

BIDAR UNIVERSITY, BIDAR
JNANA KARANGA CAMPUS HALHALLI



ENVIRONMENTAL STUDIES SYLLABUS
(CBCS)
FOR THE UNDER-GRADUATE COURSE
B.A /B.Sc./ B. Com /B.C.A / B.B.A/B.S.W
COMMON PAPER (COMPULSORY) (CBCS)

STATE EDUCATION POLICY

With effect from
Academic year 2024-25

Agreed
(B.O.S chairman)

University Grants Commission
ENVIRONMENTAL STUDIES

ABILITY ENHANCEMENT COMPULSORY COURSE. (AECC)

This module consists of 4 units, covering 48 hours of classroom based and field work intended to create awareness, enhance knowledge, develop skills and attitudes necessary to understand the Environment in its totality and enables students to participate proactively for the cause of the environment

1. Environmental Studies (AECC) is made compulsory core module syllabus framed by UGC for all the Indian Universities/ Colleges as per the directions given by the Honorable Supreme Court, which believed that conservation of environment should be a national way of life and to be included into the education process. As suggested by State Level Environmental Science Subject Expert Committee, Chairperson of Board of Studies, Board of Examiners and subject experts it is proposed to implement the tabular column, mandatorily

Subject	ENVIRONMENTAL STUDIES	Semester
Course	B.Sc./B.C.A. /B.B.A. (B.B.M)/ Defense Strategies (Military Science)	I
	BA/ B. Com /B.F. A/B.S. W/ B.V. A	II

2. This pattern helps in distributing the workload of teachers of Environmental Studies (AECC) to both I and II semesters enabling the distribution of the teaching workload of an institution for full academic year, ensures distribution of examination into two semesters; also provide scope for a full-time teacher of the subjects.
3. Qualification to teach Environmental Studies (AECC): A candidate with minimum qualification of M.Sc. in Environmental Science subject is eligible to teach Environmental Studies (AECC) at the undergraduate level at all Universities, Deemed to be Universities, Autonomous Institutions, Government Aided and Private Colleges.

However, when such candidates are not available, teachers of the subjects listed below are to be preferred to teach Environmental Studies (AECC)

- i. Biological Sciences: Zoology/ Botany/ Microbiology/ Life sciences
- ii. Chemical Sciences and Earth Sciences: Chemistry/ Geology/ Earth Sciences

The teachers NOT ELIGIBLE to teach Environmental Studies (AECC) paper are Humanities (Economics, Geography, Sociology, Political science, Rural Development, Rural Development, Philosophy, and others), Commerce, Management, English, and other languages, Communication, Performing Arts, social Work, Women Studies, Psychology, Home science, Fashion Technology, Travel& Tourism and other similar subjects

Agreed
(C.B.O.S. Chairman)

BIDAR UNIVERSITY
JNANA KARANJA, HALHALLI BIDAR
Ability Enhancement Compulsory Course

SYLLABUS of ENVIRONMENTAL STUDIES (SEP) for
B.A/B.Sc/B.Com/B.C.A/B.B.A/B.S.W/BHM
STATE EDUCATION POLICY
COMMON PAPER (COMPULSORY) EFFECTIVE FROM 2024-25

AECC-3 ENVIRONMENTAL STUDIES (CBCS)

COURSE CODE: AECC-3

Semester: I/II

Course Content

Subject	Environmental studies Ability Enhancement Compulsory Courses(AECC)	Semester
Course	B.Sc./ BCA/BBM (BBA)/ Defense Strategies (Military Science)	I
	B.A./B.Com./B.S.W./ B.F.A/B.V.A	II

Summative Marks Distribution

Formative Assessment	
Assessment Occasion/Type	Marks
Assessment Test - 1	10
Assessment Test - 2	10
Total	20

Term End Examination: Exam paper will be for maximum of 80 marks. The minimum marks to pass the examination is 40% (32 Marks)

Agreement
(B.O.S. Chairman)

UNIVERSITY GRANTS COMMISSION

AECC - ENVIRONMENTAL STUDIES

Compulsory Course/ Constitutional Values

Total contact Hours: 48	Course Credits: 3
No. of teaching Hours/ Week: 3	Duration of Exam : 3 Hours
Formative Assessment Marks: 20	Semester End Exam Marks: 80

