

GUJARAT TECHNOLOGICAL UNIVERSITY**DIPLOMA ENGINEERING – SEMESTER – 4(NEW) • EXAMINATION – SUMMER 2018****Subject Code: 3340504****Date: 04-May-2018****Subject Name: Pollution Control & Effluent Treatment****Time: 10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Use of programmable & Communication aids are strictly prohibited.
5. Use of only simple calculator is permitted in Mathematics.
6. English version is authentic.

- Q.1** Answer any seven out of ten. **14**
1. Define: Pollution.
 2. Define: Pollutant.
 3. Write down full form of ETP.
 4. Write any two effect of noise pollution.
 5. List out water sampling methods.
 6. List out ambient air sampling methods.
 7. Write down full form of BOD and COD.
 8. Write down full form of TDS and TSS.
 9. List out only types of pollution.
 10. Define pH.
- Q.2** (a) Draw a sketch of fabric filter. **03**
- OR
- (a) Explain gas absorption sampling method of ambient air. **03**
- (b) Draw a sketch of cyclone separator. **03**
- OR
- (b) Differentiate grab and composite sampling method. **03**
- (c) Describe any one control method of sulfur dioxide emission. **04**
- OR
- (c) Write any four effect of air pollution. **04**
- (d) Describe thermal incineration. **04**
- OR
- (d) Describe any one control method of nitrogen oxide. **04**
- Q.3** (a) Describe removal of pollutants by filtration. **03**
- OR
- (a) Explain pretreatment of waste water. **03**
- (b) Explain reverse osmosis. **03**
- OR
- (b) Describe removal of pollutants by coagulation. **03**
- (c) Explain any two characteristics of water. **04**
- OR
- (c) Distinguish waste water sampling methods. **04**
- (d) Explain trickling filter. **04**
- OR
- (d) Describe procedure for environmental audit. **04**
- Q.4** (a) Explain effect of land pollution. **03**

		OR	
	(a)	Classify solid waste.	03
	(b)	Discuss benefits of ISO 14001.	04
		OR	
	(b)	Explain thickening method for sludge processing.	04
	(c)	Describe effluent treatment plant for waste water treatment.	07
Q.5	(a)	Explain Ion Exchange for removal of dissolved solids.	04
	(b)	List out norms of GPCB for potable water.	04
	(c)	Write down importance of pollution control in chemical industry.	03
	(d)	Explain sanitary land filling method of solid waste disposal.	03
