

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V • EXAMINATION – SUMMER 2013****Subject Code: 150603****Date: 21-05-2013****Subject Name: Environment Engineering****Time: 10.30 am - 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.

- Q.1** (a) Explain various components of Environment. Also draw curve showing relationship between temperature and vertical height. **07**
- (b) Enlist various groundwater sources and explain in detail Radial Well and Infiltration gallery with sketch. **07**
- Q.2** (a) Explain any three physical/chemical characteristics of water with its respective permissible limits. **07**
- (b) Explain DO, BOD & COD. Also discuss relationship of DO and temperature. **07**
- OR**
- (b) Explain Eutrophication and sewage sickness. Also discuss its role in Environmental Engineering. **07**
- Q.3** (a) Explain One pipe and Two pipe system of plumbing for house drainage with sketch. **07**
- (b) Explain with sketch Nalni Trap and Gully Trap. **07**
- OR**
- Q.3** (a) Explain Compositing and Incineration method of sewage disposal with merits and demerits of each. **07**
- (b) Calculate the quantity of solid waste produced in the city having population of 5 Lakh. Also define Sullage, Sewage and Garbage. **07**
- Q.4** (a) Explain sources and effects of SO₂ and NO_x on human. **07**
- (b) Discuss with sketch Cyclone Scrubber and Fabric filter. **07**
- OR**
- Q.4** (a) Discuss various sources and effects of Noise Pollution on human. **07**
- Q.4** (b) Define Noise Pollution and Air Pollution. Also discuss how Noise/Sound is measured. **07**
- Q.5** (a) Describe various principles of house drainage. Also name various components of house drainage. **07**
- (b) Define EIA. Write brief note on it. **07**
- OR**
- Q.5** (a) Write name of any three water borne diseases with its responsible microbes. Also explain the respective control. **07**
- (b) Discuss some measures to control Air and Noise pollution. **07**
