

Lesson Plan
Geography Department
Tehatta Sadananda Mahavidyalaya
B.A /B.Sc. 1st Semester Honours (CBCS)
Subject: Geography
Course Code: CC-1 Geotectonic & Geomorphology
Credit: 06 (IA-15, ESE-60)
Teachers: Dr. Alokanda Ghosh (UGC-Scale), Labani Bag (SACT)

LECTURE	TOPIC
LECTURE-1	Earth's Tectonic and Structural Evolution
LECTURE-2	Earth's Tectonic and Structural Evolution
LECTURE-3	Geological Time Scale
LECTURE-4	Geological Time Scale
LECTURE-5	Earth's Interior
LECTURE-6	Seismology
LECTURE-7	Theory of airy
LECTURE-8	Concept of Isostasy
LECTURE-9	Theories of Airy
LECTURE-10	Theories of Pratt
LECTURE-11	Plate Techtonics
LECTURE-12	Process and Classification
LECTURE-13	Hotspot and Resulting Landforms
LECTURE-14	Class test
LECTURE-15	Doubt clearing.
LECTURE-16	Degradational Process : Weathering (Physical)
LECTURE-17	Degradational Process : Weathering (Chemical)
LECTURE-18	Mass Wasting and Resultant Landforms
LECTURE-19	Concept of Landscape Evolution and Davisian Model

LECTURE-20	Model of Landscape Evolution: Penck
LECTURE-21	Model of Landscape Evolution : Hack
LECTURE-22	Concept of Slope Development in Respect to Wood
LECTURE-23	Development of River Network : Concept of Uniclinal Structure
LECTURE-24	Concept of Folded Structure
LECTURE-25	Rocks : Concept and Types
LECTURE-26	Mineralogical Composition of Igneous rocks
LECTURE-27	Landforms special reference to Granite and Basalt
LECTURE-28	Krast landforms: Surface
LECTURE-29	Krast landforms: sub- surface
LECTURE-30	Glacial Process and Landforms
LECTURE-31	Fluvio-glacial Processes and Landforms
LECTURE-32	Aeolian Process
LECTURE-33	Fluvioaeolian Processes and Landforms
LECTURE-34	Discuss previous year question
LECTURE-35	Class test
Tutorial Class	Doubt clearing.

References:

1. Singh, S. (2008). Fundamentals of Geomorphology. Pravalika Publications, Allahabad. ISBN. 9781138940659
2. Singh, S. (2017). Physical Geography. Pravalika Publications, Allahabad.
3. Christopherson, Robert W., (2011), Geosystems: An Introduction to Physical Geography, 8 Ed., Macmillan Publishing Company
4. Kale V. S. and Gupta A., 2001: Introduction to Geomorphology, Orient Longman, Hyderabad.
5. Knighton A. D., 1984: Fluvial Forms and Processes, Edward Arnold Publishers, London.
6. Selby, M.J., (2005), Earth's Changing Surface, Indian Edition, OUP

Lesson Plan
Geography Department
Tehatta Sadananda Mahavidyalaya
B.A /B.Sc. 1st Semester Honours (CBCS)
Subject: Geography
Course Code: CC-2 (Theory and Practical) Cartographic Techniques and Geological map study
Credit: 04 (IA-15, ESE-40)
Teachers: Dr. Alokanda Ghosh (UGC-Scale), Labani Bag (SACT)

LECTURE	TOPIC
LECTURE-1	Maps: Classification and Types. Components of a Map
LECTURE-2	Concept of Scales: Linear Scale
LECTURE-3	Construction of Scales: Plain/Linear Scale
LECTURE-4	Concept of Scales: Comparative
LECTURE-5	Construction of Scales: Comparative
LECTURE-6	Concept of Scales: Diagonal
LECTURE-7	Construction of Scales: Diagonal
LECTURE-8	Final Sheet Correction
LECTURE-9	Concept of Scales: Vernier Scale
LECTURE-10	Construction of Scales: Vernier Scale
LECTURE-11	Final Sheet Correction
LECTURE-12	Coordinate Systems: Polar and Rectangular. Concept of Geoid and Spheroid.
LECTURE-13	Map Projections: Classification, Properties and Uses. Concept and Significance of UTM Projection
LECTURE-14	Concept of Generating Globe, Grids: Angular and Linear Systems of Measurement
LECTURE-15	Construction of Projections: Polar Zenithal Stereographic
LECTURE-16	Construction of Projections: Simple Conic with two Standard Parallels

LECTURE-17	Final Sheet Correction
LECTURE-18	Construction of Projections: Bonne's
LECTURE-19	Construction of Projections: Mercator's
LECTURE-20	Final Sheet Correction
LECTURE-21	Survey of India Topographical Maps: Reference scheme of Old and Open series
LECTURE-22	Delineation of Drainage Basin from Survey of India Topographical Map.
LECTURE-23	Concept of Relief, Slope and Stream Order.
LECTURE-24	Construction and Interpretation of Relief Profiles (Superimposed, Projected and Composite)
LECTURE-25	Final Sheet Correction
LECTURE-26	Preparation of Relative Relief Map
LECTURE-27	Preparation of Slope map (Wentworth),
LECTURE-28	Final Sheet Correction
LECTURE-29	Preparation of Stream Ordering (Strahler) on a Drainage Basin.
LECTURE-30	Final Sheet Correction
LECTURE-31	Types of rocks and minerals. Characteristics of Granite, Basalt, Dolerite, Pegmatite, Gneiss, Shale, Sandstone, Slate, Marble, Quartzite
LECTURE-32	Types of rocks and minerals. Characteristics of Quartz, Feldspar, Mica, Limestone, Calcite, Bauxite, Magnetite, Hematite, Galena
LECTURE-33	Concept of Bedding Plane, Unconformity and Non-conformity, thickness of Bed, Dip, Throw, Hade, heave
LECTURE-34	Geological Map (Problems related to Horizontal structure); Drawing of Geological section and Interpretation of the Map.
LECTURE-35	Geological Map (Problems related to Uniclinal); Drawing of Geological section and Interpretation of the Map.
LECTURE-36	Final Sheet Correction
LECTURE-37	Geological Map (Problems related to Folded structure); Drawing of Geological section and Interpretation of the Map.

