BA 2nd Year, Sem. III Course I (Theory)

Programme/Class: Diploma/BA	Year: Second	Semester: Third
	Subject: Geography	
Course Code: A110301T		nt, Disaster Management and ate Change

Course outcomes: Students will be able to understand

- The course aim is to give basic understanding of concept Environment, Climate Change and Disaster Management.
- Understanding of the concept of appraisal and conservation of Environment and Natural Resources.
- It will help in developing understanding about various Impacts of Climate Change.
- This course shall introduce the basic concepts related to disaster Management.
- This paper shall help in understanding Global effort in field of disaster management.

Credits: 4	Core Compulsory
Max. Marks: 25+75	Min. Passing Marks: 40

Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w

Unit	Topics	No. of Lectures
	Concepts & components of Environment, Ecology and ecosystem. Indian traditional Knowledge in Environment and disaster Management.	8
II	Bio-diversity and its conservation, sustainable development.	8
III	Deforestation, soil erosion, soil exhaustion, Desertification, Air pollution, water pollution Disposal of solid waste.	8
IV	Ganga Action Plan, Tiger project, Tehri dam & Narmada Valley project.	8
V	Science of Climate Change: Understanding Climate Change; Green House Gases and Global Warming.	8
VI	Global Climatic Assessment – IPCC, Impacts of Climate Change, National Action Plan on Climate Change.	7
VII	Disasters, Hazards, Risk, Vulnerability, Type of Disasters, Disaster Management, Disaster	7

	Management Cycle.	
VIII	Flood, Drought, Cyclone, Earthquake, Tsunami, Landslide, Chemical and Nuclear Disasters. Do's and Don'ts During Disasters.	6

Suggested Readings:

- 1. Casper J.K. (2010). *Changing Ecosystems: Effects of Global Warming.* New York, USA: Infobase Pub.
- 2. Hudson, T. (2011). *Living with Earth: An Introduction to Environmental Geology*. Delhi, India: PHI Learning Private Limited.
- 3. Miller, G.T. (2007). *Living in the Environment: Principal, Connections, and Solutions*. Belmont, Australia: Brooks/ Cole Cengage Learning.
- 4. Singh, R.B. (1993) Environmental Geography. Delhi, India: Heritage Publishers.
- 5. UNEP. (2007). Global Environment Outlook: GEO4: Environment For Development, United Nations Environment Programme. UK: University Press, Cambridge.
- 6. Government of India. (2011). *Disaster Management in India*. Delhi, India: Ministry of Home Affairs.
- 7. Singh, Savendra (2019) Pryavaran Bhugol, Pravalika Publication, Allahabad
- 8. Kapur, A. (2010). *Vulnerable India: A Geographical Study of Disasters*. Delhi, India: Sage Publication.
- 9. Singh, Savendra (2019) Apada Prabandhan, Pravalika Publication, Allahabad.
- 10. Ramkumar, M. (2009). *Geological Hazards: Causes, Consequences and Methods of Containment*. New Delhi, India: New India Publishing Agency.
- 11. Climate Change: Understanding Climate Change; Green House Gases and Global Warming; Global Climatic Assessment- IPCC
- 12. Climate Change and Vulnerability: Physical Vulnerability; Economic Vulnerability; Social Vulnerability.
- 13. Impact of Climate Change: Agriculture and Water; Flora and Fauna; Human Health
- 14. Adaptation and Mitigation: Global Initiatives with Particular Reference to South Asia.
- 15. The Climate Change Policy Framework: Global Initiatives UNFCCC and COPs; National and Local Action Plan on Climate Change.
- 16. Government of India. (2008). *Vulnerability Atlas of India*. New Delhi, India: Building Materials & Technology Promotion Council, Ministry of Urban Development, Government of India
- 17. Modh, S. (2010). *Managing Natural Disaster: Hydrological, Marine and Geological Disasters*. Delhi, India: Macmillan.
- 18. Bansal SC,(2020) Jalvayu vigyan evam Samudra Vigyan, Meenakshi Publication, Meerut.
- 19. Bansal SC, (2019) Prayavarn ek adhyan, Meenakshi Publication, Meerut.

