

C.U.SHAH UNIVERSITY

Summer Examination-2016

Subject Name: Environmental Engineering

Subject Code: 4TE05ENE1

Branch: B.Tech(Civil)

Semester: 5 **Date:** 29/04/2016

Time: 2:30 To 5:30 **Marks:** 70

Instructions

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
 - (2) Instructions written on main answer book are strictly to be obeyed.
 - (3) Draw neat diagrams and figures (if necessary) at right places.
 - (4) Assume suitable data if needed.
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Q-1	Attempt the following questions:	(14)
a)	The atmosphere of big cities is polluted by (a) household waste (b) Radioactive fallout (c) Automobile exhaust (d) pesticides	01
b)	Coal is main Contributor of (a) CO ₂ (b) Co (c) So (d) N ₂	01
c)	Asthma, bronchitis and silicosis diseases are (a) water borne (b) Air borne (c) both (a) and (b) (d) None of these	01
d)	Which one is the intensity level of noise? (a) Newton (b) Decibel (c) Pascal (d) Watt	01
e)	Which of the following is an abuse of land? (a) Fertile land used for industries (b) Fertile land used for bricks production (c) Excavation of soil from fertile land for making highways (d) All of these	01
f)	Which is biggest source of potable water (a) River (b) ground water (c) storage reservoir (d) lake	01
g)	Define environmental science.	01
h)	Give full form of BOD and COD.	01
i)	Define Renewable energy.	01
j)	Define refuse.	01
k)	Define rubbish.	01
l)	Define leachate.	01
m)	Explain flocculation process in brief.	01
n)	Explain population equivalent.	01



Attempt any four questions from Q-2 to Q-8

- Q-2 Attempt all questions (14)**
- a) Explain various sources of water. 07
 - b) Explain the physical, chemical, and biological characteristics of waste water in brief. 07
- Q-3 Attempt all questions (14)**
- a) Explain classification of air pollutants. 07
 - b) Explain incineration process with its merits and demerits. 07
- Q-4 Attempt all questions (14)**
- a) Enlist different components of environment and describe in brief. 06
 - b) Explain the types of water demand in urban area. 06
 - c) How sound is produced? 02
- Q-5 Attempt all questions (14)**
- a) Discuss self-purification of natural streams. 06
 - b) Explain factors affecting per capita demand of water. 06
 - c) Describe infiltration well with its neat sketch. 02
- Q-6 Attempt all questions (14)**
- a) Explain different phases of microbial growth and draw neat sketch of microbial growth. 06
 - b) Effects of Organometallic Compounds on health. 04
 - c) What are uses of pesticides and fertilizers? 04
- Q-7 Attempt all questions (14)**
- a) Calculate the population of a town after two decades for following data by any Two methods. 05

Year	Population
1980	25000
1990	28000
2000	34000
2010	42000

- b) Explain fabric filters with its advantages and disadvantages. 05
 - c) Explain solid waste management in brief. 04
- Q-8 Attempt all questions (14)**
- a) Give advantages of renewable energy sources. 05
 - b) Explain control of noise pollution. 05
 - c) Explain sustainable development. 04