LECTURE-38	Geological Map (Problems related to Faulted structure); Drawing of Geological section and Interpretation of the Map.
LECTURE-39	Preparation of Project File, comprising one exercise each is to be submitted.
LECTURE-40	Final Sheet Correction
LECTURE-41	Class Test
TUTORIAL CLASS	Doubt Clearing
<p>References</p> <p>Anson R. and Ormelling F. J., 1994: International Cartographic Association: Basic Cartographic Vol. Pregmen Press. Gupta K.K. and Tyagi, V. C., 1992: Working with Map, Survey of India, DST, New Delhi.</p> <p>Mishra R.P. and Ramesh, A., 1989: Fundamentals of Cartography, Concept, New Delhi</p> <p>Monkhouse F. J. and Wilkinson H. R., 1973: Maps and Diagrams, Methuen, London. Robinson A. H., 2009: Elements of Cartography, John Wiley and Sons, New York</p> <p>Singh R. L. and Singh R. P. B., 1999: Elements of Practical Geography, Kalyani Publishers.</p> <p>Sarkar, A. 2015: Practical geography: A systematic approach. Orient Black Swan Private Ltd., New Delhi</p>	

Lesson Plan
Geography Department
Tehatta Sadananda Mahavidyalaya
B.A /B.Sc. 2nd Semester Honours (CBCS)
Subject: Geography
Course Code: CC3 (Theory) – Human Geography
Credit: 06 (IA-15, ESE-60)
Teachers: Dr. Alokanda Ghosh (UGC-Scale), Labani Bag (SACT)

LECTURE	TOPIC
LECTURE-1	Definition , Nature, Scope and Content
LECTURE-2	Recent Trends of Human Geography
LECTURE-3	Evolution of Humans
LECTURE-4	Concept of Race and Ethnicity
LECTURE-5	Major Racial Groups of the World
LECTURE-6	Concept of Space and Society and Characteristic
LECTURE-7	Cultural region basis on Language
LECTURE-8	Cultural region basis on Religion
LECTURE-9	Concept of Culture and Cultural Heart and Characteristic
LECTURE-10	Concept of Cultural Diffusion, Types and Classification
LECTURE-11	Concept, Types and Classification of Convergence
LECTURE-12	Cultural Realms of the World
LECTURE-13	Evolution of Human Societies : Haunting and Gathering
LECTURE-14	Evolution of Human Societies : Pastoral Nomadism

LECTURE-15	Evolution of Human Societies : Subsistence Farming
LECTURE-16	Evolution of Human Society: Industrial and Urban society
LECTURE-17	Human - Environment Relation in Arctic Region
LECTURE-18	Human- Environment relation in Hot desert Region
LECTURE-19	Population Growth and Causes and Distribution
LECTURE-20	Population Composition
LECTURE-21	Demographic Transitional Model
LECTURE-22	Population Resource Region
LECTURE-23	Human & Environment Relations Special Reference to Development - Environment Confic
LECTURE-24	Social Morphology
LECTURE-25	Rural house types in India
LECTURE-26	Types and Pattern of Rural Settlement
LECTURE-27	Functional Classification of Urban Settlement
LECTURE-28	Discuss Previous year Question
LECTURE-29	Class Test
TUTORIAL CLASS	Doubt Clearing

References

1. Bergman, E.F (1995); Human Geography-Culture, Connections and Landscape, Prentice Hall, New Jersey Chisholm. (1975): Human Geography, Penguin Books, Hermondsworth.
2. Daniel, P.A. and Hopkinson, M.F. (1989) The Geography of Settlement, Oliver & Boyd, London. Johnston R; Gregory D, Pratt G. et al. (2008) The Dictionary of Human Geography, Blackwell Publication. Jordan-Bychkov et al. (2006) The Human Mosaic: A Thematic Introduction to Cultural Geography. W. H. Freeman and Company, New York.
3. Pickering K. and Owen A. A. (1997): An Introduction to Global Environmental Issues, 2nd edition Rutledge, London. Raw, M. (1986): Understanding Human Geography: A Practical Approach, Bell and Hyman. London Rubenstein, J.M. (2002), The Cultural Landscape, 7th edition, Prentice Hall, Englewood Cliffs Smith
4. D M (1982): Human Geography: A Welfare Approach, Edward Arnold, London

Lesson Plan
Geography Department
Tehatta Sadananda Mahavidyalaya
B.A /B.Sc. 2nd Semester Honours (CBCS)

Subject: Geography

Course Code: CC4 (Theory and Practical) – Cartograms, Survey and Thematic Mapping

Credit: 04 (IA-15, ESE-40)

Teachers: Dr. Alokanda Ghosh (UGC-Scale), Labani Bag (SACT)

LECTURE	TOPIC
LECTURE-1	Concepts of Cartograms and Thematic Maps
LECTURE-2	Concept and utility of Isopleths and Choropleth,
LECTURE-3	Concept, utility, and interpretation of :Climograph, Hythergraph and Ergograph
LECTURE-4	Preparation and interpretation of demographic charts and diagrams (Age-Sex Pyramid)
LECTURE-5	Diagrammatic representation of data: Star diagram
LECTURE-6	Diagrammatic representation of data: Age-sex pyramid diagram
LECTURE-7	Diagrammatic representation of data: pie diagram
LECTURE-8	Final Sheet Correction
LECTURE-9	Final Sheet Correction
LECTURE-10	Final Sheet Correction
LECTURE-11	Final Sheet Correction
LECTURE-12	Representation of data on map by proportional circles
LECTURE-13	Final Sheet Correction
LECTURE-14	Representation of data on map by dots
LECTURE-15	Final Sheet Correction
LECTURE-16	Representation of data on map by spheres
LECTURE-17	Final Sheet Correction
LECTURE-18	Representation of data on map by isolines
LECTURE-19	Final Sheet Correction
LECTURE-20	Representation of data on map by Choropleth method.
LECTURE-21	Final Sheet Correction
LECTURE-22	Concepts of Bearing: magnetic and true, whole-circle and reduced
LECTURE-23	Basic concepts of surveying and survey equipments: Abneys Level, Clinometer

