

## SYLLABUS & PROGRAMME STRUCTURE OF FOUR YEARS UNDERGRADUATE PROGRAMME

## **GEOGRAPHY**

( Minor )

Semester: V & VI

(Under National Education Policy - 2020)

(Effective from the Academic Session 2023-2024)

MAHARAJA BIR BIKRAM UNIVERSITY AGARTALA, TRIPURA: 799004

## 3<sup>rd</sup> Year (Degree Course) Semester-V Environmental Geography (Theoretical)

Paper-GE-501M

FullMarks-60(Credit-3)

(Internal Assessment-24; End Sem. Exam.-36)

### Unit-1:Introduction to Environmental Geography

Concept, development, nature and scope of Environmental Geography, Recent Dimensions of Environmental studies in Geography; Major physical and cultural elements of environment; Functioning of environmental systems – role of biotic and abiotic elements.

### Unit-2: Ecosystem Approach in Environmental Studies:

Ecosystem Structure and function, terrestrial and aquatic ecosystems; Principle of ecology; human ecological adaptation; influence of man on ecology and environment; bio-geo-chemical cycles. Energy flow in an ecosystem; food chain, food web and Ecological pyramids.

### Unit-3: Environmental Degradation and Hazards:

Water. Air, Noise and Solid waste problems in urban-industrial Environment, Water and soil pollution in rural landscape (with reference to India), Major pollutants: types, sources and effects. Global issues- Climatic Hazards and Management, Human response to Flood, Drought, Landslide, Earthquake and Cyclone, Forest Fires.

## Unit-4: Conservation and management of environment:

Environmental Perception, Environment Conservation and challenges in developing countries, Environmental Movements in India: *Bisnoi, Chipko*, Silent valley and Narmada. Environmental issues, policies and efforts in India, Concept of sustainable development.

- 1. Singh, S. (2001): Environmental Geography, Prayag Pustak Bhawan, Allahabad.
- 2. Gautam, A. (2009): Environmental Geography, Sharda Pustak Bhawan, Allahabad.
- 3. Dash, M.C. (2001):Fundamental of Ecology, 2<sup>nd</sup> edition, Tata Mc Graw Hill, New Delhi
- 4. ChapmanJ.L.andReiz, M.J. (1993): Ecology-Principle and Applications, Cambridge University Press.
- 5. Hagget, R.J. (1995): Geoecology: An Evolutionary Approach, Routledge, London.
- 6. Agarwal, D.P. (1992): Man and Environment in India through Ages, Books & Books, New Delhi.
- 7. Arthur N. Strahler and Alan H. Strahler (1973 1st Ed): "Environmental Geoscience Interaction between natural systems and man", Wiley International Ed.
- 8. Balakrishnan, M., 1998: Environmental Problems and Prospects in India, Oxford & IBH Pub., New Delhi.
- 9. Barrow, C. J. (2003): Environmental Change and Human Development. Arnold Publication.
- 10. Blowers, Andrews, (1993): "Planning for a sustainable Environment," Earthscan Publication, London.
- 11. Botkin, D.B., and Keller, E.A. (2013): Environmental Science, Wiley, New Delhi
- 12. Gole, P., (2001): Nature Conservation and Sustainable Development in India, Rawat Pub., Jaipur
- 13. Goudie, A. (1986): The Human Impact on the Natural Environment, 2nd edition, Blackwell Pub. Co., London
- 14. Lohani, B. N. (1997). Environmental impact assessment for developing countries in Asia (Vol 1). Manila: ADB.
- 15. Smith, K. (2001): Environmental Hazards: Assessing Risk and Reducing Disaster, Routledge

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- 3. Dash, M.C. (2001):Fundamental of Ecology, 2<sup>nd</sup> edition, Tata Mc Graw Hill, New Delhi
- 4. ChapmanJ.L.andReiz,M.J.(1993):Ecology-Principle and Applications, Cambridge University Press.
- 5. Hagget, R.J. (1995): Geoecology: An Evolutionary Approach, Routledge, London.
- 6. Agarwal, D.P. (1992): Man and Environment in India through Ages, Books & Books, New Delhi.
- 7. Arthur N. Strahler and Alan H. Strahler (1973 1st Ed): "Environmental Geoscience Interaction between natural systems and man", Wiley International Ed.
- 8. Balakrishnan, M., 1998: Environmental Problems and Prospects in India, Oxford & IBH Pub., New Delhi.
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- 12. Gole, P., (2001): Nature Conservation and Sustainable Development in India, Rawat Pub., Jaipur 13. Goudie, A. (1986): The Human Impact on the Natural Environment, 2nd edition, Blackwell Pub. Co., London
- 14. Lohani, B. N. (1997). Environmental impact assessment for developing countries in Asia (Vol 1). Manila:
- 15. Smith, K. (2001): Environmental Hazards: Assessing Risk and Reducing Disaster, Routledge

