

**B.A. /B.Sc. (Honours) Course in Geography
(Revised Syllabus)
(W.e.f. from the Academic Session 2016-2017)**

**Part- II (Honours)
(Full Marks: 200)**

Paper	Group	Marks	Full Marks
Paper IV: Climatology, Hydrology and Oceanography	Group - A: Climatology	35	75
	Group – B: Hydrology	20	
	Group – C: Oceanography	20	
Paper V: Social, Cultural and Population Geography	Group – A: Social and Cultural Geography	40	75
	Group –B: Population Geography	35	
Paper VI: (Practical) Statistical Methods	Group – A: Application of Statistical Methods	40	50
	Group – B: Laboratory Note Book and Viva Voce	5+5 = 10	

**Part- III (Honours)
(To be published later)**

(Figures in the bracket represent number of Lectures)

PART – II

Paper – IV: Climatology, Hydrology and Oceanography (No. of Lectures- 90) 75 Marks

Group – A: Climatology(No. of lectures –40) 35 Marks

1. Insolation and Heat budget (04)
2. Horizontal and vertical distribution of temperature; Inversion of temperature (06)
3. Pressure belts and General wind circulation; Air mass: typology, origin and characteristics (08)
4. Jet streams; Origin of Indian Monsoon (06)
5. Process and forms of condensation; Forms and mechanisms of precipitation: Ice Crystal Theory and Collision Coalescence Theory (08)
6. Tropical and Temperate cyclones (04)
7. Climatic classification after Koppen and Thornthwaite (1931 and 1948) (04)

Group – B: Hydrology (No. of lectures –25) 20 Marks

1. Scope and content of Hydrology and its relevance (04)
2. Global Hydrological Cycle (04)
3. Factors influencing runoff and infiltration, evaporation and transpiration (08)
4. Components, factors and processes controlling storage and movement of ground water (09)

Group-C: Oceanography (No. of lectures-25) 20Marks

1. Nature and scope of Oceanography (02)
2. Temperature, salinity and density of sea water (03)
3. Ocean currents: Pacific, Atlantic and Indian Ocean (06)
4. Bottom topography: Pacific, Atlantic and Indian Ocean (09)
5. Formation, characteristics and theories of origin of coral reefs (05)

(Figures in the bracket represent number of Lectures)

Paper – V: Social, Cultural and Population Geography (No. of Lectures- 90) 75 Marks

Group – A: Social and Cultural Geography (No. of lectures –50) 40 Marks

1. Scope and content of Social and Cultural Geography (04)
2. Concept of space : social and material space (04)
3. Indicators of social wellbeing (02)
4. Social elements: class, caste, language, religion, race and ethnicity with special reference to India (10)
5. Indian tribes with special reference to Toda, Jarwa, Khasi and Santhal (08)
6. Concepts: culture, community, society, cultural hearth and cultural realms (07)
7. Settlements as social entities; site and situation of rural settlements; rural and urban settlement classification: genetic and functional; theories of urban morphology (Concentric zone theory, Sector theory and Multiple nuclei theory) (15)

Group B: Population Geography (No. of lectures - 40) 35 Marks

1. Population growth: global trends and patterns (05)
2. Determinants and measures of fertility, mortality and mobility (08)
3. Population structure: age and sex specific (04)
4. Theories of population growth: Malthus and Marx; Demographic Transition Model (10)
5. Migration: types, factors and consequences (08)
6. Population Policy in India (05)

Paper VI: (Practical) Statistical Methods

50 Marks

Group – A: Application of Statistical methods

40 Marks

1. Nature of statistical data and scales of their measurement; tabulation and classification of data
2. Concepts of Sampling Techniques (Random, Systematic and Stratified); Test of Significance: Students' t-test and Chi-square test
3. Frequency distribution: Frequency curve and polygon; Histogram and Ogives
4. Measures of central tendency and dispersion: Mean, Median and Mode; Mean Deviation and Standard Deviation; Co-efficient of Variation; Z-score
5. Product moment correlation after Pearson and Rank correlation after Spearman; Scatter diagram; Regression analysis and fitting of trend line using bi-variate data
6. Time Series Analysis: Trend line (Semi Average, Moving Average and Least Square method)