LECTURE-24	Basic concepts of surveying and survey equipments: Prismatic Compass, Dumpy Level, Transit Theodolite
LECTURE-25	Contouring by Dumpy Level
LECTURE-26	Contouring by Dumpy Level
LECTURE-27	Final Sheet Correction
LECTURE-28	Prismatic Compass
LECTURE-29	Prismatic Compass
LECTURE-30	Final Sheet Correction
LECTURE-31	Determination of Height of objects using Transit Theodolite (Accessible Base)
LECTURE-32	Determination of Height of objects using Transit Theodolite (Accessible Base)
LECTURE-33	Determination of Height of objects using Transit Theodolite (Inaccessible Bases)
LECTURE-34	Determination of Height of objects using Transit Theodolite (Inaccessible Bases)
LECTURE-35	Final Sheet Correction
LECTURE-36	Final Sheet Correction
LECTURE-37	Survey Practice
LECTURE-38	Survey Practice
LECTURE-39	Class Test
TUTORIAL CLASS	Doubt Clearing

References

1. Cuff J. D. and Mattson M. T., 1982: Thematic Maps: Their Design and Production, Methuen Young Books Dent B. D., Torguson J. S., and Holder T. W., 2008: Cartography: Thematic Map Design (6th Edition), Mcgraw-Hill Higher Education
2. Gupta K. K. and Tyagi V. C., 1992: Working with Maps, Survey of India, DST, New Delhi.
3. Kraak M.-J. and Ormeling F., 2003: Cartography: Visualization of Geo-Spatial Data, Prentice-Hall. Mishra R. P. and Ramesh A., 1989: Fundamentals of Cartography, Concept, New Delhi.
4. Singh R. L. and Singh R. P. B., 1999: Elements of Practical Geography, Kalyani Publishers.
5. Slocum T. A., McMaster R. B. and Kessler F. C., 2008: Thematic Cartography and Geovisualization (3rd Edition), Prentice Hall.
6. Tyner J. A., 2010: Principles of Map Design, The Guilford Press.
7. Sarkar, A. (2015) Practical geography: A systematic approach. Orient Black Swan PrivateLtd., New Delhi

Lesson Plan
Geography Department
Tehatta Sadananda Mahavidyalaya
B.A /B.Sc. 3rd Semester Honours (CBCS)
Subject: Geography
Course Code: CC5 (Theory) – CLIMATOLOGY
Credit: 06 (IA-15, ESE-60)
Teachers: Dr. Alokanda Ghosh (UGC-Scale), Labani Bag (SACT)

LECTURE	TOPIC
LECTURE-1	Concept of Nature of the Atmosphere
LECTURE-2	Composition of the Atmosphere
LECTURE-3	Layout of the Atmosphere
LECTURE-4	Concept of Insolation
LECTURE-5	Controlling Factor
LECTURE-6	Heat Budget of the Atmosphere
LECTURE-7	Horizontal Temperature Distribution
LECTURE-8	Vertical Temperature Distribution
LECTURE-9	Concept of Inversion Of Temperature
LECTURE-10	Types and Causes & Consequence
LECTURE-11	Concept of Greenhouse Gases, Causes and Effect
LECTURE-12	Importance of Ozone Layer
LECTURE-13	Condensation: Process And Forms
LECTURE-14	Bergeron Theory
LECTURE-15	Findeisen Theory

LECTURE-16	Collision And coalescence
LECTURE-17	Forms of precipitation
LECTURE-18	Airmass: Typology, Origin, Characteristics, Modification
LECTURE-19	Warm And Cold Fronts and Frontogenesis, Frontolysis
LECTURE-20	Stability And Instability of Weather
LECTURE-21	Barotropic Condition And Baroclinic Condition
LECTURE-22	Circulation In The Atmosphere: Planetary Wind
LECTURE-23	Circulation In The Atmosphere: Jet Stream
LECTURE-24	Circulation In The Atmosphere: Monsoon
LECTURE-25	Tropical Cyclone
LECTURE-26	Mid- Latitude Cyclones
LECTURE-27	Causes Of Climatic Change
LECTURE-28	Evidence Of Climatic Change
LECTURE-29	Climatic Classification After Koppen
LECTURE-31	Climatic Classification after Thornthwaite (1948)
LECTURE-32	Discuss Previous Year Question
LECTURE-33	Class test
TUTORIAL CLASS	Doubt clearing.

References

1. Barry R. G. and Chorley R. J., 2001: Synoptic and Dynamic Climatology, Routledge, UK. Barry R. G. and Chorley R. J., 1998: Atmosphere, Weather and Climate, Routledge, New York. Critchfield H. J., 1987: General Climatology, Prentice-Hall of India, New Delhi
2. Oliver J. E. and Hidore J. J., 2002: Climatology: An Atmospheric Science, Pearson Education, New Delhi. Trewartha G. T. and Horn L. H., 1980: An Introduction to Climate, McGraw

Lesson Plan
Geography Department
Tehatta Sadananda Mahavidyalaya
B.A /B.Sc. 3rd Semester Honours (CBCS)
Subject: Geography
Course Code: CC6 (Theory and Practical) - STATISTICAL METHODS IN
GEOGRAPHY Credit: 04 (IA-15, ESE-40)
Teachers: Dr. Alokanda Ghosh (UGC-Scale), Labani Bag (SACT)

LECTURE	TOPIC
LECTURE-1	Importance and significance of Statistics in Geography. Discrete and continuous data, population
LECTURE-2	Scales of measurement (nominal, ordinal, interval and ratio)
LECTURE-3	Samples and sources of data
LECTURE-4	Collection of data and formation of statistical tables
LECTURE-5	Sampling: Need, types, and significance and methods of random sampling
LECTURE-6	Distribution: frequency, cumulative frequency
LECTURE-7	Construction of data matrix with each row representing an aerial unit (districts / blocks / mouzas / towns) and corresponding columns of relevant attributes.
LECTURE-8	Final Sheet Correction
LECTURE-9	Theory of Central tendency: Mean, median, mode, partition values
LECTURE-10	Calculation of measures of central tendency (Mean)
LECTURE-11	Calculation of measures of central tendency (Mean)
LECTURE-12	Calculation of measures of central tendency (Median)
LECTURE-13	Calculation of measures of central tendency (Mode)

