



चौधरी बंसी लाल विश्वविद्यालय
Chaudhary Bansi Lal University

(A State University established under Govt. of Haryana Act No. 25 of 2014)
Hansi Road, Prem Nagar, Bhiwani

विकसित भारत
अभियान
1947 TO 2047

No. CBLU/Acad./2025/ 1830

Dated: 16/09/25

To

Controller of Examinations,
Chaudhary Bansi Lal University,
Bhiwani.

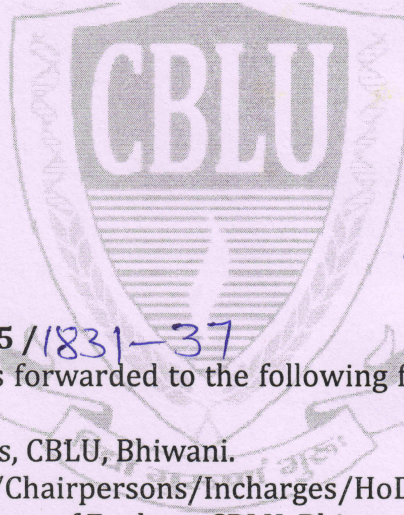
Sub: Regarding rectification in the distribution of marks in the subject DSE II Ecology and Evolution (20UZ00604).

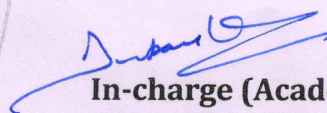
Sir,

Kindly refer to your office letter No. CBLU/COE/2025/468-470 dated 09.05.2025 with regard to discrepancies in Scheme & Syllabus of B.Sc. Zoology.

In this regard, it is to inform you that the matter was considered by the University Authorities and recommendations of the UGBOS of the Department of Zoology of its meeting held on 14.05.2025 were approved and the same has also been noted by the Academic Council vide resolution no. 11 of its 14th meeting held on 04.08.2025. Now, a copy of the corrected paper is being forwarded to you for information and further necessary action.

Encl.: As above (PDF).



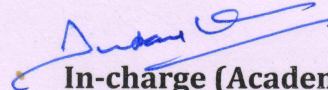

In-charge (Academic)
CBLU, Bhiwani

Endst. No CBLU/Acad./2025 /1831-37

Dated: 16/09/25

A copy of the above is forwarded to the following for information and necessary action:

1. Dean, Academic Affairs, CBLU, Bhiwani.
2. All Deans of Faculties/Chairpersons/Incharges/HoDs of UTDs, CBLU, Bhiwani.
3. Chairperson, Department of Zoology, CBLU, Bhiwani.
4. All the Principals of the Affiliated Colleges of CBLU, Bhiwani.
5. In-charge (Computer Centre), CBLU, Bhiwani is requested to upload this letter and Syllabus on the University Website under the relevant head.
6. P.S. to Vice-Chancellor (for kind information of the Vice-Chancellor), CBLU, Bhiwani.
7. P.A. to Registrar (for kind information of the Registrar), CBLU, Bhiwani.


In-charge (Academic)
CBLU, Bhiwani

DSE II (Semester VI)
ECOLOGY AND EVOLUTION (23UZOO604)
THEORY (Credits 2)

Max Marks: 50 [40 (Theory) +10 (Internal Assessment)]

Time Allotted: 3 hours

Note: Nine questions to be set in all and all the candidates are required to attempt five questions including compulsory question.

1. Question number 1 is compulsory constituting of 8 parts (1 Mark each) covering the entire syllabus.

2. Out of the remaining eight questions (8 marks each), two questions are to be set from each unit, splitting them in parts. Candidate is required to attempt four questions, selecting one question from each unit.

UNIT I

History of ecology, Autecology and synecology, Levels of organization, Laws of limiting factors, Study of biotic and abiotic factors, Unique and group attributes of population: Density, natality, mortality, fecundity, survivorship curves, dispersal and dispersion

UNIT II

Community Characteristics: species richness, dominance, diversity, abundance, vertical stratification, Ecological Niche, Ecotone and edge effect; Ecological succession with one example. Types of ecosystems with one example in detail, Food chain: Detritus and grazing food chains, Food web, Energy flow through the ecosystem, Ecological pyramids

UNIT III

Origin of species, Lamarckism, Darwinism, Neo-Darwinism, Evidences of Evolution: Geological time scale, Neutral theory of molecular evolution, Natural selection, Genetic Drift

UNIT IV

Population genetics: Hardy-Weinberg Law, Founder's effect, Bottleneck phenomenon; Species' concept, Isolating mechanisms, modes of speciation—Allopatric, sympatric, Adaptive radiation / macroevolution, Origin and evolution of man and horse.

Suggested readings

Fundamentals of Ecology (5th Edition) by W.B. Odum, E.P. Saunders, Toppan Co. Ltd., Tokyo, Japan. (1963 1st Edition).

Environmental biology and toxicology by P.D. Sharma (2014), Rastogi Publication.

Concepts of Ecology by Edward J. Kormondy (4th Edition) (2017); Prentice Hall of India (Pvt.) Ltd.

Ecology: from individuals to ecosystem (4th Edition) by Michael Begen, Colen R, Harper 2005.

Organic Evolution by Veer Bala Rastogi, Published by MEDTECH (2016).

Principles of Systematic Zoology by E. Mayr and P. D. Ashlock, Tata McGraw Hill Publishing Co. Ltd., New Delhi; 1991.