

University of Kalyani



Department of Geography

REVISED SYLLABUS

M.A. / M.Sc. COURSE IN GEOGRAPHY

2 Year PG Course (Semester System with Credit and Course)

(With Effect From: 2017-2018)

Department of Geography

University of Kalyani

Kalyani, Nadia-741235, West Bengal

M.A. / M.Sc. COURSE IN GEOGRAPHY

SEMESTER I

Paper	Group	Course Title	Contact hours per week			Credit	Internal Assessment/ Evaluation	Examination/ Report/ Viva- Voice	Total Marks	Total Credit
			L	T	P					
I	A	Geotectonics	2	1	0	4	5	25	100	4
	B	Geomorphology	2	1	0		5	30		
	C	Hydrology	2	1	0		10	25		
II	A	Climatology	2	1	0	4	10	30	100	4
	B	Soil Geography	2	1	0		5	25		
	C	Biogeography	2	1	0		5	25		
III	A	Social Geography	2	1	0	4	5	25	100	4
	B	Cultural Geography	2	1	0		5	25		
	C	Political and Historical Geography	2	1	0		10	30		
IV (Prac)	A	Toposheet Interpretation and Fluvial Morphometry	0	2	6	2	10	30+10	100	4
	B	Survey with Instruments	0	2	6	2	10	30+10		
Total							400			16

SEMESTER-I

Paper – I: (Total Credit - 4, Total Marks – 100)

Group – A: Geotectonics

(Marks - 30: Internal Evaluation – 5, Semester-end Examination - 25)

Internal structure of the earth; Palaeomagnetism and Sea floor spreading; Theories of mountain building; Geosynclines; Earthquake and Vulcanicity: mechanism and distribution

Group – B: Geomorphology

(Marks - 35: Internal Evaluation – 5, Semester-end Examination - 30)

Fundamental concepts in Geomorphology; Evolution of topography in fluvial, coastal, arid and karst landscapes – Cyclic and Non-cyclic concepts; Elements of slope and different approaches of slope development; Concept of Fluvial morphometry – linear, areal and relief aspects; Periglacial processes and landforms

Group – C: Hydrology

(Marks - 35: Internal Evaluation – 10, Semester-end Examination - 25)

Significance of Global Hydrological Cycle; Aquifers: types and issues related to over utilization; Importance of Piezometric level; Basin hydrology; Run off cycle; Unit hydrograph and its application; Fresh water crisis: issues and management; Rain water harvesting; Significance of water-shed management

Mode of Internal Evaluation:

For Group A & B – Class test

For Group C – Individual term paper on any aspect of basin hydrology

SEMESTER-I

Paper – II: (Total Credit - 4, Total Marks – 100)

Group – A: Climatology

(Marks - 40: Internal Evaluation – 10, Semester-end Examination - 30)

Nature and scope of Climatology; Airmasses and atmospheric stability and instability; Adiabatic processes; Tri-cellular model; Monsoon: Recent theories of its origin; El Nino, Southern Oscillation and La Nina; Weather forecasting: short, medium and long range; Global warming and climate change

Group – B: Soil Geography

(Marks - 30: Internal Evaluation – 5, Semester-end Examination - 25)

Soil taxonomy and world pattern of soils; Soil nutrients and soil organisms; Micro-organisms and their relation with soil fertility; Soil pollution and soil degradation; Concept of integrated management of soil

Group – C: Biogeography

(Marks - 30: Internal Evaluation – 5, Semester-end Examination - 25)

Nature, scope and significance of Biogeography; Plant ecology: Concept of Adaptation, Succession and Climax; Impact of climate and soil on distribution of plants; Means and barriers of dispersal and migration of animals; Biodiversity and related issues; International Biological Programme; Man and Biosphere Programme

Mode of Internal Evaluation:

For Group A – Individual term paper on any of the global warming and climate change related issues

For Group B & C – Class test

SEMESTER-I

Paper – III: (Total Credit - 4, Total Marks – 100)

Group – A: Social Geography

(Marks - 30: Internal Evaluation – 5, Semester-end Examination -25)

Concept of space: geographical, material and social; Geography and social life; Social structure and Social processes; Social class and caste; Social distance; Geography of inequality: race, ethnicity and gender; Health and social well-being; Human ecology of disease and emergence of Medical Geography; Social Geography and Millennium Development Goals; Human Development Index and Gender Empowerment Measures; Subaltern studies in Geography

Group – B: Cultural Geography

(Marks - 30: Internal Evaluation – 5, Semester-end Examination - 25)

Culture as a geographical process; Mosaic of culture, language, religion and customs; Emergence of ethnic geography: ethnic neighbourhood and ghetto; Ethno-ecology of PTGs in India; Partition of Indian and Diaspora; Globalization, Cultural ecology and folk geography: study on folk architecture, folk music and dance, folk fairs and festivals; Emergence of Tourism Geography from Cultural Geography

Group – C: Political and Historical Geography

(Marks - 40: Internal Evaluation – 10, Semester-end Examination - 30)

Geographical perspectives on formation of State; Concept of State after Ratzel and Marx; Colonialism, Imperialism and Federalism for understanding core-periphery relationship; Concept of Geopolitics; Geopolitical significance of international water disputes with India and its neighbouring countries; Concept of Electoral Geography; Approaches to the study of geography of elections: Areal and Spatial Behavioural approaches; Spatial organization of electoral areas and the geography of representation

Scope and content of Historical Geography; Ancient period: Territorial organization of *JANAPADAS* in India;

Agriculture, industry, trade and urbanization under the Mughal Empire; Plantation farming and textile industry during Colonial India

Mode of Internal Evaluation:

For Group A & C – Class test

For Group B – Seminar presentation on any aspect of folk geography in West Bengal

SEMESTER-I

Paper – IV: [Practical] (Total Credit - 4, Total Marks – 100)

Group – A: Toposheet Interpretation and Fluvial Morphometry [Credit: 2]

(Marks - 50: Internal Evaluation – 10, Semester-end Examination – 30+10)

Interpretation on structure, relief, vegetation and settlement pattern from topographical maps (Plateau and Plain); Nearest Neighbour Analysis of settlement distribution; Application of fluvial morphometric techniques on drainage basins demarcated on the topographical map;

Laboratory Note Book and Viva voce.

Group – B: Survey with Instruments [Credit: 2]

(Marks - 50: Internal Evaluation – 10, Semester-end Examination – 30+10)

Contouring by Prismatic Compass and Dumpy Level; Determination of Height by Theodolite (Base accessible and inaccessible case); Application of GPS in terrain evaluation; DGPS and Total Station;

Laboratory Note Book and Viva voce.

Mode of Internal Evaluation:

For Group A – Continuous assessment on map laboratory performances

For Group B – Performance during field survey

