

**STARTED BATCH IN CERTIFICATE COURSE – 2019**

**B.Sc. STUDENTS**



**CERTIFICATE COURSE**

**on**

**Environmental chemistry**

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

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

<b>S.No.</b>	<b>Name of Certificate course</b>	<b>Academic year</b>	<b>From</b>	<b>To</b>
1	Environmental Chemistry	2019-2020	01.12.2019	31.12.2019

**Hindu College, Guntur**

**ADD ON /CERTIFICATE 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, bio chemical 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.

# **Certificate course in Environmental chemistry**

**2019-2020**

**Model Paper**

**Time:- 3 hrs**

**Max marks:- 50**

Answer any two of the following

2x10=20M

1. Write about B.O.D ?
2. Write about threshold limit value ?
3. write about trophosphere

Answer any 3 questions

3X10=30M

1. write about acid rains ?
2. discuss about photochemical smog ?
3. write about toxic chemicals in environment ?
4. discuss about bioamplification ?

**Hindu College, Guntur**  
**Department of Horticulture**  
**Certificate Course Marks List-2019-20**

<b>S No.</b>	<b>NAME OF THE CANDIATE</b>	<b>MARKS OBTAINED (50M)</b>
1.	A.Navya Sri	40
2	B.Vamsi	45
3	Ch.Nagalakshmi	48
4	I Ashok	39
5	K.Chuchitha	44
6	K.Priyanka Rani	38
7	K .Uday Kiran	36
8	M.Gopichhand	42
9	M. Kiranmai	46
10	M Madhubabu	48
11	M. Ramya	38
12	Md . Kaseef Mehatb	42
13	N Srisailaja	45
14	N Navya	44
15	M .Narasimhulu Naik	38
16	P.Bharath Kumar	39
17	P.Sai Sindhu	46
18	P.Bhavana	39
19	Y .Prem Kumar	45
20	Sk. Hameed	39



# HINDU COLLEGE, GUNTUR



(Affiliated By Acharya Nagarjuna University)  
Re-accredited By NAAC as Grade A

## CERTIFICATE

This is to certify that Mr./Miss M. Kiranmai studying  
DHBZ has successfully completed certificate course on "Environmental chemistry"  
conducted by Dept. of Horticulture, Hindu College, Guntur,  
from 29/12/2019 to 31/12/2019. We wish all the best in his/her future endeavors.

*[Signature]*  
HEAD



*[Signature]*

DIRECTOR  
DIRECTOR  
Sciences & Allied Courses  
Hindu College  
Amaravathi Road Campus