LECTURE-14	Final Sheet Correction
LECTURE-15	Measures of dispersion range, mean deviation, standard deviation, coefficient of variation (Theory)
LECTURE-16	Measures of dispersion, standard deviation (Practical)
LECTURE-17	Measures of dispersion, coefficient of variation (Practical)
LECTURE-18	Association and correlation: product moment correlation (Theory)
LECTURE-19	Rank correlation (Theory)
LECTURE-20	Association and correlation: product moment correlation (Practical)
LECTURE-21	Rank correlation (Practical)
LECTURE-22	Linear Regression
LECTURE-23	Linear Regression
LECTURE-24	Final Sheet Correction
LECTURE-25	Time series analysis
LECTURE-26	Time series analysis
LECTURE-27	Final Sheet Correction
LECTURE-28	Final Sheet Correction
LECTURE-29	Class test
TUTORIAL CLASS	Doubt Clearing
References	
<ol style="list-style-type: none"> 1. Berry B. J. L. and Marble D. F. (eds.): Spatial Analysis – A Reader in Geography. Ebdon D., 1977: Statistics in Geography: A Practical Approach. 2. Hammond P. and McCullagh P. S., 1978: Quantitative Techniques in Geography: An Introduction, Oxford University Press. 3. King L. S., 1969: Statistical Analysis in Geography, Prentice-Hall. Mahmood A., 1977: Statistical Methods in Geographical Studies, Concept. Pal S. K., 1998: Statistics for Geoscientists, Tata McGraw Hill, New Delhi. 4. Sarkar, A. (2013) Quantitative geography: techniques and presentations. Orient Black Swan Private Ltd., New Delhi 	



Lesson Plan
Geography Department
Tehatta Sadananda Mahavidyalaya
B.A /B.Sc. 3rd Semester Honours (CBCS)
Subject: Geography
Course Code: CC7 (Theory) - Geography of India Credit: 06 (IA-15, ESE-60)
Teachers: Labani Bag (SACT)

LECTURE	TOPIC
LECTURE-1	Tectonic and Stratigraphic Provinces
LECTURE-2	Physiographic Divisions
LECTURE-3	Drainage System
LECTURE-4	Climate
LECTURE-5	Characteristic & Classification
LECTURE-6	Soil
LECTURE-7	Characteristic & Classification
LECTURE-8	Vegetation
LECTURE-9	Characteristic & Classification
LECTURE-10	Population Distribution
LECTURE-11	Population Growth
LECTURE-12	Population Structure
LECTURE-13	Population Policy
LECTURE-14	Distribution of Population : Race

LECTURE-15	Distribution of Population : Caste
LECTURE-16	Distribution of Population : Religion
LECTURE-17	Distribution of Population : Language
LECTURE-18	Distribution of Population : Tribes
LECTURE-19	Agriculture Region
LECTURE-20	Green Revolution
LECTURE-21	Consequence
LECTURE-22	Distribution & Utilisation of Iron Ore
LECTURE-23	Distribution & Utilisation of Coal
LECTURE-24	Distribution & Utilisation of Petroleum
LECTURE-25	Industrial Development Since Independence
LECTURE-26	Regionalisation of India : Spate
LECTURE-27	Regionalisation of India : Bhatt
LECTURE-28	Physiographic Division of West Bengal
LECTURE-29	Forest Resource
LECTURE-21	Water Resource of West Bengal
LECTURE-22	Population Growth & distribution of West Bengal
LECTURE-23	Human Development
LECTURE-24	Resource : Mining
LECTURE-25	Resource : Agriculture
LECTURE-26	Resource : Industries
LECTURE-27	Regional Development : Darjeeling Hills
LECTURE-28	Regional Development : Sundarban

LECTURE-29	Discuss Previous Year Questions
LECTURE-29	Class Test
TUTORIAL CLASS	Doubt Clearing

References

1. Johnson, B. L. C., ed. 2001. Geographical Dictionary of India. Vision Books, New Delhi.
2. Mandal R. B. (ed.), 1990: Patterns of Regional Geography – An International Perspective. Vol. 3 – Indian Perspective.
3. Sdyasuk Galina and P. Sengupta (1967): Economic Regionalisation of India, Census of India Sharma, T. C. 2003: India - Economic and Commercial Geography. Vikas Publ., New Delhi. Singh R. L., 1971: India: A Regional Geography, National Geographical Society of India.
4. Singh, Jagdish 2003: India - A Comprehensive & Systematic Geography, Gyanodaya Prakashan, Gorakhpur. Spate O. H. K. and Learmonth A. T. A., 1967: India and Pakistan: A General and Regional Geography, Methuen. Tirtha, Ranjit 2002: Geography of India, Rawat Publs., Jaipur & New Delhi
5. Pathak, C. R. 2003: Spatial Structure and Processes of Development in India. Regional Science Assoc., Kolkata. Tiwari, R.C. (2007) Geography of India. Prayag Pustak Bhawan, Allahabad
6. Sharma, T.C. (2013) Economic Geography of India. Rawat Publication, Jaipur
7. Indian Geography by Anish Chatterjee
8. Indian Geography & west Bengal by Ajit Kumar Sil
9. Indian Geography by Alok Pal

Lesson Plan
Geography Department
Tehatta Sadananda Mahavidyalaya
B.A /B.Sc. 4th Semester Honours (CBCS)
Subject: Geography
Course Code: CC8 (Theory) - Geography of India Credit: 06 (IA-15, ESE-60)
Teachers: Labani Bag (SACT)

LECTURE	TOPIC
LECTURE-1	Concept & characteristics of Region
LECTURE-2	Classification of Region
LECTURE-3	Types of Planning
LECTURE-4	Principal & Techniques
LECTURE-5	Need for Regional Planning
LECTURE-6	Multilevel Planning
LECTURE-7	Metropolitan Areas
LECTURE-8	Metropolitan Region
LECTURE-9	Concept of Metropolis
LECTURE-10	Concept of Regional Development
LECTURE-11	Growth versus Development
LECTURE-12	Growth pole Theory (Perrous)
LECTURE-13	Core Periphery Model (Hirschman)
LECTURE-14	Growth foci Model (R.P.Mishra)
LECTURE-15	Regional Inequality,

