

BIO ENVIRONMENTAL GEOGRAPHY - COURSE MANAGEMENT AND ADVISORY

Bioenvironmental geography is an amalgamated section comprising Biogeography and Environmental geography section of UPSC Geography syllabus. The section has been combined because of close association between these two subjects and the overlapping relationship between them. Biogeography has got many overlaps with Environmental Geography and preparing both of them simultaneously has its own advantages if the entire study of the syllabus is so synchronized.

Preparing this portion thoroughly gives you some added advantages. Not only you get few easy manageable questions in part A of Paper I of Geography optional, the offshoots and applications of the knowledge gained by mastering this component are very rewarding for Paper II of Geography. Also helps candidates in answering questions related to world biomes, distribution of flora and fauna, conservation measures, etc. asked in GS Paper I and III.

Moreover, by preparing this portion comprehensively shall give you at least 6-8 marks in prelims. So, it means that the cost benefit analysis of this portion of the syllabus highly favors a comprehensive preparation of Bio-environmental Geography.

Focus Areas

The soul of the syllabus of Bioenvironmental Geography lies in understanding the key concepts of ecosystems, biomes, Zoogeographical regions, and linking it with Biogeographical processes. The students have to be specially prepared with the terms and terminologies of the subject.

The whole section has to be divided into four broad sections-Ecosystem and its processes, Soils and vegetation, Role of Humans, and Impact of Humans, besides having a fifth component in the form of various issues. Moreover all the chapters have an Indian extension and a GS extension as well. This involves a parallel study of soil types in India, vegetation of India and it can save ones time and develop their understanding better.

In fact it is better to make it a rule to think of all the concepts in the Indian context. UPSC used to be asking such questions in the past.

The entire section is a bit factual sometimes particularly in topics of soil classification, biomes, floral and faunal distribution, etc. the other is completely conceptual and still another completely analytical.

The Syllabus as it is

Biogeography: Genesis of soils; Classification and distribution of soils; Soil profile; Soil erosion, Degradation and conservation; Factors influencing world distribution of plants and animals; Problems of deforestation and conservation measures; Social forestry; agroforestry; Wild life; Major gene pool centres.

Environmental Geography: Principle of ecology; Human ecological adaptations; Influence of man on ecology and environment; Global and regional ecological changes and imbalances; Ecosystem their management and conservation; Environmental degradation, management and conservation; Biodiversity and sustainable development; Environmental policy; Environmental hazards and remedial measures; Environmental education and legislation.

Relations with GS PT

Ecology and Environment is the most important section of GS PT as every year some 15-16 questions are asked from Ecology and Environment.

Relations with GS Mains

There is a complete section in GS on Ecological Issues in the third paper. Besides there

1. Geographical Features And Their Location- Changes In Critical Geographical Features (Including Water Bodies And Ice-Caps) And In Flora And Fauna And The Effects Of Such Changes
2. Conservation, environmental pollution and degradation, environmental impact assessment
3. Disaster and disaster management.

Thus, one can be sure of 20-40 marks in GS Paper I.

What the students Get

- Bioenvironmental Geography by K. Siddhartha
- Ecology and Environment by K. Siddhartha
- Modern Dictionary of Geography by K. Siddhartha & S.Mukherjee

Additional material that the students can go for

Absolutely not needed

Learning Sequencing as it should be in order to understand the topic, and chapter structure

The course sequencing is not per the syllabus. This is done to provide concept to the candidates. If the candidates follow the topic after another as per the syllabus they will never follow the concept. Hence the sequencing and reordering has been done to students benefit so that students are able to connect the dots and connect their concepts.

How best to utilise it

Pre Online Learning

Before picking Bioenvironmental Geography to study, the candidate must have studied and understood Basic Biology at the 10th standard level.

Online Learning sequence.

1. First read the topics
2. Listen to the explanation
3. Now use the summary
4. You have some model answers. Use only questions from model answers to write
5. Now compare your answers with the model
6. Ensemble will keep you updating on current affairs regularly on this topic
7. Keep an eye on updates

Bio-Environmental Geography (The syllabus as it should be studied)

BioGEOGRAPHY & Environmental Geography combined

SEQUENCING	TOPICS	CHAPTER AND STUDY MATERIAL	VIDEO EXPLANATION & MULTIMEDIA	CLASS LECTURE by	SYNOPSIS & LECTURE FORMAT	QUESTION BANK	MODEL ANSWERS	CURRENT & ENRICHMENT
1a.	Ecosystem Concept	Bioenvironmental Geography	Compact Powerpoint description and analysis with trend analysis		☐	☐	☐	NA
1b	Types of Ecosystems	Bioenvironmental Geography	Compact Powerpoint description and analysis with trend analysis		☐	☐	☐	NA
2.	Laws of Ecology	Bioenvironmental Geography		Lecture type made in explanatory form with story	☐	☐	☐	NA

				line explanati on				
3	Soil Genesis	Bioenvironmental Geography	Compact Powerpoint description and analysis with trend analysis		☐	☐	☐	NA
4	Soil Profile	Bioenvironmental Geography	Compact Powerpoint description and analysis with trend analysis		☐	☐	☐	NA
5	Soil Classification	Bioenvironmental Geography	Compact Powerpoint description and analysis with trend analysis		☐	☐	☐	NA
6	Soil Degradation and Conservation	Bioenvironmental Geography	Compact Powerpoint description and		☐	☐	☐	NA

