



KIIT UNIVERSITY, BHUBANESWAR
AUTUMN MID SEMESTER EXAMINATION-2015

Semester I (Regular)

Env. Sc./CH 1005

Branches: CSE, IT, EE, SCE

Full Marks: 25

Time: 2hrs.

Answer any **FIVE** questions including Question No. 1 which is compulsory
The figures in the margin indicate full marks.

Q. No.	Contents	Marks
1.		[1X5=5]
(a)	What is Albedo?	
(b)	What is 'lapse rate'? Why stratosphere shows positive lapse rate ?	
(c)	What are primary and secondary air pollutants?	
(d)	What is TLV of a pollutant ? Give one example.	
(e)	Let us consider the earth to be a black body with an average temperature 15°C . Calculate the wavelength at which the maximum energy is radiated. (Given: Wien's constant = $2898\ \mu\text{mK}$).	
2.	How would you broadly divide the major regions of the atmosphere ? State their respective altitude, temperature ranges and lapse rates. Also mention the important chemical species present in each layer.	[5]
3.	What is the difference between 'Photochemical smog' and 'London smog'. Explain the mechanism of formation of photochemical smog from PAN.	[5]
4.	What is 'Greenhouse effect' ? Write the names of five greenhouse gases. Describe clearly how these greenhouse gases contribute to 'global warming'.	[5]
5.	What is 'lithosphere'? Explain in details, the structure of lithosphere.	[5]
6.	What are the major sources of CO and NO _x in the atmosphere ? How does they contribute to air pollution? Mention a couple of adverse effects due to these pollutants.	[5]
7.	Define 'EIA'. What is the importance of EIA in environmental studies ? Discuss the different environmental factors covered by EIA.	[5]
***** GOOD LUCK *****		