LECTURE-16	Regional Disparity
LECTURE-17	Significant of Human Development
LECTURE-18	Indicators & Measurements
LECTURE-19	Regional Imbalances
LECTURE-20	Strategies of Regional Development
LECTURE-21	Concept NITI Aayog
LECTURE-22	Function
LECTURE-23	Discuss previous year question
LECTURE-24	Class test
TUTORIAL CLASS	Doubt clearing

References :

1. Kapila U, Indian Economy since Independence, 17th edition, 2016-2017
2. Kulshetra, S.K (2012): Urban and Regional Planning in India: A hand book for Professional Practitioners , Sage Publication, New Delhi
3. Kundu, A. (1992): Urban Development Urban Research in India, Khanna Publ. New Delhi
4. Misra , R.P, Sundaram K.V, PrakashRao , VLS (1974): Regional Development Planning in India , Vikas Publication , New Delhi
5. Misra, R.P (1992): Regional Planning: Concepts, techniques, Policies and Case Studies, Concept, New Delhi
6. Region and Regional Development by Dr. Sanjib Majumder
7. Region and Regional Development and planning by Amalendu Shah & Sumita Gyan.

Lesson Plan
Geography Department
Tehatta Sadananda Mahavidyalaya
B.A /B.Sc. 4th Semester Honours (CBCS)
Subject: Geography
Course Code: CC9 (Theory) – ECONOMIC GEOGRAPHY
Credit: 06 (IA-15, ESE-60)
Teachers: Dr. Alokanda Ghosh (UGC-Scale), Labani Bag (SACT)

LECTURE	TOPIC
LECTURE-1	Concept a meaning of economic geography
LECTURE-2	Approaches of Economic Geography
LECTURE-3	Concept of Goods, Concept of Services
LECTURE-4	Concept of Production
LECTURE-5	Concept of Consumption
LECTURE-6	Factors of Locational Economic Activity
LECTURE-7	Agglomeration
LECTURE-8	Factors of Transport Cost
LECTURE-9	Concept and Classification of Economic Activity
LECTURE-10	Location Theory of Von Thünen
LECTURE-11	Location Theory of Alfred Weber
LECTURE-12	Primary Activities: Subsistence and Commercial Agriculture
LECTURE-13	Primary Activities : Forestry
LECTURE-14	Primary Activities : Fishing

LECTURE-15	Secondary Activities: Manufacturing (Iron and Steel in India)
LECTURE-16	Secondary Activities: Manufacturing (Iron and Steel in Japan)
LECTURE-17	Secondary Activities: Manufacturing (Petrochemical in India)
LECTURE-18	Secondary Activities: Manufacturing (Petrochemical in USA)
LECTURE-19	Tertiary Activities: Types of Trade and Services
LECTURE-20	Agricultural Systems : Tea Plantation in India
LECTURE-21	Agricultural Systems : Mixed Farming in Europe
LECTURE-22	Highways: Roles in Economic Development of India since 1990s
LECTURE-23	International Trade Blocs: WTO and OPEC
LECTURE-24	International Trade Blocs: OPEC
LECTURE-25	Discuss Previous Question
LECTURE-26	Discuss Previous Question
LECTURE-27	Class Test
TUTORIAL CLASS	Doubt Clearing

References :

1. Alexander J. W., 1963: Economic Geography, Prentice-Hall Inc., Englewood Cliffs, New Jersey
2. Coe N. M., Kelly P. F. and Yeung H. W., 2007: Economic Geography: A Contemporary Introduction, Wiley-Blackwell
3. Hodder B. W. and Lee Roger, 1974: Economic Geography, Taylor and Francis Combes P., Mayer T. and Thisse J. F., 2008: Economic Geography: The Integration of Regions and Nations, Princeton University Press
4. Wheeler J. O., 1998: Economic Geography, Wiley

Lesson Plan
Geography Department
Tehatta Sadananda Mahavidyalaya
B.A /B.Sc. 4th Semester Honours (CBCS)
Subject: Geography

Course Code: CC10 (Theory and Practical) - ENVIRONMENTAL GEOGRAPHY Credit:
04 (IA-15, ESE-40)

Teachers: Dr. Alokanda Ghosh (UGC-Scale)

LECTURE	TOPIC
LECTURE-1	Geographer's Approach to Environmental Studies
LECTURE-2	Changes in Perception of Environment in different stages of Human Civilization
LECTURE-3	Concept of Ecosystem
LECTURE-4	Structure of Ecosystem
LECTURE-5	Function of Ecosystem
LECTURE-6	Class Test
LECTURE-7	Environmental Degradation
LECTURE-8	Water Pollution
LECTURE-9	Air Pollution
LECTURE-10	Environmental Issues related to Agriculture
LECTURE-11	Urban Environmental Issues related to Waste Management
LECTURE-12	Class Test
LECTURE-13	Concept of Bio-diversity

LECTURE-14	Environmental Issues related to Bio-diversity
LECTURE-15	National Environmental Programs on Forest
LECTURE-16	Global Environmental Programs on Forest
LECTURE-17	National Environmental Policies on Forest
LECTURE-18	Global Environmental Policies on Forest
LECTURE-19	National Environmental Programs on Wetland
LECTURE-20	Global Environmental Programs on Wetland
LECTURE-21	National Environmental Policies on Wetland
LECTURE-22	Global Environmental Policies on Wetland
LECTURE-23	Discuss Previous Years Question
LECTURE-24	Class Test
LECTURE-25	Doubt Clearing
LECTURE-26	Preparation of questionnaire for perception survey on environmental problems
LECTURE-27	Environmental Impact Assessment: Leopold Matrix
LECTURE-28	Quality assessment of soil using field kit: pH and NPK
LECTURE-29	Quality assessment of soil using field kit: NPK
LECTURE-30	Interpretation of air quality using CPCB / WBPCB data
LECTURE-31	Interpretation of air quality using CPCB / WBPCB data
TUTORIAL CLASS	Doubt Clearing

