator's Projections | 13 | RG,CS,DD | | |
| | | 6. Survey: | | | | |
| | | a) Closed traverse survey by Prismatic Compass. | 3 | RG | | |
| | | b) Levelling by Dumpy Level with at least one change point: Drawing of profile and determination of gradient | 4 | CS | | |

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| | | **ACADEMIC CALENDER - 2018-19 ,<br>P. N . DAS COLLEGE** | | | | |
| | | **DEPARTMENT OF GEOGRAPHY (GENERAL), PART -II** | | | | |
| **PAPER** | **GROUP** | **TOPIC** | **NO.OF LECTURES** | **NAME OF LECTURER** | **TEST** | **REMEDIAL CLASS** |
| | **A** | **POPULATION & SOCIAL GEOGRAPHY** | | | | |
| | | 1. Factors of growth and distribution of world population. | 4 | | | |
| | | 2. Fertility, mortality and age-sex structure of population with reference to India. | 6 | | | |
| | | 3. Migration**:** Types, causes and consequences. | 4 | | | |
| | | 4. Contemporary Social issues**:** Literacy and poverty. | 4 | | | |
| | B | **Economic Geography** | | RG | | |
| | | 1. Sectors of the economy: primary, secondary, tertiary and quaternary: | 4 | RG | | |
| | | 2. Types of agriculture**:** | 2 | RG | | |
| | | a) Shifting cultivation of India. | 1 | RG | | |
| | | b) Intensive subsistence rice farming in India. | 2 | RG | | |
| | | c) Plantation farming in India**:** Tea and Coffee | 4 | RG | | |
| | | Scales of production**:** cottage, small scale and large-scale industries | 4 | RG | | |
| | | 1. Location, problems and prospects of Indian industries. | | RG | | |
| | | a) Cotton textile industry. | 3 | RG | | |
| | | b) Heavy engineering industry**:** locomotive. | 4 | RG | | |
| | | Petroleum refining industry | 2 | RG | | |

