NKT/KS/17/5098

Bachelor of Science (B.Sc.) Semester—II (C.B.S.) Examination

ENVIRONMENTAL SCIENCE

(Introduction to Water and Soil Chemistry)

Compulsory Paper–1

Time : Three Hours] [Maximum Marks : 50

N.B. :— (1) **ALL** questions are compulsory and carry equal marks.

(2) Illustrate your answer with suitable examples and diagram.

1. Describe a method of collecting sample for water or waste water quality testing. 10

OR

(a) How domestic waste and industrial effluents are responsible for degradation of water quality ? 5

(b) Discuss the effects of thermal pollutants on water quality. 5

2. What is hardness ? How are they classified ? Explain the method of its estimation. 10

OR

(a) High concentration of fluoride ions in drinking water are dangerous for public health. Why ? 5

(b) What is D.O. ? Why is it significant parameter of water quality ? 5

3. Define soil. Explain with sketch soil profile. 10

OR

(a) Discuss the various component of soil. 5

(b) Distinguish between acidic and basic soil. 5

4. Discuss the agencies responsible for soil erosion. Suggest a control measures. 10

OR

(a) Define soil fertility. How is it differ from soil productivity ? 5

(b) What are the objective of soil conservation ? 5

5. Write in short (any **ten**) :

(a) Why there is a need of sample preservation ?

(b) What does NTU stands for ?

(c) What do you understand by integrated type of water sample ?

(d) Write the information to be submitted along with sample.

(e) Explain how odour and tastes is measured in water.

(f) Define alkalinity.

(g) What is the composition of soil ?

(h) Define weathering.

(i) What do you understand by cation exchange capacity ?

(j) What are the characteristics of humus ?

(k) What are the functions of National waste land development board ?

(l) Name the branch which delays with the study of soil. 1×10=10