

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
M. E. - SEMESTER – I • EXAMINATION – WINTER • 2013

Subject code: 711706N

Date: 06-01-2014

Subject Name: Environmental Sanitation

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)** What is an epidemic? How should it be controlled? **07**
(b) Discuss spread of Typhoid. Discuss its preventive and controlling measures. **07**

- Q.2 (a)** Discuss various components of good housing program. **07**
(b) How does over population affect the good hygiene program? **07**

OR

- (b)** Discuss significance and need for good ventilation for dwelling units and related areas. **07**

- Q.3 (a)** Discuss source, application and biological effects of UV radiations. **07**
(b) Explain nuclear chain reaction . **07**

OR

- Q.3 (a)** Discuss principles of radiation protection. **07**
(b) Discuss source, application and biological effects of Microwave radiations. **07**

- Q.4 (a)** Discuss pros and cons of a nuclear power plant as source of energy in India. **07**
(b) Discuss , practice of safety in a nuclear power plant. **07**

OR

- Q.4 (a)** What is maximum permissible dose of radiation? How is it measured? Discuss measurement by chemical effect and light generation. **07**

- Q.4 (b)** Discuss effects of radiation on living cells. **07**

- Q.5 (a)** What is radioactive half life? How do the effects differ with different half life? Discuss delayed somatic effects of radiation. **07**

- (b)** Discuss principles of radioactive liquid waste treatment. Explain one of the methods of treatment of high activity radioactive liquid waste. **07**

OR

- Q.5 (a)** Classify radioactive solid waste. Discuss various methods of treatment of radioactive solid waste. **07**

- (b)** Discuss , radioactive solid waste disposal methods. **07**
