# PRESIDENCY UNIVERSITY **BENGALURU**

# SCHOOL OF ENGINEERING **MID TERM EXAMINATION - NOV 2023**

Semester : Semester V - 2021 Course Code : CIV2043 Course Name : Sem V - CIV2043 - Urban Sanitation and Hygiene Program: B. TECH

Date : 6-NOV-2023 Time: 9:30AM - 11:00AM Max Marks: 50 Weightage: 25%

## Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Question paper consists of 3 parts.

(iii) Scientific and non-programmable calculator are permitted.

(iv) Do not write any information on the guestion paper other than Roll Number.

## PART A

## **ANSWER ALL THE QUESTIONS**

1. The purpose of urban sanitation is to reduce risks to human health by managing factors in the urban environment which can contribute to health problems. Give any four components of sanitation.

(CO1) [Knowledge]

(5 X 2 = 10M)

2. Environmental Impact Assessment (EIA) is an early warning process that verifies the enforcement of environmental policies. Define EIA.

(CO1) [Knowledge]

- **3.** Sanitation systems aim to protect human health by providing a clean environment. Define sanitation. (CO1) [Knowledge]
- 4. To effectively utilise solid wastes as fuel or for other purposes, it is crucial to understand the different chemical characteristics of municipal waste. List any four chemical characteristics of municipal waste.

(CO1) [Knowledge]

5. A Trap is design to hold some quantity of water. This water is called as trap seal acts as a barrier to prevent back flow of flow of air (foul gases). List the principle points of a plumbing trap.

(CO2) [Knowledge]

## PART B

## **ANSWER ALL THE QUESTIONS**

6. All Indian cities and towns become totally sanitized, healthy and liveable and ensure and sustain good public health and environmental outcomes for all their citizens with a special focus on hygienic and affordable sanitation facilities for the urban poor and women. Enlist the core principles of National Urban Sanitation Policy and expain any two of it in detail.

(CO1) [Comprehension]

(2 X 10 = 20M)





**7.** A trap is a depressed or bent sanitary fitting which, when provided always remains full of water, thus maintaining a water seal. It prevents the passage of foul gases. Write the classification of traps based on shape and use and explain any three traps based on use.

(CO2) [Comprehension]

## PART C

## ANSWER THE FOLLOWING QUESTION

### (1 X 20 = 20M)

**8.** a) A survey by the Central Pollution Control Board (CPCB) found that 351 river segments on 323 different rivers throughout the nation were polluted. Describe the Initiatives taken up by the Government of India for wastewater Management. (10 marks)

b) India took a defining step to curb pollution caused by littered and unmanaged plastic waste on July 1, 2022, when a ban was imposed on the manufacture, import, stocking, distribution, sale and use of identified single-use plastic items, which have low utility and high littering potential. Explain the Plastic Waste Management Amendment, 2021 (10 marks)

(CO1) [Application]