

**GUJARAT TECHNOLOGICAL UNIVERSITY**
**BE - SEMESTER-IV(NEW) – EXAMINATION – SUMMER 2019**
**Subject Code:2143609**
**Date:20/05/2019**
**Subject Name: Industrial Pollution & Control**
**Time:02:30 PM TO 05:00 PM**
**Total Marks: 70**
**Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

		MARKS
<b>Q.1</b>	(a) Define solid waste, Air Pollution and field capacity.	<b>03</b>
	(b) Write seven copies of Manifest	<b>04</b>
	(c) Explain different categories of Biomedical Waste.	<b>07</b>
<b>Q.2</b>	(a) Describe sources of solid waste.	<b>03</b>
	(b) Explain in detail Multiple Effect Evaporator.	<b>04</b>
	(c) Discuss liquid waste treatment in drug industry.	<b>07</b>
	<b>OR</b>	
	(c) Explain solid waste management in pharmaceutical industry.	<b>07</b>
<b>Q.3</b>	(a) Describe primary and secondary pollutants.	<b>03</b>
	(b) Describe synthetic organic compounds and oil.	<b>04</b>
	(c) Explain in detail Cyclone Separator with a neat sketch.	<b>07</b>
	<b>OR</b>	
<b>Q.3</b>	(a) Describe working principle of scrubber.	<b>03</b>
	(b) Define fog, dust, smoke and mist.	<b>04</b>
	(c) Explain solid waste treatment in Energy Industry	<b>07</b>
<b>Q.4</b>	(a) What are advantages and Disadvantages of Gravity Settling Chamber	<b>03</b>
	(b) Describe chemical characteristics of solid waste.	<b>04</b>
	(c) Explain liquid waste treatment in Glass Industry.	<b>07</b>
	<b>OR</b>	
<b>Q.4</b>	(a) Define BOD, COD and influent.	<b>03</b>
	(b) Describe significant features of landfill.	<b>04</b>
	(c) Explain liquid waste treatment in textile industry.	<b>07</b>
<b>Q.5</b>	(a) Explain liquid waste treatment in rubber industry.	<b>03</b>
	(b) Describe in detail Incineration.	<b>04</b>
	(c) Describe outline of effluent treatment plant.	<b>07</b>
	<b>OR</b>	
<b>Q.5</b>	(a) Describe primary treatment of wastewater.	<b>03</b>
	(b) Write down the advantages & disadvantages of ESP.	<b>04</b>
	(c) Explain solid waste treatment in polymer industry.	<b>07</b>

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