COURSE STRUCTURE

FOR

CHOICE BASED CREDIT SYSTEM (CBCS)

OF

1st SEMESTER

M. A. / M. Sc. GEOGRAPHY (2017 & Onwards)

M.A/M.Sc. Geography CBCS-2017 Page 1

M.A./M.Sc. Programme in Geography and Regional Development (2017 & Onwards)

CHOICE BASED CREDIT SYSTEM (CBCS)

Course Description

The M.A / M.Sc Post Graduate Programme in Geography is of two years, based on 96 credits comprising of four semesters. All the 96 credits will spread over 6 different components viz: I) Teaching, II) Tutorial, III) Seminar, IV) Practical, V) Field Tour & VI) Project Work/Dissertation. The students are offered (44) Papers Comprising of (12) Core Courses, which are compulsory, along with (16) Discipline Centric Theory Courses (8) Generic Elective & (8) Open Elective Courses.

NOTE: A credit means one hour of teaching/work or two hours of practical work/tutorial per week for 16 weeks in a semester.

- A candidate compulsorily has to obtain 24 credits per semester i.e., 48 credits in one year programme (2 semesters), 96 credits in two year programme (4 semesters).
- A candidate has to obtain minimum of 24 credits in a semester; 12 credits compulsorily are to be opted from "Core Courses", while the remaining 12 credits can be obtained in the following ways:
- ❖ 8 credits are to be obtained from Discipline centric courses
- ❖ At least 2 credits are to be obtained from Generic Elective courses, however a candidate has an option to take 4 credits from the GE Courses
- ❖ A candidate has a choice to take a maximum of 2 credits if required from Open Elective courses.

M.A/ M.Sc. Geography CBCS-2017 Page 2

CHOICE BASED CREDIT SYSTEM (CBCS) (2017 and Onwards)

Semester - I

Course	Course Title	Category	Hours per week			Credits
			L	T	P	
GG-CR -17101	Geomorphology	core	4	2	0	4
GG-CR-17102	Evolution of geographic thought	core	4	2	0	4
GG-CR-17103	Advanced quantitative and cartographic techniques	core	0	0	8	4
GG-DCE-17104	Geography of tourism	Discipline Centric Elective	3	2	0	3
GG-DCE-15105	Medical Geography	Discipline Centric Elective	2	2	0	2
GG-DCE-17106	Hydrology & Oceanography	Discipline Centric Elective	3	2	0	3
GG-DCE-17107	Fluvial Geomorphology	Discipline Centric Elective	2	2	0	2
GG-GE-17108	Geography of Jammu & Kashmir	Generic Elective	2	2	0	2
GG-GE-17109	Climatology	Generic Elective	2	2	0	2
GG-0E-17110	Study of Maps and Globe	Open Elective	2	2	0	2
GG-GE-17111	Global Positioning System	Open Elective	2	2	0	2

Credit-I

- 1. Evolution of Geomorphic Thought
- 2. Fundamental Concepts;
 - a. Uniformitarnism
 - b. Geological Structures
 - c. Order of Superposition
- 3. Multicyclic and Polygenic Evolution of Landscapes.

Credit-II

- 1. Eperogeneric and Organic Earth Movements
- 2. Sea floor spreading
- 3. Plate Tectonics
- 4. Evolution and Structure of Himalayas

Credit-III

- 1. Exogentic and Endogenic processes
- 2. Concepts, Agents and Processes of Gradation
- 3. Types and Classification of Weathering
- 4. Types and Classification of Mass Movements
- 5. Slope Elements and Slope Evolution

Credit-IV

- 1. Karst topography
- 2. Erosional landforms
- 3. Valleys of Karst region
- 4. Depositional landforms
- 5. Karst cycle of erosion

Credit-I:

- 1. Changing nature of geography
- 2. Paradigm shift in Geography from modern to postmodern period
- 3. Development of Geography in India
- 4. Quantitative revolution in geography

Credit-II:

- **1.** Development of Scientific Geography. (Immanuel Kant, Bernhard Varineus, Humboldt, and Carl Ritter)
- 2. German school of Thought- Contribution of Ratzel, Alfred Hettner and Penk
- **3.** French school of Thought- Contribution of Vidal-de-la Blache, Jean Brunches, De Morton

Credit-III:

- 1. British school of Thought- J.H. Mackinder, Geddes, Stamp
- 2. Soviet Union school of Thought- V.V. Dokuchaiev, Voeikov and Anuchin
- 3. American school of Thought- Davis, Churchill Semple , Huntington and Hartshorne

Credit-IV:

- 1. Recent concepts- Areal differentiation, spatial organization, spatial diffusion
- 2. Concept of Wellbeing, space and place
- 3. Concept of positivism, pragmatism, idealism, realism
- 4. Recent approaches- radical approach, Humanistic approach, Behavioral approach
- 5. Darwin's impact on geography

GG-CR-17103 ADVANCED QUANTITATIVE AND CARTOGRAPHIC TECHNIQUES

Credit-I:

- 1. Correlation, types of correlation, Forms of relation and measuring the strength of association and relation. Construction and meaning of scatter Diagram, Karl Person's
 - Coefficient of Correlation, Rank Correlation
- 2. Linear regression Analysis
- 3. Multiple correlation
- 4. Partial correlation coefficient
- 5. Multiple Regression
- 6. Coefficient of Determination

Credit-II:

- 1. Lorenz Curve and Gini's Coefficient
- 2. Location Quotient
- **3.** Time series: Moving average, least square method and drawing of line of best fit, second degree equation
- 4. The exponential curve, Logistic curve
- 5. Interpolation
- 6. Sampling its types, t test, Z test, Chi Square test, Mann Whitney- U Test

Credit-III:

