

**B.Sc. Environmental Science: Course Structure under CBCS**  
(For the candidates admitted from the academic year 2018-2019 onwards)

**ELIGIBILITY :** Any science group at Higher Secondary School level.

(NAAN MUDHALVAN SCHEME was Implemented in 6<sup>th</sup> semester alone for 2020-21 Batch)

| Sem   | Part  | Course   | Title                                    | Inst.<br>Hours/<br>Week | Credit | Exam<br>Hours | Marks |     | Total |
|-------|-------|--|--|-------------------------|--------|---------------|-------|-----|-------|
|       |       |  |  |                         |        |               | Int   | Ext |       |
| I     | I     | Language Course–I (LC) –<br>Tamil*/Other Languages ** #  |  | 6                       | 3      | 3             | 25    | 75  | 100   |
|       | II    | English Language Course - I<br>(ELC)   |  | 6                       | 3      | 3             | 25    | 75  | 100   |
|       | III   | Core Course–I (CC)   | Concepts of Environment                  | 6                       | 6      | 3             | 25    | 75  | 100   |
|       |       | Core Practical – I (CP)  | Environment and Ecology                  | 3                       | -      | -             | -     | -   | -     |
|       |       | First Allied Course–I (AC)   | Biology – I                              | 4                       | 4      | 3             | 25    | 75  | 100   |
|       |       | First Allied Course–II (AP)  | Biology                                  | 3                       | -      | -             | -     | -   | -     |
|       |       | Add on Course – I ##   | Professional English I                   | 6                       | 4      | 3             | 25    | 75  | 100   |
|       | IV    | Value Education  | Value Education                          | 2                       | 2      | 3             | 25    | 75  | 100   |
| Total |       |  | 30                                       | 22                      |        |               |       | 600 |       |
| II    | I     | Language Course–II (LC)–<br>Tamil*/Other Languages ** #  |  | 6                       | 3      | 3             | 25    | 75  | 100   |
|       | II    | English Language Course–II<br>(ELC)  |  | 6                       | 3      | 3             | 25    | 75  | 100   |
|       | III   | Core Course–II (CC)  | Ecology                                  | 6                       | 6      | 3             | 25    | 75  | 100   |
|       |       | Core Practical – I (CP)  | Environment and Ecology                  | 3                       | 3      | 3             | 40    | 60  | 100   |
|       |       | First Allied Course–II (AP)  | Biology                                  | 3                       | 3      | 3             | 40    | 60  | 100   |
|       |       | First Allied Course–III (AC)   | Biology – II                             | 4                       | 2      | 3             | 25    | 75  | 100   |
|       |       | Add on Course – II ##  | Professional English II                  | 6                       | 4      | 3             | 25    | 75  | 100   |
|       | IV    | Environmental Studies  | Environmental Studies                    | 2                       | 2      | 3             | 25    | 75  | 100   |
| Total |       |  | 30                                       | 26                      |        |               |       | 800 |       |
| III   | I     | Language Course – III (LC)–<br>Tamil*/Other Languages ** #   |  | 6                       | 3      | 3             | 25    | 75  | 100   |
|       | II    | English Language Course-III<br>(ELC)   |  | 6                       | 3      | 3             | 25    | 75  | 100   |
|       | III   | Core Course – III (CC)   | Environmental Pollution                  | 6                       | 6      | 3             | 25    | 75  | 100   |
|       |       | Core Practical – II (CP)   | Environmental Resource<br>and Management | 3                       | -      | -             | -     | -   | -     |
|       |       | Second Allied Course–I (AC)  | Chemistry – I                            | 4                       | 4      | 3             | 25    | 75  | 100   |
|       |       | Second Allied Course-II (AP)   | Chemistry                                | 3                       | -      | -             | -     | -   | -     |
|       | IV    | Non Major Elective I - for<br>those who studied Tamil<br>under Part-I<br>a) Basic Tamil for<br>other language students<br>b) Special Tamil for those<br>who studied Tamil upto<br>+2 but opt for other<br>languages in degree<br>programme | @  | 2                       | 2      | 3             | 25    | 75  | 100   |
|       | Total |  |  | 30                      | 18     |               |       |     | 500   |

