DEPARTMENT OF GEOGRAPHY
RABINDRANATH TAGORE UNIVERSITY
SYLLABUS AS PER NEP 2020
FOUR-YEAR UNDERGRADUATE PROGRAMS
Paper Code: MAJ-GGY-1.1
TITLE OF PAPER: GEOMORPHOLOGY

Distribution of Marks: 80 (End Sem) +20 (Sessional)

Total Credit = 4 Credit

Course Objectives

- This fundamental and introductory course aims to introduce students to the principles and processes of geomorphology.
- The course will enhance students' understanding of the Earth's surface features and the processes that shape them.
- It aims to equip students with the skills to analyze various landforms and understand their formation and development.

Course Outcomes

- Students will develop an understanding of geomorphological processes and landforms.
- They will gain practical knowledge in analyzing and interpreting landform development.
- The course will also prepare students for higher studies and competitive exams related to geography.

Unit 1: Introduction to Geomorphology **(Classes: 8)**

- Definition, Scope, and Importance of Geomorphology
- Fundamental Concepts: Uniformitarianism, Catastrophism, and the Geologic Cycle
- Structure of the Earth and Plate Tectonics

Unit 2: Endogenic Processes **(Classes: 10)**

- Earth Movements: Diastrophism and Volcanism
- Types of Folds and Faults
- Earthquakes and Volcanoes: Causes, Effects, and Distribution

Unit 3: Exogenic Processes **(Classes: 10)**

- Weathering: Types and Processes
- Mass Wasting: Types and Factors
- Erosion and Deposition by Running Water, Wind, Glaciers, and Coastal Waves

Unit 4: Landforms **(Classes: 12)**

- Fluvial Landforms: Valleys, Floodplains, and Deltas
- Aeolian Landforms: Sand Dunes and Loess
- Glacial Landforms: Moraines, Eskers, and Drumlins
- Coastal Landforms: Beaches, Spits, and Bars

Recommended Books

1. Geomorphology by Savindra Singh
2. Modern Approaches to Fluvial Geomorphology by Ramkrishna Maiti
3. Principles of Geomorphology by W.D. Thornbury
4. Fundamentals of Geomorphology by Richard Huggett
5. Geomorphology: The Mechanics and Chemistry of Landscapes by Robert S. Anderson and Suzanne P. Anderson
6. Tectonic Geomorphology by Douglas W. Burbank and Robert S. Anderson
7. Fluvial Processes in Geomorphology by Luna B. Leopold
8. Coastal Geomorphology by Eric Bird
9. Glacial Geomorphology by David Evans
10. Aeolian Geomorphology by Ian Livingstone
11. Applied Geomorphology: Theory and Practice by R.J. Allison
12. Geomorphology and Global Environmental Change by Olav Slaymaker
13. Soil Geomorphology by A.J. Gerrard
14. Landforms and Geomorphology: Concepts and History by Richard J. Chorley

SEMESTER: I

DEPARTMENT OF GEOGRAPHY
PAPER CODE: GGY-Minor-101
PAPER NAME: PHYSICAL GEOGRAPHY
DISTRIBUTION OF MARKS: 80 (THEORY) + 20 (INTERNAL ASSESSMENT)

Theory Credit: 4
Practical Credit: 0
Number of required classes: 60

- Number of contact classes: 40
- Number of non contact classes 20

Course Objectives :

- This course aims to introduce students to the principles and processes of physical geography.
- It will help students understand the various physical features and natural phenomena of the Earth.
- The course will equip students with the skills to analyze and interpret physical geographical data.

Course Outcomes

- Students will develop an understanding of the fundamental concepts of physical geography.
- They will be able to analyze the physical features and natural phenomena of the Earth.
- The course will prepare students for higher studies and competitive exams in geography.

Theory

Unit 1: Introduction to Physical Geography

- Definition, Scope, and Importance of Physical Geography
- Branches of Physical Geography
- Relationship between Physical Geography and Human Geography

Unit 2: Geomorphology

- Structure of the Earth and Plate Tectonics
- Endogenic Processes: Earthquakes and Volcanoes
- Exogenic Processes: Weathering, Erosion, and Deposition
- Landforms: Mountains, Plateaus, and Plains

Unit 3: Climatology

- Composition and Structure of the Atmosphere
- Insolation and Temperature
- Atmospheric Pressure and Winds
- Precipitation and Climatic Regions

Unit 4: Oceanography

- Distribution of Oceans and Seas
- Oceanic Movements: Waves, Tides, and Currents
- Ocean Resources and Marine Pollution