References

1. Chandna R. C., 2002. Environmental Geography. Kalyani, Ludhiana.
2. Cunningham W. P. and Cunningham M. A., 2004. Principals of environmental science: Inquiry and Applications. Tata Macgraw Hill, New Delhi.
3. Goudie A. 2001. The Nature of the Environment. Blackwell, Oxford.
4. Kormondy, Edward J. 2012. Concepts of Ecology. PHI Learning Pvt. Ltd., New Delhi.
5. Miller G. T. 2004. Environmental Science: Working with the Earth, Thomson, Brooks Cole, Singapore.
6. MoEF, 2006. National Environmental Policy-2006. Ministry of Environment and
and
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8. Odum, E. P. et al. 2005. Fundamentals of Ecology. Ceneage Learning, India.
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Lesson Plan
Geography Department
Tehatta Sadananda Mahavidyalaya
B.A /B.Sc. 5th Semester Honours (CBCS)
Subject: Geography
Course Code: CC11 (Theory+Practical) - RESEARCH METHODOLOGY AND FIELD WORK
Credit: 04+02 (IA-15, ESE-40+20)
Teachers: Dr. Alokanda Ghosh (UGC-Scale)

LECTURE	TOPIC
LECTURE-1	Research in Geography: Meaning, types and significance
LECTURE-2	Significance of Literature review in research
LECTURE-3	Literature Rreview and Literature Survey
LECTURE-4	Defining Research Problem and Research Questions
LECTURE-5	Objectives
LECTURE-6	Hypothesis and testing method
LECTURE-7	Research Materials
LECTURE-8	Research Methods
LECTURE-9	Techniques of Writing Scientific Reports
LECTURE-10	References (APA style)
LECTURE-11	Bibliography
LECTURE-12	Concept of Abstract and Keywords
LECTURE-13	Deductive and Inductive Research
LECTURE-14	Sampling Methods and Techniques , Sampling Error
LECTURE-15	Research Ethics and Plagiarism

LECTURE-16	Preparation of Questionnaire (open, closed, structured, non-structured)
LECTURE-17	Collection of Data: Secondary
LECTURE-18	Collection of Data: Primary
LECTURE-19	Field techniques and tools: Landscape survey using transects and quadrants
LECTURE-20	Methods of Soil Sample Collection
LECTURE-21	Field Survey
LECTURE-22	Field Survey
LECTURE-23	Field Survey
LECTURE-24	Field Survey
LECTURE-25	Field Survey
LECTURE-26	Data Entry
LECTURE-27	Data Entry
LECTURE-28	Data Entry
LECTURE-29	Data Entry
LECTURE-30	Data Analysis
LECTURE-31	Data Analysis
LECTURE-32	Data Analysis
LECTURE-33	Preparation of Maps and Diagram
LECTURE-34	Preparation of Maps and Diagram
LECTURE-35	Preparation of Maps and Diagram
LECTURE-36	Preparation of Maps and Diagram

LECTURE-37	Data Interpretation
LECTURE-38	Data Interpretation
LECTURE-39	Data Interpretation
LECTURE-40	Data Interpretation
LECTURE-41	Photoplate Arrangement
LECTURE-42	Report Writing
LECTURE-43	Report Writing
LECTURE-44	Report Writing
LECTURE-45	Report Writing
LECTURE-46	Report Writing
TUTORIAL CLASS	Doubt Clearing

References

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3. Monkhouse, F.J. and Williamson, R.H. (1963): Maps and Diagrams: Their Compilation and Construction, Methuen, London
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Lesson Plan
Geography Department
Tehatta Sadananda Mahavidyalaya
B.A /B.Sc. 5th Semester Honours (CBCS)
Subject: Geography
Course Code: CC12 (Theory + Practical) REMOTE SENSING AND GIS
Credit: 04+02 (IA-15, ESE-40+20)
Teachers: Dr. Alokanda Ghosh (UGC-Scale), Labani Bag (SACT)

LECTURE	TOPIC
LECTURE-1	Definition, Concepts and Principles of Remote Sensing (RS)
LECTURE-2	Aerial photo and Types of Air Photo
LECTURE-3	Remote sensing satellites, sensors and platforms
LECTURE-4	EMR Interaction with Atmosphere and Earth Surface
LECTURE-5	Sensor resolutions and applications with reference to IRS
LECTURE-6	Principles of False Colour Composites (FCC) from IRS LISS-III
LECTURE-7	Types of RS data and Landsat Images(ETM+) data
LECTURE-8	Image Processing, Pre-processing; Enhancement; Classification
LECTURE-9	Principles of image interpretation for Forest, Water and Soil
LECTURE-10	Shape file creation, Geodatabase creation, Georeferencing (Practical)
LECTURE-11	Digitization of features and creating layers (Practical)
LECTURE-12	How to download free Open Series Toposheets from SOI sites (Practical)
LECTURE-13	Preparation of FCC using IRS LISS-III and/or Landsat (ETM+) data
LECTURE-14	Preparation of LULC Map by Supervised Image Classification (Maximum Likelihood) using IRS LISS-III or Landsat (ETM+) data
LECTURE-15	Preparation of LULC Map by Supervised Image Classification

	(Maximum Likelihood) using IRS LISS-III or Landsat (ETM+) data
LECTURE-16	Preparation of LULC Map by Supervised Image Classification (Maximum Likelihood) using IRS LISS-III or Landsat (ETM+) data
LECTURE-17	Digitisation of Point, Line and Polygon Features and Preparation of Thematic Map (using choropleth method)
LECTURE-18	Digitisation of Point, Line and Polygon Features and Preparation of Thematic Map (using bar method)
LECTURE-19	Digitisation of Point, Line and Polygon Features and Preparation of Thematic Map (using pie method)
LECTURE-20	Definition and Components of Geographical Information System (GIS) and raster and vector data structures
LECTURE-21	Principles of preparing attribute tables and overlay analysis
LECTURE-22	Principles of preparing attribute tables and overlay analysis (P)
LECTURE-23	(GIS) and raster and vector data structures (P)
LECTURE-24	Principles of GNSS positioning - Uses and Waypoint Collection Methods (T)
LECTURE-25	Principles of GNSS positioning - Uses and Waypoint Collection Methods (P) using handheld GPS (Germin)
LECTURE-26	Applications of Geographical Information System in Flood Management
LECTURE-27	Applications of Geographical Information System in Urban Sprawl
LECTURE-28	Practice Class
LECTURE-29	Practice Class
LECTURE-30	Class Test
LECTURE-31	Tutorial
LECTURE-32	Practice Class
LECTURE-33	Practice Class
LECTURE-34	Practice Class
LECTURE-35	Class Test

