

**COURSE TITLE:**  
**Geoheritage Conservation**

**COURSE CODE:**  
**GEL-AOC-001**

**COURSE COORDINATOR:**  
**Dr. Manjit Kumar Mazumdar**



**DEPARTMENT OF GEOLOGY**  
**PRAGJYOTISH COLLEGE**  
**GUWAHATI – 781 009**

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**ADD-ON COURSE**

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**TOTAL CONTACT HOURS: 30**

**COURSE COORDINATOR: DR. MANJIT KUMAR MAZUMDAR**

**UNIT 1: introduction**

**(4 hours)**

- Concepts of geodiversity, geosites, geoheritage, geoconservation, geotourism and geoparks
- Classification and significance
- International geoconservation designations: World Heritage Sites, Ramsar Sites, European Designations (SPA, SAC, ASSI, NNR, AONB)

**UNIT 2: Geoparks**

**(10 hours)**

- Definition of geoparks
- Objectives of geoparks
- History of development of geoparks: role of UNESCO, international promotional events
- Infrastructural elements of geoparks: geoguides and georangers, geopaths, georoutes, information panels and signages, geomuseums, geoshops, geohotels, geoproductions
- Sustainable activities within geoparks: educational and leisure activities
- Economic significance of geoparks
- Community engagement in geopark development
- Steps in geopark development: top-bottom and bottom-up approaches
- International Geopark Networks: GGN, EGN, APGN, AGN

**UNIT 3: Geoconservation legislations**

**(4 hours)**

- International legislations
- International charters: International Declaration of the Rights of the Memory of the Earth (1991), Beijing Declaration (2004), Madonie Declaration (2004), Osnabruck Declaration (2008), Langkawi Declaration (2010), Arouca Declaration (2011), Shimabara Declaration (2012), Declaration of Reykjavik (2015), English Riviera Declaration (2016), Declaration of Checiny (2018), Zumaia Declaration (2022)
- Indian efforts

**UNIT 4: Indian efforts towards geoheritage conservation**

**(12 hours)**

- Geoheritage elements across the Indian sub-continent
- National Geological Monuments (NGM)
- Aspiring and prospective geopark localities of India
- Organizational efforts towards geoconservation

**Suggested reading material:**

1. C. Anze, L. Yunting and C.Y. Ng. Young (2015). *The Principles of Geotourism*, Science Press, Beijing
2. C.V. Burek and C.D. Prosser (2008). *The History of Geoconservation*, The Geological Society, London, Special Publications, 300
3. D.R. Reddy (2020). *A Monograph on Potential Geoparks of India*, INTACH, New Delhi
4. 36<sup>th</sup> IGC (2016). *Geotourism Hotspots of Indian Subcontinent*, GSI, New Delhi
5. C. Sharples (2002). *Concepts and Principles of Geoconservation*, Tasmanian Parks and Wildlife Service, Australia
6. M. Gray (2004). *Geodiversity – Valuing and Conserving Abiotic Nature*, John Wiley & Sons Ltd., USA
7. R.K. Dowling and D. Newsome (2006). *Geotourism – Sustainability, Impacts and Management*, Elsevier Butterworth-Heinemann, Oxford
8. R, Crofts, J.E. Gordon, J. Brilha, M. Gray, J. Gunn, J. Larwood, V.L. Santucci, D. Tormey and G.L. Worboys (2020). *Guidelines for Geoconservation in Protected and Conserved Areas*, Best Practice Protected Area Guidelines, Series No. 31, IUCN, Switzerland