This course can be opted as an elective by the students of following subjects: Open for all

Suggested Continuous Evaluation Methods:

Assignment / test / Quiz(MCQ) / Seminar/ Presentations

Suggested equivalent online courses:
https://onlinecourses.swayam2.ac.in/aic19_ge05/preview
https://onlinecourses.swayam2.ac.in/nou21 bt03/preview

BA 2nd Year, Sem. III Course II (Practical)

Programme/Class: Diploma/BA	Year: Second	Semester: Third
Subject: Geography		
Course Code: A110302P	Course Title: Statistical Techniques and Surveying	

Course outcomes: Students will be able to understand

- To differentiate between qualitative and quantitative information.
- To understand the nature of various data.
- To understand sampling methods for data collection.
- To present data through graphical and diagrammatic formats.
- To use the concept of probability mainly the normal distribution.

Credits: 2	Core Compulsory
Max. Marks: 25+75	Min. Passing Marks: 40

Total No. of Lectures-Tutorials-Practical (in hours per week): P- 2/w

Unit	Topics	No. of Lectures
I	Use of Data in Geography: Significance of Statistical Methods in Geography; Sources of Data, Scales of Measurement (Nominal, Ordinal, Interval, Ratio)	8
II	Tabulation and Descriptive Statistics: Frequency Distribution Table, Cross Tabulation, Graphical Presentation of Data (Bar diagram, Histograms, Frequency Curve and Cumulative Frequency Curves), Measurement of Central Tendencies (Mean, Median and Mode), Measurement of Partitions (Deciles, Quartiles and Percentiles), Dispersion (Standard Deviation, Variance and Coefficient of Variation).	8
III	Sampling: Probability sampling Non-probability sampling. Correlation: Rank Correlation and Product Moment Correlation.	7
IV	Instrumental Survey: Sextant	7

Suggested Readings:

- 1. Berry B. J. L. and Marble D. F. (eds.): Spatial Analysis A Reader in Geography.
- 2. Ebdon D., 1977: Statistics in Geography: A Practical Approach.
- 3. Davis, R.E. and Foote, F.S. (1953): Surveying, 4th edition, McGraw Hill

Publication, New York

- 4. Sharma, JP (2001) Prayogik Bhugol, Rastogi Publication, Meerut
- 5. Hammond P. and McCullagh P. S., 1978: Quantitative Techniques in Geography: An Introduction, Oxford University Press.
- 6. Sharma, PM, (2009) Bhugol Me sankhkiya Vidhyan, Rajasthan Granth Accademy, Jaipur
- 7. Bansal SC,(2020) Shodh vidhitantra va sankhikiya Vishyan, RK Books Publication, New Delhi.
- 8. King L. S., 1969: Statistical Analysis in Geography, Prentice-Hall.
- 9. Mahmood A., 1977: Statistical Methods in Geographical Studies, Concept.
- 10. Pal S. K., 1998: Statistics for Geoscientists, Tata McGraw Hill, New Delhi.
- 11. Sarkar, A. (2013) Quantitative geography: techniques and presentations. Orient Black Swan Private Ltd., New Delhi
- 12. Silk J., 1979: Statistical Concepts in Geography, Allen and Unwin, London.
- 13. Spiegel M. R.: Statistics, Schaum's Outline Series.
- 14. Yeats M., 1974: An Introduction to Quantitative Analysis in Human Geography, McGraw Hill, New York.

This course can be opted as an elective by the students of following subjects: Open for all

Note: In Final Examination Student shall be examined by external and internal examiners. Marks Distribution: Written Exam, Viva, Practical File, Instrumental Surveys.