TUTORIAL CLASS	Doubt Clearing
<p>References</p> <ol style="list-style-type: none">1. Campbell J. B., 2007: Introduction to Remote Sensing, Guildford Press.2. Jensen J. R., 2004: Introductory Digital Image Processing: A Remote Sensing Perspective, Prentice Hall.3. Joseph, G. 2005: Fundamentals of Remote Sensing, United Press India.4. Lillesand T. M., Kiefer R. W. and Chipman J. W., 2004: Remote Sensing and Image Interpretation, Wiley. (Wiley Student Edition).5. Nag P. and Kudra, M., 1998: Digital Remote Sensing, Concept, New Delhi.6. Rees W. G., 2001: Physical Principles of Remote Sensing, Cambridge University Press.7. Singh R. B. and Murai S., 1998: Space-informatics for Sustainable Development, Oxford and IBH Pub.8. Wolf P. R. and Dewitt B. A., 2000: Elements of Photogrammetry: With Applications in GIS, McGraw- Hill.9. Sarkar, A. (2015) Practical geography: A systematic approach. Orient Black Swan Private Ltd., New Delhi	

TSM GEOGRAPHY

Lesson Plan

Geography Department

Tehatta Sadananda Mahavidyalaya

B.A /B.Sc 5th Semester Honours (CBCS)

Subject: Geography

DSE-1 (CULTURAL AND SETTLEMENT GEOGRAPHY)

Credit: 6 (IA-15, ESE-60)

Teachers: Labani Bag (SACT)

LECTURE	TOPIC
LECTURE-1	Definition, Scope and Content of Cultural Geography
LECTURE-2	Development of Cultural Geography
LECTURE-3	Concept of Cultural Hearth, Realm; Cultural Landscape
LECTURE-4	Cultural Innovation and Diffusion
LECTURE-5	Major World Religions
LECTURE-6	Cultural Segregation, Cultural Diversity, and Acculturation
LECTURE-7	Major Races of the World: Distribution and Characteristics
LECTURE-8	Class Test
LECTURE-9	Doubt Clearing
LECTURE-10	Scope and Content of Settlement Geography
LECTURE-11	Definition and Characteristics of Rural Settlement
LECTURE-12	Rural Settlements: Site and Situation
LECTURE-13	Urban Settlements: Census Definition, Urban Outgrowth
LECTURE-14	Urban Agglomeration
LECTURE-15	Concept of Urban Morphology and Characteristic
LECTURE-16	Classical Models of Burgess

LECTURE-17	Classical Models of Hoyt
LECTURE-18	Classical Models of Harris
LECTURE-19	Classical Models of Ullman
LECTURE-20	Functional Classification of Cities: Harris
LECTURE-21	Functional Classification of Cities: Nelson
LECTURE-22	Discuss Previous Year Questions
LECTURE-23	Class Test
TUTORIAL CLASS	Doubt Clearing

References

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Daniel, P.A. and Hopkinson, M.F. (1989) The Geography of Settlement, Oliver & Boyd, London.

Johnston R; Gregory D, Pratt G. et al. (2008) The Dictionary of Human Geography, Blackwell Publication.

Jordan-Bychkov et al. (2006) The Human Mosaic: A Thematic Introduction to Cultural Geography. W. H. Freeman and Company, New York.

Pearce D. (1995): Tourism Today: A Geographical Analysis, 2nd edition, Longman Scientific & Technical, London

Pickering K. and Owen A. A. (1997): An Introduction to Global Environmental Issues, 2nd edition Rutledge, London.

Rubenstein, J.M. (2002), The Cultural Landscape, 7th edition, Prentice Hall, Englewood Cliffs

Smith D M (1982): Human Geography: A Welfare Approach, Edward Arnold, London

Lesson Plan
Geography Department
Tehatta Sadananda Mahavidyalaya
B.A /B.Sc. 5th Semester Honours (CBCS)
Subject: Geography
DSE-2 (POPULATION GEOGRAPHY)
Credit: 6 (IA-15, ESE-60)
Teachers: Labani Bag (SACT)

LECTURE	TOPIC
LECTURE-1	Development of Population Geography; Relation between Population Geography and Demography
LECTURE-2	Determinants of Population Dynamics; Concept of Optimum Population
LECTURE-3	Theories of population growth: Malthusian Theory
LECTURE-4	Theories of population growth: Marxian Approach
LECTURE-5	Demographic Transition Model
LECTURE-6	Distribution, Density and Growth of Population in India since 1951
LECTURE-7	Population Composition and Characteristics: Age-Sex; Female-Male Ratio
LECTURE-8	Measures of Fertility and Mortality
LECTURE-9	Population Composition of India: Rural and Urban, Occupational Structure as per Census of India
LECTURE-10	Migration: Theories
LECTURE-11	Causes and Types
LECTURE-12	Concept of Human Development Index

LECTURE-13	Population and development: population-resource regions
LECTURE-14	Population policies in Selected Countries: Sweden
LECTURE-15	Population policies in Selected Countries: China
LECTURE-16	Contemporary Issues in Population: Health
LECTURE-17	Contemporary Issues in Population: Unemployment
LECTURE-18	Discuss Previous Years Question
LECTURE-19	Class Test
TUTORIAL CLASS	Doubt Clearing

References

1. Bergman, E.F (1995): Human Geography-Culture, Connections and Landscape, Prentice Hall, New Jersey Chisholm. (1975): Human Geography, Penguin Books, Hermondsworth.
2. Daniel, P.A. and Hopkinson, M.F. (1989) The Geography of Settlement, Oliver & Boyd, London. Johnston R; Gregory D, Pratt G, et al. (2008) The Dictionary of Human Geography, Blackwell Publication. Jordan-Bychkov et al. (2006) The Human Mosaic: A Thematic Introduction to Cultural Geography. W. H. Freeman and Company, New York.
3. Pickering K. and Owen A. A. (1997): An Introduction to Global Environmental Issues, 2nd edition Rutledge, London. Raw, M. (1986): Understanding Human Geography: A Practical Approach, Bell and Hyman, London Rubenstein, J.M. (2002), The Cultural Landscape, 7th edition, Prentice Hall, Englewood Cliffs Smith
4. D M (1982): Human Geography: A Welfare Approach, Edward Arnold, London