|                           |       |   |  |  |    |   |    |      |     |
|---------------------------|-------|---|--|--|----|---|----|------|-----|
| IV                        | I     | Language Course –IV (LC) - Tamil*/Other Languages ** #  |  | 6  | 3  | 3 | 25 | 75   | 100 |
|                           | II    | English Language Course – IV (ELC)  |  | 6  | 3  | 3 | 25 | 75   | 100 |
|                           | III   | Core Course – IV (CC)   | Natural Resources                          | 5  | 5  | 3 | 25 | 75   | 100 |
|                           |       | Core Practical – II (CP)  | Environmental Resource and Management      | 3  | 3  | 3 | 40 | 60   | 100 |
|                           |       | Second Allied Course - II (AP)  | Chemistry                                  | 3  | 3  | 3 | 40 | 60   | 100 |
|                           |       | Second Allied Course - III  | Chemistry – II                             | 3  | 2  | 3 | 25 | 75   | 100 |
|                           | IV    | Non Major Elective II- for those who studied Tamil under Part I<br>a) Basic Tamil for other language students<br><br>b) Special Tamil for those who studied Tamil upto +2 but opt for other languages in degree programme | @  | 2  | 2  | 3 | 25 | 75   | 100 |
|                           |       | Skill Based Elective - I  | Skill Based Elective - I                   | 2  | 2  | 3 | 25 | 75   | 100 |
|                           | Total |   |  | 30   | 23 |   |    |      | 800 |
|                           | V     | III   | Core Course – V (CC)                       | Environmental Microbiology and Biotechnology | 5  | 5 | 3  | 25   | 75  |
| Core Course – VI (CC)     |       |   | Environmental Toxicology                   | 5  | 5  | 3 | 25 | 75   | 100 |
| Core Course – VII (CC)    |       |   | Sustainable Development                    | 6  | 5  | 3 | 25 | 75   | 100 |
| Core Practical – III (CP) |       |   | Environmental Monitoring and Assessment    | 3  | 3  | 3 | 40 | 60   | 100 |
| Major Based Elective – I  |       |   | Global Warming and Climate change          | 5  | 5  | 3 | 25 | 75   | 100 |
| IV                        |       | Skill Based Elective – II   | Skill Based Elective - II                  | 2  | 2  | 3 | 25 | 75   | 100 |
|                           |       | Skill Based Elective – III  | Skill Based Elective - III                 | 2  | 2  | 3 | 25 | 75   | 100 |
|                           |       | Soft Skills Development   | Soft Skills Development                    | 2  | 2  | 3 | 25 | 75   | 100 |
| Total                     |       |   | 30   | 29   |    |   |    | 800  |     |
| VI                        | III   | Core Course – VIII (CC)   | Waste Management                           | 6  | 6  | 3 | 25 | 75   | 100 |
|                           |       | Core Course – IX (CC)   | Environmental Health and Safety Management | 6  | 6  | 3 | 25 | 75   | 100 |
|                           |       | Core Practical – IV (CP)  | Environmental Remediation and Restoration  | 5  | 4  | 3 | 40 | 60   | 100 |
|                           |       | Major Based Elective II   | Ecotourism                                 | 6  | 6  | 3 | 25 | 75   | 100 |
|                           |       | Major Based Elective III  | Disaster Management                        | 6  | 6  | 3 | 25 | 75   | 100 |
|                           | V     | Extension Activities **   | Extension Activities                       | -  | 1  | - | -  | -    | -   |
|                           |       | Gender Studies  | Gender Studies                             | 1  | 1  | 3 | 25 | 75   | 100 |
|                           | VI    | Naan Mudhalvan Scheme (NMS) @@  | Naandi / Unnati / Quest / IBM Skills Build | -  | -  | - | -  | -    | -   |
|                           | Total |   |  | 30   | 30 |   |    |      | 600 |
| Grand Total               |       |   | 180  | 148  |    |   |    | 4100 |     |

### List of Allied Courses

| Allied Course I<br>(First Year) |   | Allied Course II<br>(Second Year) |
|---------------------------------|---|-----------------------------------|
| Biology                         |   | Chemistry                         |
| Language Part – I               | - | 4                                 |
| English Part –II                | - | 4                                 |
| Core Paper                      | - | 9                                 |
| Core Practical                  | - | 4                                 |
| Add-on Course                   | - | 2                                 |
| Allied Paper                    | - | 4                                 |
| Allied Practical                | - | 2                                 |
| Non-Major Elective              | - | 2                                 |
| Skill Based Elective            | - | 3                                 |
| Major Based Elective            | - | 3                                 |
| Environmental Studies           | - | 1                                 |
| Value Education                 | - | 1                                 |
| Soft Skill Development          | - | 1                                 |
| Gender Studies                  | - | 1                                 |
| Extension Activities            | - | 1 (Credit only)                   |
| Naan Mudhalvan Scheme           | - | 1 (No Credits)                    |

\* For those who studied Tamil upto 10<sup>th</sup> +2 (Regular Stream).

+ Syllabus for other Languages should be on par with Tamil at degree level.

# Those who studied Tamil upto 10<sup>th</sup> +2 but opt for other languages in degree level under Part- I should study special Tamil in Part – IV.

## The Professional English – Four Streams Course is offered in the 1<sup>st</sup> and 2<sup>nd</sup> Semester in all UG Courses. It will be taught apart from the Existing hours of teaching / additional hours of teaching (1 hour /day) as a 4 credit paper as an add on course on par with Major Paper and completion of the paper is must to continue his / her studies further. The Extra 6 hrs / cycle will be utilized for the Add on Professional English Course. (As per G.O. No. 76, Higher Education (K2) Department dated: 18.07.2020).

@ NCC Course is one of the Choices in Non-Major Elective Course. Only the NCC cadets are eligible to choose this course. However, NCC Course is not a Compulsory Course for the NCC Cadets.

\*\* Extension Activities shall be outside instruction hours.

@@ Naan Mudhalvan Scheme as per Government instruction.

Non Major Elective I & II – for those who studied Tamil under Part I

- a) Basic Tamil I & II for other language students
- b) Special Tamil I & II for those who studied Tamil upto 10<sup>th</sup> or +2 but opt for other languages in degree programme

**Note:**

|   | Internal Marks | External Marks |
|---|----------------|----------------|
| 1. Theory   | 25             | 75             |
| 2. Practical  | 40             | 60             |
| 3. Separate passing minimum is prescribed for Internal and External marks |                |                |

**FOR THEORY**

The passing minimum for CIA shall be 40% out of 25 marks [i.e. 10 marks]

The passing minimum for University Examinations shall be 40% out of 75 marks [i.e. 30 marks]

**FOR PRACTICAL**

The passing minimum for CIA shall be 40% out of 40 marks [i.e. 16 marks]

The passing minimum for University Examinations shall be 40% out of 60 marks [i.e. 24 marks].

\*\*\*\*\*