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| | C | **REGIONAL GEOGRAPHY** | | | | |
| | | 1. Regions of India: | | DD | | |
| | | a) Concept of regions: formal and functional | 2 | DD | | |
| | | b) Broad physiographic regions of India: special reference to Deccan Trappe | 3 | DD | | |
| | | c) Agricultural Regions of India: special reference to Punjab-Haryana wheat belt, | 2 | DD | | |
| | | d) Industrial Regions of India: special reference to Asansol-Durgapur industrial belt. | 3 | DD | | |
| | | 2. Indian monsoon and its impact: problem of flood, drought and cyclone. | 8 | DD | | |
| | | 3. Forest resources of India: issues concerning deforestation and social forestry. | 5 | DD | | |
| | | 4. Causes and consequences of soil erosion in India. | 4 | DD | | |
| | | | | | | |
| 3 | | **Paper-III (Practical): applied geographical Techniques** | | | | |
| | A | **Cartography** | | | | |
| | | 1. Scales: Concept of scales, drawing of linear scales. | 6 | | | |
| | | 2. Projections: Concept and major classification. | 8 | DD | | |
| | | a) Simple conic with one standard parallel | | DD | | |
| | | b) Cylindrical Equal Area | | DD | | |
| | | c) Polar Zenithal Gnomonic. | | DD | | |
| | | 3.Cartograms: Choropleth, pie-graphs and square diagrams with proportional scales. | 8 | DD | | |
| | B | **Map Interpretation** | | RG | | |
| | | 1. Basis of numbering and scale of Survey of India Topographical sheets. | 2 | RG | | |
| | | 2. Interpretation of 1:50,000 topographical sheets under the following heads: | 3 | RG | | |
| | | Interpretation of relief and drainage from topographical maps with profiles | 8 | RG | | |
| | | Interpretation of communication and settlement from topographical maps | 6 | RG | | |
| | | Relationship between physical and cultural features with the help of transect chart. | 4 | RG | | |
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| | C | **Statistics** | | | | |
| | | 1. Nature and classification of data. | 2 | RG | | |
| | | 2 .Process of tabulation and graphical representation: histogram, frequency polygon, cumulative frequency curve. | 6 | RG | | |
| | | 3.Measures of central tendency: mean, median and mode. | 4 | RG | | |
| | | | | | | |
| | D | **Field Report** | | | | |
| | | Field Report on either a rural mouza or an urban ward (to be conducted during field excursion) | 20 | RG,DD | | |
| | | ***Guidelines for field report on rural mouza*** | | | | |
| | | One rural mouza is to be selected and the followings are to be done: | | | | |
| | | (a) Landuse survey | | | | |
| | | (b) Collection of socio-economic and physical data | | | | |
| | | (c) Classification and tabulation of data | | | | |
| | | (d) Preparation of landuse map on cadastral map | | | | |
| | | (e) Preparation of maps and diagrams showing broad Physiography, drainage, settlement, demographic characteristics etc. | | | | |
| | | **The report is to be prepared preferably under the following sections:** | | | | |
| | | (a) Introduction: Objective, extent and space relations, sources of information, methodology. | | | | |
| | | (b) Physical components: drainage, surface condition, slope, climate, soil vegetation, etc. | | | | |
| | | (c) Population: Number, FMR, literacy, occupational structure, religious composition, language, media exposure, per capita income (based on availability of data). | | | | |
| | | (d) Settlement: Number of houses, building materials, number and size of rooms, amenities (based on availability of data) | | | | |
| | | (e) Agriculture: irrigational facilities, general landuse, cropping intensity, production and marketing (based on availability of data). | | | | |
| | | (f) Other economic activities: Fishing, horticulture, brick-making industries (based on availability of data). | | | | |
| | | (g) Problems, prospects, suggestions and conclusion. | | | | |
| | | (h) Bibliography. | | | | |
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| | | ***Guidelines for field report on urban area*** | | | | |
| | | One urban area is to be selected and the followings are to be done: | | | | |
| | | (a) Landuse survey | | | | |
| | | (b) Collection of socio-economic data | | | | |
| | | (c) Classification and tabulation of data | | | | |
| | | (d) Preparation of urban landuse map | | | | |
| | | (e) Preparation of maps and diagrams showing urban morphology, sewage networks, communication networks, traffic flow, demographic characteristics, cultural and economic zonation etc. | | | | |
| | | The report is to be prepared preferably under the following sections: | | | | |
| | | (a) Introduction: Objective, extent and space relations, sources of information, methodology etc. | | | | |
| | | (b) Physical components: Surface conditions, slope, drainage, climate etc. | | | | |
| | | (c) Population: Number, FMR, literacy, occupational structure, religious composition, language, media exposure, per capita income (based on availability of data). | | | | |
| | | (d) Town morphology: sectors of landuse. | | | | |
| | | (e) Economy: Economic individuality of the town, production and marketing patterns, spatial differences in occupation and per capita income characteristics (based on availability of data). | | | | |
| | | (f) Bibliography | | | | |
| | | Field report is to be hand-written. | | | | |
| | | Text of the report should not exceed 1500 words. | | | | |
| | | Maps and diagrams excluding photo-plates should not exceed 15. | | | | |
| | | **group e: Viva-voce on Laboratory Notebook** | | | | |
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| | | **ACADEMIC CALENDER – 2018-19, P. N. DAS COLLEGE** | | | | |
| | | **DEPARTMENT OF GEOGRAPHY PART -III (GEN)** | | | | |
| **PAPER** | **GROUP** | **TOPIC** | **NO.OF LECTURES** | **NAME OF LECTURER** | **TEST** | **REMEDIAL CLASS** |
| 4 | | **PAPER -IV-A** | | | | |
| | A | **(Theoretical): Applied Geography : 70 marks** | | | | |
| | | **Section I: Land use and settlement Geography** | | | | |
| | | 1. Concept and attributes of land. | 2 | DD | | |
| | | 2. Objectives and principles of land use. | 2 | DD | | |
| | | 3. Factors influencing land use and land categories: | 2 | DD | | |
| | | a) Agricultural land use. | 2 | DD | | |
| | | b) Non-agricultural landuse. | 2 | DD | | |
| | | 4. Rural settlements: evolution, nature and effect of physical environment, | 4 | CS | | |
| | | 5. Urban settlements: definition, morphology and function. | 6 | CS | | |
| | | **Section II: Remote Sensing and Geographical Information System** | | | | |
| | | 1. Concept of Remote Sensing, different methods of remote sensing – aerial photo and satellite imagery. | 6 | CS | | |
| | | 2. Aerial Photo: Types and interpretation keys; concept of principal point, fudicial marks, flight line, photo overlap. | 4 | CS | | |
| | | 3. IRS images: Sensors, different types of resolution and their applicability. | 4 | RG | | |
| | | 4. Concept of GIS and its applicability: Spatial and attribute data, raster and vector data structure and concept of information layers in GIS. | 5 | RG | | |
| | B | **PRACTICAL - 30 Marks** | | | | |
| | | 1. Interpretation of Daily Weather Maps published by India Meteorological Department – Monsoon season | 10 | CS | | |
| | | 2. Preparation of thematic maps: | 2 | | | |
| | | i) Flow diagram and ii) Determination of Detour Index | 2 | DD | | |
| | | 3. Aerial photo interpretation for identification of broad physical and cultural features. | 8 | RG | | |
| | | 4. **Laboratory Note Book and Viva-voce** | | | | |

