


<b>Name:</b>	 <b>UPES</b> UNIVERSITY WITH A PURPOSE
<b>Enrolment No:</b>	

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**

**End Semester Examination**

**Course: Pollution control in process industries**

**Program: B. Tech CHEMICAL**

**Course Code: CHEG 3018**

**Semester: VII**

**Time: 03 hrs.**

**Max. Marks: 100**

**Instructions:**

**SECTION A**

**Each Question will carry 5 Marks**

S. No.		Marks	CO
Q 1	Classify various wastewater treatment methods.	4	CO1
Q2	For iron and steel industry list out the major pollutants.	4	CO3
Q3	Write the principle of working of venture scrubber.	4	CO1
Q4	Define sludge.	4	CO3
Q5	List out the methods used for solid waste management.	4	CO4

**SECTION B**

**Each question will carry 10 marks**

Q 6	What are the different sources of noise pollution in industry? How does noise affect human beings?	10	CO1
Q7	Describe composting process with the help of diagram.	10	CO2
Q8	Explain the working of USAB reactor with the help of neat diagram?	10	CO3
Q10	Explain sequential batch reactor process.	10	CO5

**SECTION-C**

**Each Question carries 20 Marks.**

Q 11	Write a note on the effluent treatment plant essential components at an integrated chemical process industry of your choice.	20	CO5
Q 12	Write down the different sources of noise, air, soil, water and solid waste pollution in UPES. Suggest the suitable methods to control the mentioned pollution with the help of suitable diagram	20	CO5