- 1. Cartographic methods and techniques for preparation of maps and diagrams, types and applications
- 2. Calculation of gradient and slope
- 3. Went worth's Method of average slope

Credit-IV:

- 1. Digital Mapping: Preparation of thematic maps
- **2.** Analysis of Socio Economic data with the help of SPSS and presentation in Maps with the help of GIS
- 3. crop combination data (weaver's, Thomson's, and Rafiullah's, method)
 - Socio-Economic data (Construction of composite index and mapping of
 - Regional disparities). Livestock data, Hydrometerological data in maps

Credit-I:

- 1. Definition and Scope of Tourism Geography
- **2.** Components of tourism
- **3.** The use of Geographical Resources for Tourism
- **4.** Theories of Tourist development
- 5. Sustainable Tourism; Carrying Capacity

Credit-II:

- 1. Tourism Motivation
- 2. Types and Forms of Tourism
- 3. Infrastructure and Support System
- 4. Accommodation and Supplementary Accommodation
- **5.** Tourism planning and its approaches

Credit-III:

- 1. Indian Tourism; Regional Dimension of Tourist attraction
- 2. National Tourism Policy
- **3.** Tourism in J&K: Tourist Resources; Tourist Flow and Distribution pattern; Tourism accommodation
- 4. Impact of Tourism: Environmental; Economic; Social and Cultural
- 5. GIS and Tourism; Tool for Applied Geography Research

Credit-I:

- 1. Relevance of Medical Geography in contemporary world
- 2. Paradigm shift in Medical Geography
- 3. World Health Organization and its mandate
- 4. Medical Pluralism
- 5. Disease Diffusion and types

Credit-II:

- 1. Socio cultural and Economic factors affecting human health
- 2. Geo-ecology and spatial pattern of Cardiovascular', AIDS, Malaria, and Cancer, diseases in India.
- 3. Geo-etiology of diseases like Tuberculosis and Goiter in Jammu and Kashmir.
- 4. Health and healthcare behavior in developing countries.
- 5. Regional Inequalities in Health Care in J &K.

GG-DCE-17106 HYDROLOGY AND OCEANOGRAPHY

Credit-I:

- **1.** Introduction to Hydrology
- 2. Hydrological Cycle and Global water balance
- 3. Groundwater: Origin, Occurrence, Quality and Movement
- 4. Aquifers and their types
- 5. Rain water harvesting: models and feasibility
- 6. National water policy and Water Crisis in India

Credit-II:

- 1. Introduction to Oceanography
- 2. Evolution of Continents and Ocean Basins
- **3.** Marine biological environment
- 4. Waves and their types
- **5.** Ocean currents and their significance
- 6. Ocean Conveyer Belts

Credit-III:

- 1. Coral reefs: theories of formation (Darwin and Dally)
- 2. Oceans as store houses of Non-conventional sources of energy.
- 3. Food resources & Mineral resources of the Oceans
- 4. Law of the Sea & Exclusive Economic Zone
- **5.** Climate change and oceans; Sea level change and its implications
- 6. Role of oceans in regulating green house effect/Marine Biological Pump

GG-DCE -17107 FLUVIAL GEOMORPHOLOGY

Credit-I

- 1. Fluvial Geomorphology and Geography
- **2.** Fluvial processes and related landforms
- 3. Drainage Basin a fundamental geomorphic unit
- **4.** Drainage pattern, Evolution and types

Credit-II

- 1. Mechanics of Fluvial Erosion : Overland , Through & Groundwater Flow
- 2. Sediment Transport : Dissolved, Suspended & Bed Load
- 3. Channel Geometry & Flow: Geometry
- 4. Sources of Stream Flow & Flow Velocity
- 5. Stream Gradation: Modern Theories, Graded Stream

GG-GE-17108 GEOGRAPHY OF JAMMU AND KASHMIR

No. of Credits-2

- 1. Jammu and Kashmir State its space relationships
- 2. Relief and Physiography
- **3.** Climate and natural vegetation
- **4.** Drainage System
- **5.** Population: distribution, density and growth
- **6.** Population structure and composition
- 7. Agriculture of Jammu and Kashmir and Horticulture of J&K with respect to apple and saffron
- 8. Tourism in Jammu and Kashmir
- 9. Energy resources of Jammu and Kashmir (hydal and geothermal)

CBCS-2017 Page 11

No. of Credits-2

- 1. Climatology and its relation with Meteorology
- **2.** Evolution of earth's atmosphere
- **3.** Global Circulation system
- **4.** Air masses, Fronts & Frontogenesis
- 5. Climatic classification; Koppen
- 6. Climatic Change and Indicators- Geomorphic , Geological and Lithological
- 7. Climate of India & Its controls; Western disturbances
- **8.** Theories of Indian Monsoon : a) Classical theory b) Modern theory

M.A/ M.Sc. Geography CBCS-2017 Page 12

STUDY OF MAPS AND GLOBE **GG-OE-17110**

No. of Credits = 2

- 1. Maps Meaning, Significance and Types.
- 2. Difference between Map and Site Plan
- 3. Elements of Maps.
- 4. Scale- Meaning, Necessity and Types.
- 5. Signs and Symbols.
- 6. Study of Topographical Maps.
- 7. Globe as model of Earth.
- 8. Determination of Co-ordinates- latitude , Longitude and altitude.

CBCS-2017 Page 13

GG-OE-17111 GLOBAL POSITIONING SYSTEM (GPS)

No. of Credits = 2

- 1. GPS -Fundamentals
- 2. GPS -Functioning
- 3. GPS -Segments
- 4. GPS positioning-Types
- 5. Limitations of GPS Positioning
- 6. Land surveying- Location and Measurements
- 7. Traffic applications