# P.N.DAS COLLEGE, PALTA

## DEPARTMENT OF GEOGRAPHY ,PART-III( HONOURS)

## ACADEMIC CALENDER, 2018-19

| SL.NO | HONS/ GEN | PAPER | GROUP | TOPIC | NO.OF LECTURES | NAME OF LECTURER | TEST | REMEDIAL CLASS |
|---|---|---|---|---|---|---|---|---|
| | **HONOURS** | **5** | **A** | **SOCIAL, CULTURAL AND POLITICAL GEOGRAPHY** | | | | |
| | | | | Social and Cultural Geography | | | | |
| | | | | 1. Concept of culture and its components with special emphasis on India: language, religion and ethnicity. | 4 | CS | | |
| | | | | 2. Social geography of rural India: caste structure and social stratification; tribe – Santhals and Lepcha. | 4 | CS | | |
| | | | | 3. Urban social Geography — Social ecology and social space. | 4 | CS | | |
| | | | | 4. Rural settlements – its forms, site and situations.<br>Urban settlement – morphology and | 14 | CS | | |

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| | | | | hierarchy. | | | | |
| | | | | Political Geography | | DD | | |
| | | | | 5. Concept of Political Geography and geo-politics; concept of frontier and boundary | 6 | DD | | |
| | | | | 6. Concept of cold war; bi-polarisation and unipolarisation | 6 | DD | | |
| | | | | 7. Political geography of India: Administrative settings of India, problem of border states, partition and its geo-political implications | 6 | DD | | |
| | | | | | | | | |
| | | | **B** | **REGIONAL GEOGRAPHY** | | RG | | |
| | | | | 1. Concepts of regions; basis of regionalization with reference to India physical, economic and planning | 4 | RG | | |
| | | | | 2. a) Physiographic Regions of India with special reference to Kashmir Himalaya | 2 | RG | | |
| | | | | b) Agricultural Region of India of India with special reference to Punjab-Haryana | 2 | RG | | |
| | | | | c) Industrial Region of India with special reference to Mumbai-Pune industrial belt | 2 | RG | | |
| | | | | 3. Regional disparities in India: causes and implications | 3 | RG | | |
| | | **6** | **A** | **PHILOSOPHY OF GEOGRAPHY AND CONTEMPORARY ISSUES** | | CS | | |
| | | | | 1. Definition and nature of Geography. | 2 | CS | | |
| | | | | 2.Selected contributors in the evolution | 6 | CS | | |

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| | | | | of geographical thought Humboldt, Vidal de la Blache, Carl Sauer and David Harvey | | | | |
| | | | | 3.Major postulates: Determinism, Possibilism, Regional differentiation, location, time and space | 8 | CS | | |
| | | | | 4. Changing approaches and methodology: Positivism, Quantitative Revolution, Welfare-Behavioural approach, Structural and radical approach | 10 | CS | | |
| | | | **B** | **CONTEMPORARY ISSUES IN GEOGRAPHY** | | | | |
| | | | | **Section -1: Natural hazards and their management in the Indian Sub-continent** | | | | |
| | | | | 5. Concept of hazards and disasters: Natural, quasi-natural and man-made hazards, different approaches in hazard management | 2 | RG | | |
| | | | | 6.Climatic hazards: Flood, drought and cyclone mechanism – environmental impact and management | 6 | RG | | |
| | | | | 7.Geomorphic hazards: landslide, river bank erosion, coastal erosion environmental impact and management | 6 | CS | | |
| | | | | 8. Edaphic and biotic hazards: Deforestation, desertification, loss of bio-diversity — environmental impact and management | 6 | CS | | |
| | | | | **Section-2: Economic and human development in the Third World** | | DD | | |
| | | | | 9. Concept of third world, concept of development and under development: | 6 | DD | | |

