

**STARTED BATCH IN ADD ON COURSE-2020**  
**B.Sc.STUDENTS**



**ADD ON COURSE**  
**on**  
**Environmental chemistry**

-----Organized by-----

**Department of**  
**Horticulture, Hindu College,**  
**Market Centre GUNTUR-**  
**522003**

**Hindu College, Guntur**  
**ADDON COURSE SYLLABUS**

**ENVIRONMENTAL CHEMISTRY**

**1. Introduction**

Terminology – pollution, pollutant, contaminant, receptor, sink, dissolved oxygen (DO), chemical Oxygen demand(COD), Biomedical Oxygen demand(BOD) and threshold limit value.

**2. Atmosphere**

Major regions- troposphere, Stratosphere, Mesosphere and Thermosphere of atmosphere with temperature profile.

**3. Green House Effect**

Production, main sources of green house gases, consequences and prevention of Global warming.

**4. Depletion of Ozone layer**

Cause, Mechanism, Consequences and prevention of depletion of Ozone layer.

**5. Air pollution**

Air pollutants- Acid rains, Estimation and adverse effects of acid rain, photo chemical smog.

## **6. Water pollution**

Classification of water pollutants, organic pollutants, Inorganic pollutants, radioactive pollutants, eutrofication and consequences, bioamplification

## **7. Toxicology**

Toxic chemicals in the environment, biochemical effects of lead and Mercury and Arsenic. Biochemical effects of pesticides.

## **References:-**

1. A text book of Environmental chemistry by V. Subramanyam, 2011.
2. A text book of Environmental chemistry and pollution control by SS Dhara and DD Mishra, 2004.
3. Objective environmental sciences by BB Singh.

# **AddOnCoursein Environmental chemistry**

**2020-2021**

**Model Paper**

**Time:- 3 hrsMax marks:- 50**

Answer any two of the following

2x10=20M

1. write about biomedical oxygen demand ?
- 2.what are green house gases enlist ?
- 3 write about stratosphere

Answer any 3 questions

3X10=30M

1. write briefly on radioactive pollutants ?
- 2.Write about photochemical smog?
- 3.write about biochemical effects of pesticides ?
4. what are air pollutants? Give examples ?

# Hindu College, Guntur

Department of Horticulture

Add on course 2020-21

| SNO | NAME OF THE STUDENT | Student Signature |
|-----|---------------------|-------------------|
| 1.  | A. SarthajKhanam    | A. SarthajKhanam  |
| 2   | Aa.VenuNaik         | Aa.VenuNaik       |
| 3   | B .Sushma           | B. Sushma         |
| 4   | Ch.Deepti           | Ch. Deepti        |
| 5   | Ch.Sivani           | Ch. Sivani        |
| 6   | D.Manjula           | D. Manjula        |
| 7   | G.Sowmya            | G. Sowmya         |
| 8   | G.NavyaDeepti       | G. NavyaDeepti    |
| 9   | G.Srilkashmi        | G. Srilkashmi     |
| 10  | I .Navya            | Navya. I          |
| 11  | I .Narendra         | I. Narendra       |
| 12  | J. Priyanka         | J. Priyanka       |
| 13  | K.Varsha            | Varsha. K.        |
| 14  | M.Sarika            | M. Sarika         |
| 15  | R.Lavanya           | R. Lavanya        |
| 16  | Sk.Farheen          | Sk. Farheen       |
| 17  | Sk.Nowsheen         | Sk. Nowsheen      |
| 18  | Sd. FareenJaha      | Sd. FareenJaha    |
| 19  | Sd. Thaksin         | Sd. Thaksin       |
| 20  | T. Sasikala         | T. Sasikala       |

# Hindu College, Guntur

## Department of Horticulture

### AddOnCourseMarksList-2020-21

| SNO | NAMEOFTHECANDIATE | MARKSOBTAINED<br>(50M) |
|-----|-------------------|------------------------|
| 1.  | A. SarthajKhanam  | 45                     |
| 2   | Aa.VenuNaik       | 46                     |
| 3   | B .Sushma         | 48                     |
| 4   | Ch.Deepthi        | 48                     |
| 5   | Ch.Sivani         | 46                     |
| 6   | D.Manjula         | 41                     |
| 7   | G.Sowmya          | 42                     |
| 8   | G.NavyaDeepthi    | 44                     |
| 9   | G.Srilkashmi      | 40                     |
| 10  | I .Navya          | 41                     |
| 11  | I .Narendra       | 39                     |
| 12  | J. Priyanka       | 42                     |
| 13  | K.Varsha          | 44                     |
| 14  | M.Sarika          | 45                     |
| 15  | R.Lavanya         | 41                     |
| 16  | Sk.Farheen        | 40                     |
| 17  | Sk.Nowsheen       | 46                     |
| 18  | Sd. FareenJaha    | 42                     |
| 19  | Sd. Thaksin       | 42                     |
| 20  | T. Sasikala       | 40                     |

## DEPARTMENT OF HORTICULTURE

YEAR: 2020

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# HINDU COLLEGE, GUNTUR

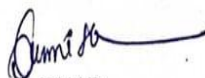


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Re-accredited By NAAC as Grade A

## CERTIFICATE

This is to certify that Mr./Miss SK. Nowsheen studying  
IHBZ has successfully completed certificate course on "Environmental chemistry"  
conducted by Dept. of Horticulture, Hindu College, Guntur,  
from 01/12/2020 to 31/12/2020. We wish all the best in his/her future endeavors.

  
HEAD



  
DIRECTOR  
Sciences & Allied Courses  
Hindu College  
Amaravathi Road Campus