

HEMCHANDRACHARYA NORTH GUJARAT UNIVERSITY, PATAN
Under CBCS-Semester-Grading pattern
B.Sc. (Semester-V & VI) Programme
Elective Subjective Course in BOTANY
ES-BOT-303 (Air Pollution)

Theory teaching hours: **2 Hours/week**

Credit: **2.0**

Unit-I

- Define: Pollution (416) and pollutants (417). Various principal environmental pollutants with examples (416, 417). Kinds of pollutants: Non-degradable (418) and Bio-degradable (418).
- Air Pollution: Introduction (418), Air quality (419), sources and pollutants: Industrial Chimany wastes (419), Thermal power station (419) and Automobile (420 -421).
- Carbon-Compounds: Carbon dioxide (423), Carbon monoxide (425).
- Sulphur compound: Sulphur dioxide (426), Hydrogen sulphide (428).

Unit-II

- Nitrogen oxides: Nitrogen oxide, Nitric oxide and Nitrogen dioxide (428 -429).
- Fluorocarbons (434) and Hydrocarbons (435). Metals (435) and Photo-chemicals products (436).
- Prevention and control of air pollution (444 -452).
- Green House Effect (423), Global Warming (425), Ozone -depletion (432), and Acid rain (429).

References:

Shrma P. D. (7th Eedition - Reprint 2003). Ecology and Environ ment. Rastogi Publications, Meerut.

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Under CBCS-Semester-Grading pattern

B. Sc. (Semester-V and VI) Programme

Format for Question paper

Core Complementary Course in Botany

Time: 3 Hours

[w. e. f. June 2013 and December 2013]

Total Marks: 70

1. Long answered and medium answered/short note-typed questions from each Unit-I 20
 - a. Long answered questions (Attempt any **two** from **three**, each of 7 marks)
 - b. Medium answered or short note-typed questions (Attempt any **two** from **three**, each of 3 marks)
2. Long answered and medium answered/short note-typed questions from each Unit-II 20
 - a. Long answered questions (Attempt any **two** from **three**, each of 7 marks)
 - b. Medium answered or short note-typed questions (Attempt any **two** from **three**, each of 3 marks)
3. Long answered and medium answered/short note-typed questions from each Unit-III 20
 - a. Long answered questions (Attempt any **two** from **three**, each of 7 marks)
 - b. Medium answered or short note-typed questions (Attempt any **two** from **three**, each of 3 marks)
4. Questions such as, MCQs, Fill in the blanks, Match the pairs, very short answered questions, etc. 10
(Each of 1 Mark) [Total 10, at least **three** questions from each Unit]

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B. Sc. (Semester-V and VI) Programme

Format for Question paper

Elective (Subject) Course in Botany

Time: 2 Hours

[w. e. f. June 2013 and December 2013]

Total Marks: 50

1. Long answered and medium answered/short note-typed questions from each Unit-I 20
 - a. Long answered questions (Attempt any **two** from **three**, each of 7 marks)
 - b. Medium answered or short note-typed questions (Attempt any **two** from **three**, each of 3 marks)
2. Long answered and medium answered/short note-typed questions from each Unit-II 20
 - a. Long answered questions (Attempt any **two** from **three**, each of 7 marks)
 - b. Medium answered or short note-typed questions (Attempt any **two** from **three**, each of 3 marks)
3. Questions such as, MCQs, Fill in the blanks, Match the pairs, very short answered questions, etc. 10
(Each of 1 Mark) [Total 10, **Five** questions from each Unit]

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