Recommended Books

1. Physical Geography by Savindra Singh
2. Climatology by D. S. Lal
3. Oceanography by Sharma R.C.
4. Geomorphology by Savindra Singh
5. Physical Geography by Strahler and Strahler
6. Introduction to Physical Geography by A. N. Strahler
7. Fundamentals of Physical Geography by Majid Husain
8. An Introduction to Physical Geography and the Environment by Joseph Holden
9. Physical Geography: Science and Systems of the Human Environment by Alan H. Strahler and Arthur N. Strahler
10. Mcknight's Physical Geography : A Landscape Appreciation by Hess, Darrell Hess
11. Essentials of Physical Geography by by Albert Perry Brigham and Charles T B McFarlane
12. The Blue Planet: An Introduction to Earth System Science by Brian J. Skinner and Barbara W. Murck
13. Fundamentals of Physical Geography by Peter Smithson, Ken Addison, and Ken Atkinson

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SUBJECT: MDC (MULTIDISCIPLINARY COURSE)
SEMESTER: I
COURSE NAME: DYNAMIC EARTH SYSTEMS
(COMPULSORY)
PAPER CODE: GGY-MD-101

COURSE LEVEL: DYNAMIC EARTH SYSTEMS
100 MARKS (THEORY = 80 MARKS, INTERNAL ASSESSMENT = 20 MARKS)
THEORY (4 CREDITS, 80 MARKS, 60 CLASSES OF ONE-HOUR DURATION)

Unit I: The Earth
- The origin and evolution of the Earth
- Age of the Earth
- Four spheres of the Earth: lithosphere, hydrosphere, atmosphere

Unit II: Interior of the Earth
- Layers of the Earth: crust, mantle, and core
- Composition and properties of layers of the earth
- Plate tectonics: theory, types of plate boundaries, and their interactions

Unit III: Rocks and Minerals
- Characteristics, types, and properties of rocks
- Rock cycle
- Common minerals and their identification

Unit IV: Landforms on the Earth
- Classification of landforms
- Geomorphic processes: endogenic and exogenic forces
- Folding and faulting
- Erosion, mass wasting, and landslides

Unit V: Atmosphere and Climate
- Weather and climate: elements and factors influencing them
- Climate zones of the world
- Global climate change and its impacts

Internal Assessment
- Assignments: 10 Marks
- Class Tests: 10 Marks

Total Internal Assessment: 20 Marks

Course Objectives:
1. To understand the origin, evolution, and structure of the Earth.
2. To explore the composition and dynamic processes of Earth's interior.
3. To identify and classify different types of rocks and minerals.
4. To analyze various landforms and the geomorphic processes that shape them.

Course Outcomes:
1. Students will gain a comprehensive understanding of Earth's formation and its four spheres and able to explain the internal structure of the Earth and the concept of plate tectonics.
2. Students will acquire skills to identify common rocks and minerals and understand their properties and equipped to classify landforms and understand the processes of folding, faulting, erosion, and mass wasting.
3. Students will develop an awareness of weather patterns, climate zones, and the effects of climate change on the environment.

Recommended Readings:
1. The Unstable Earth by J. A. Steers

2. Physical Geography by Savindra Singh
3. Fundamentals of Geomorphology by Richard John Huggett
3. Fundamentals of Physical Geography by Husain Majid
4. Physical Geography by Aakash
5. Physical Geography in Diagrams by R.B. Bunnett
6. Fundamental Concept of Physical Geography by Dr. Sourav Das

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SEMESTER: I
PAPER CODE: GGY-SEC-101

SUBJECT: SEC GEOGRAPHY
PAPER NAME: DISASTER MANAGEMENT

Course Objectives

- This core paper aims to introduce students to the interface between geography and the environment.
- The course will enhance students' understanding of disaster management principles and practices.
- It aims to equip students with the skills to analyze and mitigate the impacts of natural and anthropogenic disasters.

Course Outcomes

- The course will help students develop an understanding of environmental issues typically addressed by geographers and students will gain practical knowledge in creating disaster risk assessments and management plans.
- It will also be beneficial for students preparing for UGC NET/SLET exams and other competitive exams, including civil services.