Group-B: Laboratory Note Book and Viva Voce

(5+5) = 10 Marks

University of Kalyani

B.A. /B.Sc. (General) Course in Geography (Revised Syllabus)

(w.e.f. the Academic Session 2016-2017)

Part-II (General) (Full Marks: 200)

Paper	Group	Marks	Full Marks
Paper II: Social, Economic and Regional Geography of India	Group - A: Social Geography	20	100
	Group – B: Economic Geography	30	
	Group – C: Regional Geography of India	50	
Paper III: Practical			100

Part- III (General) (To be published later)

(Figures in the bracket represent number of Lectures)

PART – II

Paper – II: Social, Economic and Regional Geography of India (No. of lecturers –100) **100 Marks**

Group –A: Social Geography(No. of lectures- 23) **20 Marks**

1. Growth and distribution of world population (07)
2. Migration: Types, causes and consequences of migration (08)
3. Contemporary social issues: Adult literacy, poverty, gender issues (08)

Group –B: Economic Geography(No. of lectures –28) **30 Marks**

1. Sectors of the economy: primary, secondary, tertiary and quaternary (05)
2. Forms of economy: (09)
 - i) Tribal economies: hunting and gathering; shifting cultivation in India
 - ii) Traditional economies: Intensive subsistence farming
 - iii) Modern economies: Commercial grain farming and mixed farming
3. Cottage, small scale and largescale industries – general characteristics and examples (05)
4. Location, problems and prospects of Indian industries (09)
 - a) Agro-based: Cotton textile industry
 - b) Forest-based: Paper industry
 - c) Mineral-based: Iron and steel industry

Group – C: Regional Geography of India(No. of lectures-49) **50 Marks**

1. Concept of regions: formal and functional; macro, meso, micro regions (06)
2. Broad physiographic regions of India (04)
3. Vagaries of Indian monsoon and its impact: Problem of flood and drought (08)
4. Forest resources of India: Issues concerning deforestation (08)
5. Problems of soil erosion and conservation in India (04)
6. Regions of India: (10)
 - a) Agricultural regions of India: Special reference to Punjab-Haryana wheat belt
 - b) Industrial regions of India: Special reference to Hooghly industrial belt
 - c) Planning regions of India: Special reference to D VC Region
 - d) Biotic regions of India: Special reference to Sundarban of West Bengal
7. Racial and ethnic diversity in India: Associated problems with special reference to tribal population (09)

Paper – III: Practical

100 Marks

1. Concept of scale: drawing of Linear scale **08 Marks**
2. Projection by Graphical method: **12 Marks**
 - i) Simple Conical with One Standard Parallel
 - ii) Cylindrical Equal Area
 - iii) Polar Zenithal Stereographic
3. Cartograms: Pie graph, Bar graph (simple and compound) **15 Marks**
4. Statistics: **20 Marks**
 - a) Nature and classification of data
 - b) Process of tabulation and graphical representation: histogram, frequency polygon, frequency curve, ogive (more than and less than method)
 - c) Measures of central tendency: mean, median and mode
 - d) Measures of dispersion: range, quartile deviation, mean deviation, standard deviation, coefficient of variations
5. Interpretation of Indian Daily Weather map (pre-monsoon, monsoon and post-monsoon) under the following heads: **15 Marks**
 - i) Atmospheric pressure
 - ii) Wind direction and speed
 - ii) Sky condition
 - iv) Precipitation
6. Field Work and Viva voce **20 Marks**

[Field Work in village within the district near the college/institution covering the following aspects:

 - a) Land-use survey and its presentation on a *Mouza* map (Cadastral)
 - b) Collection of door to door data through Questionnaire Survey; representation of the data by statistical methods and cartograms
 - c) Preparation of a report covering Physiography, Drainage, Climate, Vegetation, Soil, Population, Mining, Fishing, Forestry, Irrigation, Agriculture, Animal Rearing, Industry, Transport, Settlement, Landuse, Folk Culture –whichever is applicable
 - d) Maps and diagrams should not be more than 15 pages of A4 size
 - e) The report should not be more than 1500 words. Report should be hand written (dry letters are not permitted)]
7. Laboratory Note Book and Viva Voce **5+5=10 Marks**