



Bachelor of Science
B.Sc. (Semester-II)

Course Code	US02VABSC02	Title of the Course	Environmental Studies
Total Credits of the Course	2	Hours per Week	2

Course Objectives:	<ol style="list-style-type: none">1. To make younger generation environment conscious.2. To expose the students to the fundamental concepts of environment so that they can appreciate the importance of individual efforts to protect and preserve our environment.3. To encourage them to make judicious use of our resources so that it will not only help present generation but also the future generations in meeting their needs.
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Course Content		
Unit	Description	Weightage* (%)
1.	Introduction to Environmental studies, Ecosystems and Natural Resources <ul style="list-style-type: none">– Definition, Scope and importance of Environmental Studies– Multidisciplinary nature of environmental studies– Component of Environment: Atmosphere, Hydrosphere, Lithosphere, Biosphere– Biogeochemical cycles: Carbon cycle and Nitrogen cycle– Concept of sustainability and sustainable development.– Definition and Structure of ecosystem – Abiotic and Biotic components– (Producers, Consumers and Decomposers)– Functions of Ecosystem: Energy flow in an ecosystem, Food chains, Food webs with examples– Classification -Renewable & Non-renewable Resources and types	50
2.	Biotic Interactions <ul style="list-style-type: none">– Positive Interactions with suitable examples– A. Mutualism– B. Commensalism	50





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	<ul style="list-style-type: none">- C. Proto-cooperation- Negative Interactions with suitable examples- A. Exploitation- B. Competition- C. Antibiosis	
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Teaching-Learning Methodology	Blended learning approach incorporating both traditional classroom teaching as well as usage of ICT tools.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination (As per CBCS R.6.8.3)	-
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	-
3.	University Examination	100%

Course Outcomes: Having completed this course, the learner will be able to	
1.	understand the fundamental concepts of Environment so that they can appreciate the importance of individual efforts to protect and preserve our environment.
2.	make judicious use of our resources that will not only help present generation but also the future generations in meeting their needs.

Suggested References:	
Sr. No.	References
1.	Ecology and Environment by P.D. Sharma.
2.	Fundamentals of Ecology by E.P.Odum.
3.	Ecology by Mohan P. Arora.
4.	Fundamentals of Ecology by M.C. Dash.
5.	Environmental Science by S.C.Santra.





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6.	An Introduction to Environmental Engineering & Science by Gilbert N Master.
7.	Encyclopaedia of Environmental Pollution and Control by R. K. Trivedi.
8.	Ecology and Sustainable development by P.S. Ramkrishana.
9.	Environmental Conservation; Fundamentals of Forestry Vol 5 by S.S. Negi, Bishen Singh, Mahendra Pal Singh.