Unit 1: Fundamentals of Disaster Management (Classes: 8)

- Concept of Disaster and Hazard
- Types of Disaster & Hazard (Natural and Anthropogenic)
- Risks and Vulnerability

Unit 2: Major Disasters & Hazards and Their Management (Classes: 10)

- Natural Disasters: Flood, Earthquake, Drought, Landslide, Tsunami, Volcanic Eruption, Epidemic Diseases
- Anthropogenic Disasters: Air Pollution, Water Pollution, Chemical and Nuclear Explosion

Unit 3: Disaster Management Cycle & Phases (Classes: 8)

- Prevention and Preparedness
- Response and Rehabilitation
- Reconstruction and Mitigation

Unit 4: National Environment Policy & National Disaster Management Plan (Classes: 6)

- Environment Protection Act 1986
- Disaster Management Act 2005
- National Environment Policy
- National Disaster Management Plan

Unit 5: Practical and Project Report Preparation (Classes: 8)

- Create a diagram illustrating the disaster management cycle, specifically referencing floods and earthquakes in North-East India, and interpret its different steps
- Create a flood vulnerability map of Assam and highlighting their occurrence and frequency in various regions.

- Project Report Preparation

1. Each student must prepare a project report on a relevant natural disaster issue, guided by their respective teacher.
2. The report should be 30-40 printed A4 size pages with spiral binding.

Recommended Books:

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1. Disaster Management by R. B. Singh
2. Disaster Management: Future Challenges and Opportunities by Jagbir Singh
3. Introduction to Disaster Management by Santosh Kumar
4. Disaster Management: A Comprehensive Approach by S. Lakshmi
5. Environmental Geography by Savindra Singh
6. Natural Hazards and Disaster Management: Vulnerability and Mitigation by R.B. Singh

SEMESTER: II
SYLLABUS AS PER NEP 2020
FYUGP SECOND SEMESTER MAJOR COURSE
PAPER CODE: GGY-MAJOR-201
PAPER NAME: ECONOMIC GEOGRAPHY
DISTRIBUTION OF MARKS: 80 (THEORY) + 20 (INTERNAL ASSESSMENT)

Theory Credit: 4
Practical Credit: 0
Number of required classes: 60

- Number of contact classes: 40
- Number of non contact classes 20

Course Objectives

- This course aims to introduce students to the principles and theories of Economic Geography.
- It will help students understand the spatial distribution of economic activities and their interrelationships.
- The course will equip students with the skills to analyze economic patterns and processes at various scales.

Course Outcomes

- Students will develop an understanding of the fundamental concepts of Economic Geography.
- They will be able to analyze the spatial distribution of economic activities.
- The course will prepare students for higher studies and competitive exams in geography.

Theory

Unit 1: Introduction to Economic Geography

- Definition, Scope, and Importance of Economic Geography
- Fundamental Concepts: Economic Landscape, Economic Activities, and Economic Regions
- Approaches to Economic Geography

Unit 2: Agriculture and Economic Geography

- Agricultural Systems and Patterns
- Factors Affecting Agriculture: Physical, Economic, and Technological
- Agricultural Regions of the World and India

Unit 3: Industrial Geography

- Location of Industries: Theories and Factors
- Types of Industries: Heavy, Light, and High-Tech
- Industrial Regions of the World and India

Unit 4: Transport and Trade

- Transportation Systems: Modes and Networks
- Role of Transportation in Economic Development
- International Trade: Patterns and Policies

Recommended Books

1. A Geography of India by Gopal Singh
2. Human & Economic Geography by Surender Singh and Jitender Saroha
3. Economic Geography by Dr. Y. I. Singh
4. Regional Economic Development and History (Regions and Cities) by Marijn Molema and Sara Svensson
5. Economic Geography: A Contemporary Introduction by Neil Coe, Philip Kelly, and Henry W. C. Yeung
6. Indian Economy by Ramesh Singh
7. The Geography of Transport Systems by Jean-Paul Rodrigue
8. The World Economy: Resources, Location, Trade, and Development by Frederick P. Stutz
9. Agricultural Geography by Majid Husain
10. Economic Geography: A Contemporary Introduction by Neil Coe and Philip Kelly
11. Global Shift: Mapping the Changing Contours of the World Economy by Peter Dicken
12. Economic Geography: A Systematic Study by L. S. Bhat

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SEMESTER: II
FYUGP 2ND SEMESTER MINOR COURSE
SUBJECT: GEOGRAPHY
PAPER CODE: GGY-MINOR-201
PAPER NAME: HUMAN GEOGRAPHY
DISTRIBUTION OF MARKS : 80 (THEORY) + 20 (INTERNAL ASSESSMENT)
TOTAL CREDIT = 4 CREDITS

Theory Credit : 4
Practical Credit : 0
Number of required classes : 60

- Number of contact classes : 40
- Number of non contact classes : 20

Course Objectives

- This course aims to introduce students to the principles and concepts of Human Geography.
- The course will enhance students' understanding of human societies and their spatial dynamics.
- It aims to equip students with the skills to analyze various human geographic phenomena and their impacts on the environment.

