

(FOR THE CANDIDATES ADMITTED IN
DURING THE ACADEMIC YEARS

(NO. OF PAGES: 1)

20UCY4N3

2020 - 2021 ONLY)

REG.NO.:

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI

END-OF-SEMESTER EXAMINATIONS: JULY 2022

UG DEGREE PROGRAMMES (AIDED)

MAXIMUM MARKS: 50

IV-SEMESTER

TIME : 2 HOURS

PART - III

WATER AND WATER TREATMENT PROCESSES

SECTION - A

(10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.

1. Which of the following salts is responsible for hardness of water? **(K1)**
a) CaCl_2 b) NaCl c) KCl d) KNO_3
2. Foaming can be controlled by adding _____. **(K1)**
a) Salt b) castor oil c) soap d) grease
3. Cation exchange resin can be regenerated by adding _____. **(K1)**
a) NaCl b) HCl c) NaOH d) H_2SO_4
4. Floating impurities of large size can be removed by _____ process. **(K1)**
a) screening b) coagulation c) sedimentation d) disinfection
5. Process used to remove iron from water is _____. **(K1)**
a) aeration b) desalination c) ion exchange d) lime soda

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES

6. Define: Hard water **(K2)**
7. What is priming? **(K2)**
8. List the advantages of Zeolite process. **(K2)**
9. Write a note on sterilization. **(K2)**
10. What are the types of industrial wastes? **(K2)**

SECTION – B

(5 X 8 = 40 MARKS)

ANSWER ANY FIVE QUESTIONS OUT OF THE EIGHT QUESTIONS.

11. Explain the method of estimation of Hardness of water using EDTA. **(K3)**
12. What are scales and sludges? List out their limitations in boilers. **(K3)**
13. List out the disadvantages of hardwater in domestic use. **(K3)**
14. Summarize the method of softening of hard water using ion exchange process. **(K3)**
15. Explain the processing of softening water using lime soda process. **(K3)**
16. How will you purify water using electrodialysis and reverse osmosis? **(K3)**
17. Illustrate the process of municipal water treatment for drinking purpose. **(K3)**
18. Sketch the process involved in the treatment of chemical wastes from industries. **(K3)**