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| | | | | Basic indicators of economic, human and gender development | | | | |
| | | | | 10. Problems of third world – Poverty, Population explosion, food security and hunger, unemployment, malnutrition and child labour. | 14 | DCD | | |
| | | | | 11. Globalization and sustainable development. | 4 | DD | | |
| | | | | 12. Problem of urbanization | 1 | DD | | |
| | | **7** | | **APPLIED GEOGRAPHICAL TECHNIQUES (PRACTICAL)** | | | | |
| | | | | 1.Interpretation of geological maps and drawing of sections: Uniclinal, folds with unconformity and igneous intrusions | 10 | CS | | |
| | | | | 2.Interpretation of Indian Daily Weather Maps – Monsoon and Post Monsoon. | 10 | DD | | |
| | | | | 3.Remote Sensing | | DD | | |
| | | | | a. Basic concept of remote sensing, EMR, Band | 2 | DD | | |
| | | | | b. Types of satellites and sensors with special reference to IRS series of satellites; types of resolutions and their applicability | 3 | DD | | |
| | | | | c. Principles of preparing standard false colour composite, landuse and land cover mapping from standard FCC with header information. | 3 | DD | | |
| | | | | d. Interpretation of aerial photograph – basic principles of aerial photography, side lap, end lap, flight line, air base, fudicial marks, .Principle | 10 | RG | | |

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| | | | | Point, Nadir Point, Conjugate Principal Point, | | | | |
| | | | | e.Preparation of aerial photo mosaics, demarcation of effective area, extraction of cultural and physiographic features within this area with preparation of interpretation key | 10 | RG | | |
| | | | | 4.Geographical Information System. | | CS,RG | | |
| | | | | a. Concept of GIS and its applicability: Spatial and attribute data, raster and vector data structure and concept of information layers in GIS. | 4 | CS,RG | | |
| | | | | b. Georeferencing of scanned maps and ascribing projection (Polyconic/ UTM) | 4 | CS,RG | | |
| | | | | c. Digitisation of point, line and polygon layers; Attachment of appropriate attribute tables. | 4 | CS, RG | | |
| | | | | d. Preparation of thematic maps from attached data: choropleth, pie chart and bar graphs. | 10 | CS,RG | | |
| | | | | 5. Field Report: | | CS,RG,DD | | |
| | | **8** | **A** | **Statistical Techniques (PRACTICAL)** | | | | |
| | | | | 1. Nature of statistical data: discrete, continuous, parametric and non-parametric data. | 2 | RG | | |
| | | | | 2. Tabulation and classification of statistical data. | 2 | RG | | |
| | | | | 3. Frequency distribution: histogram, frequency polygon, ogive, normal and skewed distribution, measures of skewness. | 4 | RG | | |
| | | | | 4. Measures of central tendency: | 8 | RG | | |

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| | | | | mean, median, mode, partition values : quartile, decile, percentile | | | | |
| | | | | 5. Measures of dispersion: mean deviation, quartile deviation, semi-quartile range, standard deviation and co-efficient of variation. | 8 | CS | | |
| | | | | 6. Simple bivariate correlation and regression trend line. | 6 | CS | | |
| | | | | 7. Time series analysis | 2 | CS | | |
| | | | **B** | **Contemporary issues in Geography** | | | | |
| | | | | **Section-A : Representation of climatic and hydrological data of the Indian Sub-continent** | | CS | | |
| | | | | 1. a) Preparation and Interpretation of a climatic chart showing relationship between rainfall, temperature, pressure and relative humidity of a station for three months, preparation and interpretation of Taylor's Climograph and Hythergraph. | 6 | CS | | |
| | | | | b) Preparation of station models for different meteorological stations of India with the help of Synoptic chart | 4 | DD | | |
| | | | | 2. Preparation and interpretation of rating curves, hydrographs and unit hydrographs of rivers flowing through the Indian Sub-continent. | 6 | CS | | |
| | | | | **Section-B: Economic and Human Development in Third World** | | | | |
| | | | | 3. Computation of Human and Gender Development Index and ranking of countries/states/districts based on HDI and GDI. | 4 | DD | | |

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| | | | | 4.Preparation of questionnaire schedule for assessment of development and for perception survey | 2 | RG | | |
| | | | | 5. Measures of Spatial and size-class distribution. | | CS | | |
| | | | | 6.a) Dominant-distinctive function | 4 | CS | | |
| | | | | b) Rank-size rule. | 2 | CS | | |
| | | | | c) Lorenz curve. | 2 | CS | | |