Lesson Plan
Geography Department
Tehatta Sadananda Mahavidyalaya
B.A /B.Sc. 6th Semester Honours (CBCS)
Subject: Geography

Course Code: CC-13 (EVOLUTION OF GEOGRAPHICAL THOUGHT)

Credit: 6 (IA-15, ESE-60)

Teachers: Labani Bag (SACT)

LECTURE	TOPIC
LECTURE-1	Definition, Scope and Content of Geography; Geography as a Spatial Science
LECTURE-2	Geography in Ancient Period: Greek
LECTURE-3	Geography in Ancient Period: Roman
LECTURE-4	Development of Geography in Medieval period: Arabian
LECTURE-5	Development of Mapping and Knowledge about the World Regional Geography in the Age of Explorations
LECTURE-6	Classical Geography in 19 th Century: Humboldt
LECTURE-7	Classical Geography in 19 th Century: Ritter
LECTURE-8	Quantitative Revolution and its Critique
LECTURE-9	German School of Thought
LECTURE-10	French School of Thought
LECTURE-11	American School of Thought
LECTURE-12	Indian Contribution to Geography
LECTURE-13	Concept of Determinism

LECTURE-14	Concept of and Possibilism
LECTURE-15	Concept of Neo-Determinism
LECTURE-16	Approaches to the study of Geography: Systematic
LECTURE-17	Approaches to the study of Geography: Regional
LECTURE-18	Discuss Previous Year Questions
LECTURE-19	Class Test
TUTORIAL CLASS	Doubt Clearing

References

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Dunbar. G.S. (eds) 1991, Modern Geography: An Encyclopaedic Survey. St. James Press. Chicago: Gregory D. and Walford. R. (eds) 1988, Horizons in Human Geography, Macmillan London.

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Lesson Plan
Geography Department
Tehatta Sadananda Mahavidyalaya
B.A /B.Sc. 6th Semester Honours (CBCS)
Subject: Geography
Course Code: CC14 (Theory + Practical) DISASTER MANAGEMENT
Credit: 04+02 (IA-15, ESE-40+20)
Teachers: Dr. Alokanda Ghosh (UGC-Scale)

LECTURE	TOPIC
LECTURE-1	Classification of hazards and disasters
LECTURE-2	Approaches to hazard study: Risk perception and vulnerability assessment. Hazard paradigms
LECTURE-3	Approaches to hazard study: Hazard paradigms
LECTURE-4	Responses to hazards: Preparedness, trauma and aftermath.
LECTURE-5	Resilience and capacity building
LECTURE-6	Hazards mapping: Data and techniques
LECTURE-7	Earthquake: Factors, vulnerability, consequences and management
LECTURE-8	Earthquake: Factors, vulnerability, consequences and management
LECTURE-9	Landslide: Factors, vulnerability, consequences and management
LECTURE-10	Landslide: Factors, vulnerability, consequences and management
LECTURE-11	Cyclone: Factors, vulnerability, consequences and management
LECTURE-12	Cyclone: Factors, vulnerability, consequences and management
LECTURE-13	Fire: Factors, vulnerability, consequences and management
LECTURE-14	Fire: Factors, vulnerability, consequences and management
LECTURE-15	Class Test

LECTURE-16	Class Test
LECTURE-17	Project Report on Cyclone
LECTURE-18	Project Report on Cyclone
LECTURE-23	Project Report on Cyclone
LECTURE-24	Project Report on Cyclone
LECTURE-25	Project Report on Cyclone
LECTURE-26	Project Report on Cyclone
LECTURE-27	Project Report on Cyclone
LECTURE-28	Project Report on Cyclone
TUTORIAL CLASS	Doubt Clearing

References

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- Kapur, A. (2010) Vulnerable India: A Geographical Study of Disasters, Sage Publication, New Delhi.
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Lesson Plan

Geography Department

Tehatta Sadananda Mahavidyalaya

B.A /B.Sc. 6th Semester Honours (CBCS)

Subject: Geography

DSE-4 (SOIL AND BIO-GEOGRAPHY)

CREDIT- 6 (IA-15, ESE-60)

Teachers: Dr. Alokanda Ghosh (UGC- Scale)

LECTURE	TOPIC
LECTURE-1	Soil: Definition, Factors of Formation
LECTURE-2	Development and Characteristics of an ideal Soil Profile
LECTURE-3	Physical and Chemical Properties of Soil with special reference to Texture
LECTURE-4	Physical and Chemical Properties of Soil with special reference to Structure
LECTURE-5	Physical and Chemical Properties of Soil with special reference to Organic Carbon
LECTURE-6	Physical and Chemical Properties of Soil with special reference to pH
LECTURE-7	Concept of Zonal, Azonal and Intrazonal Soil
LECTURE-8	Formation and Profile Characteristics of Laterite and Podsol
LECTURE-9	Formation and Profile Characteristics of Podsol
LECTURE-10	Classification of Soil : Russian and Indian (ICAR)
LECTURE-11	Soil Degradation and Management
LECTURE-12	Definition and Scope of Bio-geography, Meaning of Biosphere, Ecology, Ecosystem, Environment

LECTURE-13	Communities, Habitats, Niche, Ecotone and Biotopes
LECTURE-14	Biosphere and Energy: Laws of Energy Exchange
LECTURE-15	Biosphere and Energy: Food Chain, Food Web and Energy Flow
LECTURE-16	Bio-Geo Chemical Cycle: Carbon
LECTURE-17	Bio-Geo Chemical Cycle: Nitrogen
LECTURE-18	Factors of Plant Growth: Light, Heat, Moisture
LECTURE-19	Factors of Plant Growth: Wind, Soil and Topography
LECTURE-20	Biomes – Concept and Classification; Tropical Rainforest
LECTURE-21	Biomes – Concept and Classification; Temperate Grassland
LECTURE-22	Threat to Biodiversity- Causes, Consequences and Conservation
LECTURE-23	Discuss Previous Year Question
LECTURE-24	Cass Test
TUTORIAL CLASS	Doubt Clearing

References

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Biswas, T.D. and Mukherjee, S.K. 1987, Text book of Soil Science. Tata-McGraw-Hill.

Brady. N.C. and Weil. R.R. 1996, The Nature and Properties of Soil. 11th edition. Longman. London.

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