## 3<sup>rd</sup> Year (Degree Course) Semester-V (Practical)

Paper-GE-501M (Practical)

Full Marks-40(Credit-1)

(Internal Assessment-16; End Sem. Exam.-24)

Sl. No.	Practical	Marks
1,	Instrument Survey Dumpy level Prismatic compass Theodolite	16
2.	Laboratory Notebook and Viva-voce	5+3
TOTAL		24

- 1. Mitra, K., Ghosh K. and Das M. (2006): B.A. General Practical Geography, Kalyani Publishers, Kolkata.
- 2. Sarkar, A. (2015): Practical Geography: A systematic approach, Orient Black Swan Private Ltd., New Delhi.
- 3. Saha, P. &Basu, P.(2015):AdvancedPracticalGeography–ALaboratoryManual,BooksandAllied (P) Ltd., Kolkata.
- 4. Singh, R.L.&Singh, RanaP.B. (2003):Elements of Practical Geography, Kalyani Publishers, New Delhi.
- 5. Saikia,R.&Thakuriah,G.(2015): Practical Geography, EBH Publishers(India),Guwahati.

## 3<sup>rd</sup> Year ( Degree Course) Semester-VI

# **Economic Geography**

Paper-GE-601M

Full marks-60(Credit-3) (Internal Assessment-24; End Sem.Exam.-36)

# Unit-1:Introduction to Economic Geography

Concept, scope and development; Resource: Meaning and concept, Classification, significance; Classification and types of economic activities; Factors affecting location of economic activities with spatial reference to agriculture (Von Thunen Theory); industry (Weber's Theory).

## Unit-2: Primary Economic activities

Intensive Subsistence Agriculture; Extensive Commercial Agriculture; Plantation Agriculture; Mixed Farming; Forestry: Lumbering-Tropical and Temperate; Fishing: Temperate and Tropical fishing ground; Mining: Definition, examples and types.

## Unit-3: Secondary Economic activities

Manufacturing: Meaning, types and determinants of location of industries; Industry: Iron and steel, Cotton Textile, Aluminum, Petroleum refining and Paper; Industrial regions of India: (a) Hooghly region (b) Mumbai- Pune region (c) Madurai- Coimbatore region (d) Chhota Nagpur region

## Unit-4: Tertiary Economic activities

Transport and trade: Major transport system of the world-Trans-Siberian Railway; Canadian Pacific Railway, Panama Canal Route, Suez Canal Route; Concept of World Trade Organization (WTO); Multinational Corporation (MNC) and International Trade; International Trade system of India; Recent status of Indian Economy.

- 1. Jones, C.F. and Darkenwald , G.G. (1954) Economic Geography, Me Milan, New York. 2. Smith, D.N.(1971) — Industrial Location – An Economical Geographical Analysis, John Wiley, New York .
- 3. Morgan , W.B. and Munton , R.J.C . (1971) : Agricultural Geography, Methuen, London .
- 4. Leong ,G.C.(2000), Human and Economic Geography ,Oxford University Press, New Delhi , Kolkata.
- 5. Roy, Prithwish, Economic Geography, (Latest Edition), New Central Book Agency (p) Ltd., Kolkata. 6. Hartshorn ,T.A .Alexander,J.W,Economic Geography (Latest Edition), Printice Hall of India Pv5. Ltd.
- 7. Chattaraj ,Guha (Latest Edition),Economic Resources, John Wiley publication,New Delhi,Kolkata.
- 8. Gautam ,Alka ,Advanced Economic Geography, Sharada Pustak Bhawan,University Road, Allahabad .
- 9. Saxena, H.M., Economic Geography, Rawat Publications, Jaipur, New Delh

## 3<sup>rd</sup> Year (Degree Course) Semester-VI

#### Practical

Paper-GE-601M (Practical)

Full Marks-40 (Credit -1)

(Internal Assessment-16; End Sem. Exam. 24)

SI. No.	Practical	Marks
1.	Projection  Construction, Characteristics application of followings projection:  Cylindrical equal area projection.  Simple conical projection with one standard parallel.	16
2.	Bonne's projection.  Laboratory Note Book and Viva-voce	05+3
	Total	24

#### Selected References:

- 1. Saha, P & Basu, P. (2015): Advanced Practical Geography-A Laboratory Manual, Books and Allied (P) Ltd., Kolkata
- 2. Singh. R.L. & Singh, Rana, P. B (2003): Element of Practical Geography, Kalyani Publishers, New Delhi
- 3. Sankar, A. (2015): Practical Geography: A systematic approach. Orient Black Sawn Privat Ltd., New Delhi.

4. Singh, R & Singh, K.: Map Work and Practical Geography, Central Book Depot.

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