	Environmental Studies and Ecosystems	48 hours
Unit 1	Environmental Studies and Ecosystems	12
	Introduction to Environmental Studies Multidisciplinary nature of environmental studies Scope and importance: Concept of sustainability and sustainable development. Ecosystems What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs and ecological succession. Case studies of the following ecosystems: Forest ecosystem. Grassland ecosystem. Desert ecosystem. Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)	
Unit 2	Natural Resources and Biodiversity & Conservation	12
	Natural Resources: Renewable and Non-Renewable Resources: Land resources and land-use change: Land degradation, soil erosion and desertification. Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations. Water: Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (international & inter-state). Energy resources: Renewable and non-renewable energy sources, use of alternate energy sources, growing energy needs, case studies. Biodiversity & Conservation Levels of biological diversity: Genetic, species and ecosystem diversity; Biogeographic zones of India;	

Agimand
(B.O.S. chairman)

	Biodiversity patterns and global biodiversity hot spots. India as a mega-biodiversity nation; Endangered and endemic species of India. Threats to biodiversity: Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity. Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value.	
Unit 3	Environmental Pollution	12
	Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution, Nuclear hazards and human health risks Solid waste management, Control measures of urban and industrial waste	
Unit 4	Human Communities and the Environment:	12
	Human population growth: Impact on environment, human health and welfare. Resettlement and rehabilitation of project affected persons Disaster Management: Floods, earthquakes, cyclones and landslides Environmental movements: Environmental ethics: Role of Indian and other religions and cultures in environmental conservation	

Reference

- Carson, R. (2002). *Silent Spring*. Houghton Mifflin Harcourt.
- Gadgil, M., & Guha, R. (1993). *This Fissured Land: An Ecological History of India*. Univ. of California Press.
- Gleeson, B. and Low, N. (eds.) (1999). *Global Ethics and Environment*. London, Routledge.
- Gleick, P. H. (1993). *Water in Crisis*. Pacific Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute, Oxford Univ. Press.
- Groom, Martha J., Gary K. Meffe, and Carl Ronald Carroll. (2006). *Principles of Conservation Biology*. Sunderland: Sinauer Associates.
- Grumbine, R. Edward, and Pandit, M.K. (2013). Threats from India's Himalaya dams. *Science*, 339: 36-37.
- McCully, P. (1996). *Rivers no more: the environmental effects of dams* (pp. 29-64). Zed Books.
- McNeill, John R. (2000). *Something New Under the Sun: An Environmental History of the*

Twentieth Century.

Nandini, N. (2019). A text book on Environmental Studies (AECC). Sapna Book House, Bengaluru.

Odum, E.P., Odum, H.T. & Andrews, J. (1971). Fundamentals of Ecology. Philadelphia: Saunder

Pepper, I.L, Gerba, C.P. & Brusseau, M.L. (2011). Environmental and Pollution Science. Academic Press.

Rao, M.N. & Datta, A.K. (1987). Waste Water Treatment. Oxford and IBHPublishing Co. Pvt. Ltd.

Raven, P.H., Hassenzahl, D.M. & Berg, L.R. (2012). Environment. 8th edition. John Wiley & Sons.

Rosencranz, A., Divan, S., & Noble, M. L. (2001). Environmental law and policy in India. Tripathi 1992.

Sengupta, R. (2003). Ecology and economics: An approach to sustainable development. OUP.

Singh, J.S., Singh, S.P. and Gupta, S.R. (2014). Ecology, Environmental Science and Conservation. S. Chand Publishing, New Delhi.

Sodhi, N.S., Gibson, L. & Raven, P.H. (eds). (2013). Conservation Biology: Voices from the Tropics. John Wiley & Sons.

Thapar, V. (1998). Land of the Tiger: A Natural History of the Indian Subcontinent. Warren, C. E. (1971). Biology and Water Pollution Control. WB Saunders.

Wilson, E. O. (2006). The Creation: An appeal to save life on earth. New York: Norton.

World Commission on Environment and Development. (1987). Our Common Future. Oxford University Press.

Scheme of Examination

QI. Twelve (12) Question will be asked. Each carrying 2 marks, out of which any Ten (10) question should be answered. Four (Four) question shall be asked from each unit compulsory

QII. Nine (9) Question will be asked. Each carrying 5 marks, out of which any Six (6) questions should be answered. Two (2) question shall be asked from each unit compulsory

QIII. Five (5) Question will be asked. Each carrying 10 marks, out of which any Three (3) question should be answered. One (1) question shall be asked from each unit compulsory

Ajman
(B.O.S. Chairman)

Question Paper pattern

I/II Semester Examination Month Year
Environmental Studies

Paper Title: AECC-3: Environmental Studies

Duration: 3 hours

Max Marks: 80

Instruction: Answer all the sections

Section-A

10X 2= 20

Q1. Answer any Ten of the following

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.

Section B

6X5= 30

QII. Answer any Six of the following

- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.
- 21.

Section C

3X10= 30

QIII. Answer any Three of the following

- 22.
- 23.
- 24.
- 25.
- 26.

Agarwal
(B.O.S. Chairman)