Course Outcomes:

- Students will develop an understanding of human geographic processes and patterns.
- They will gain practical knowledge in analyzing and interpreting human-environment interactions.
- The course will also prepare students for higher studies and competitive exams related to geography.

Theory

Unit 1: Introduction to Human Geography

- Definition, Scope, and Importance of Human Geography
- Branches of human geography
- Fundamental Concepts: Place, Space, and Scale
- Human-Environment Interaction

Unit 2: Population Geography

- Meaning and Scope of Population Geography
- Distribution and Density
- Population Growth and Demographic Transition
- Migration: Types, Causes, and Effects

Unit 3: Economic Geography

- Meaning, scope and approaches of Economic Geography
- Economic Activities: Primary, Secondary, Tertiary, and Quaternary
- Agricultural Systems and Land Use

Unit 4: Urban Geography

- Meaning and Scope of Urban Geography

- Urbanization and Urban Systems

- Urban Morphology and Land Use
- Urban Problems and Planning

Recommended Books

1. Fundamentals of Human Geography by Dr. L. R. Singh
2. Human Geography by Majid Husain
3. Human & Economic Geography by Surender Singh and Jitender Saroha
4. A Textbook of Human Geography by Th. Nabakumar Singh
5. Introduction to Human Geography The Evolution of MAN from Man by Dr. Asutosh Goswami
6. Human Geography by Dr. Dipesh Karmarkar
7. Human Geography : An Essential Anthology by J. Agnew
8. Contemporary Human Geography by James M. Rubenstein
9. Human And Economic Geography By Goh Cheng Leong
10. Human Geography: A Spatial Perspective by Sarah Witham Bednarz; Mark Bockenhauer; Fred Hiebert
11. Principles of Human Geography by P.Vidal De La Blache
12. Human and Economic Geography by by S D Maurya

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SEMESTER: II
PAPER CODE: GGY-SEC-202
PAPER NAME: POPULATION GEOGRAPHY

DISTRIBUTION OF MARKS: 50(THEORY) + 25marks Project

Theory Credit : 2
Prokect Credit :1
Number of required classes : 30

- Number of contact classes : 20
- Number of non contact classes : 10

Course Objectives:

- This course aims to provide students with an understanding of the spatial distribution of populations and demographic characteristics.
- It will help students analyze population patterns, dynamics, and their implications on resources and development.
- The course will equip students with the skills to study and interpret demographic data and trends.

Course Outcomes:

- Students will develop an understanding of the basic concepts and theories of Population Geography.
- They will be able to analyze population distribution, composition, and growth patterns.
- The course will prepare students for higher studies and competitive exams in geography.

Theory

Unit 1: Introduction to Population Geography

- Definition, Scope, and Importance of Population Geography
- Sources of Population Data: Census, Surveys, and Vital Statistics
- Basic Concepts: Population Size, Distribution, Density, and Growth

Unit 2: Population Distribution and Composition.

- Factors Influencing Population Distribution: Physical, Economic, and Social
- Patterns of Population Distribution: Global and Regional
- Population Composition: Age, Sex, and Ethnicity

Unit 3: Population Dynamics

- Population Growth: Measures, Trends, and Patterns
- Demographic Transition Theory
- Fertility, Mortality, and Migration: Determinants and Consequences

Unit 4: Population Policies and Planning

- Population Policies: Objectives and Types
- Population Planning and Control: Methods and Strategies
- Case Studies of Population Policies in Selected Countries

Recommended Books

1. Population Geography by S D Maurya
2. Population and Settlement Geography by Dr. Y. I. Singh
3. Geography of Population by RC Chandana
4. Population Geography by Debjani Roy
5. Population Geography: Tools & Issues by K. Bruce Newbold
6. The Population Bomb by Paul and Anne Ehrlich
7. Demography: The Study of Human Population by David Yaukey, Douglas L. Anderton and Jennifer Hickes Lundquist
8. India's Population: Aspects of Quality and Control by Ashok Mitra
9. Principles of Population Studies by Asha A. Bhende and Tara Kanitkar
10. Population Geography: Problems and Prospects by Gary L. Potere and Robert P. Larkin
11. Geography of Population: Selected Essays by Kayastha SL
12. An Introduction to Population Geography by William F. Hornby and Melvyn Jones

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