			analysis with trend analysis					
6a	Land capability;	Bioenvironmental Geography					☐	NA
7.	Factors influencing World distribution of Fauna and Flora	Bioenvironmental Geography	Compact Powerpoint description and analysis with trend analysis		☐	☐	☐	NA
8	Biomes	Bioenvironmental Geography	Documentary type International level videos with a story line explanation		☐	☐	☐	NA
9	Gene Pool Centres	Bioenvironmental Geography	Not needed		☐	☐	☐	NA
10	Human ecological adaptations	Bioenvironmental Geography		Lecture type made in explanatory form with story line	☐	☐	☐	NA

				explanati on				
11	Global Ecological Imbalances Mans Impact on Ecosystem, Environmental Degradation, Ecological Superiority of Humans	Bioenvironmental Geography	Examination oriented Video recorded Lectures interlaced with graphics, illustrations, videos and flow charts.		☐	☐	☐	Will keep on being updated with new developments
12	Human Impact on Climate-Global Warming, Global cooling, Ozone Hole, Climatic modification by human Activities.	Bioenvironmental Geography	Examination oriented Video recorded Lectures interlaced with graphics, illustrations, videos and flow charts.		☐	☐	☐	Will keep on being updated with new developments
12	Human Impact on Atmosphere-	Bioenvironmental Geography	Examination oriented		☐	☐	☐	Will keep on being

	Aerosols, Acid rain, Urban Heat Island		Video recorded Lectures interlaced with graphics, illustrations, videos and flow charts.					updated with new developments
13	Human Impact on Land-Land degradation, Soil Degradation) Erosion, Salinization, Laterisation) Derelict Land Formation, Desertrification	Bioenvironmental Geography	Examination oriented Video recorded Lectures interlaced with graphics, illustrations, videos and flow charts.		☐	☐	☐	Will keep on being updated with new developments
14	Human Impact on Water- Marine Pollution (Oil Pollution, Algal Bloom) Marine Waste Disposal,	Bioenvironmental Geography	Examination oriented Video recorded Lectures interlaced		☐	☐	☐	Will keep on being updated with new developments

	Eutrophication, Biomanipulation, Thermal Pollution,		with graphics, illustrations, videos and flow charts.					
16	Human Impact on Ecosystem- Biomagnification, Mass extinction, Holocene extinction	Bioenvironmental Geography		Lecture type made in explanatory form with story line explanation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Will keep on being updated with new developments
17	Pollution- Air Pollution, Stubble burning, Water pollution, Oil Pollution, Soil pollution, Stubble Burning, HAB, Algal Bloms	Bioenvironmental Geography		Lecture type made in explanatory form with story line explanation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Will keep on being updated with new developments
18	Biodiversity	Bioenvironmental Geography	Included <input type="checkbox"/>	Lecture type made in explanato	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Will keep on being updated with new

				ry form with story line explanati on				developme nts
19	Forest Conservation, Forest Fires	Bioenvironmenta l Geography	Included <input type="checkbox"/>	Lecture type made in explanato ry form with story line explanati on	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Will keep on being updated with new developme nts
20	Wildlife Conservation	Bioenvironmenta l Geography	Included <input type="checkbox"/>	Lecture type made in explanato ry form with story line explanati on	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Will keep on being updated with new developme nts
21.	Desertification	Bioenvironmenta l Geography	Included <input type="checkbox"/>	Lecture type made in explanato ry form	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

22	Sustainable development	Bioenvironmental Geography	Included <input type="checkbox"/>	Lecture type made in explanatory form with story line explanation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Will keep on being updated with new developments
23	EIA	Bioenvironmental Geography	Included <input type="checkbox"/>	Lecture type made in explanatory form with story line explanation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Will keep on being updated with new developments
23	Environmental management	Bioenvironmental Geography	Included <input type="checkbox"/>	Lecture type made in explanatory form with story line explanation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Will keep on being updated with new developments
24	Environmental	Bioenvironmental	Not	Not			<input type="checkbox"/>	Will keep

	awareness	l Geography	required	required				on being updated with new developments
25	Environmental hazards and remedial measures;	Bioenvironmental Geography		Siddhartha Sir in India Physical Aspects & Natural events			□	Will keep on being updated with new developments
26	Environmental education	Bioenvironmental Geography	Not required	Not required			□	Will keep on being updated with new developments
27	Environmental legislation	Bioenvironmental Geography	Not required	Not required			□	Will keep on being updated with new developments

Post Script- General Directions after Course

- Learn how to write answers from your you tube channel and the various answer directives.

- Go through the Question Bank and observe the type of Questions asked.
- Interpretation and understanding of the question is the most important criteria.
- Pick up some questions given in your answer bank and write them on your own.
- Then compare these answers with the answers given to you.
- Repeat this process more than once.
- Then go through the entire answers given to you.
- Now start writing independent answers.
- Special emphasis must be given to drawing correct illustrations. Practice correct illustrations.
- Presentation should be in good legible writing and simple language with:
 - Use of maps, flowcharts and diagrams
 - Use of examples and case studies to support the answer
- Adherence to word limit is advised.
- For answer evaluation you can join the test series and send cam scanned copies to Ensemble.