KNT/KW/16/5220

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

WATER POLLUTION : MONITORING AND MANAGEMENT

Paper—1

(Environmental Science)

Time : Three Hours] [Maximum Marks : 50

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

(2) Illustrate your answers with suitable examples and diagrams.

1. What is Ganga Action Plan ? Why is it required ? Explain the status of Ganga Action Plan. 10

OR

(a) Describe the sources and effects of Water Pollution in India. 5

(b) What are the causes of ground water pollution ? 5

2. What is Eutrophication ? What are its causes ? How do you control it ? 10

OR

(a) Explain Oxygen Sag Curve. Write its sketch and highlight its significance. 5

(b) What is N/P Ratio ? What is its significance in water pollution ? How can you maintain N/P Ratio ? 5

3. What are Cooling Towers ? How cooling towers can help in mitigating thermal pollution ? Explain two fundamental types of cooling towers used in India with sketches. 10

OR

(a) What are the criteria to select a site for Thermal Power Plant ? 5

(b) Discuss, in brief, the utilization of Flyash from thermal power stations. 5

4. What are Anthropogenic Radio-active pollution ? What are its causes and sources ? 10

OR

(a) Why Chernobyl is the world's worst Nuclear disaster ? How it could have been controlled ? 5

(b) Classify Hazardous Wastes. What are the characteristics of Hazardous waste ? 5

5. Attempt any **TEN** :

(a) Advantages of COD determination over BOD determination.

(b) What is TKN ? What is its significance ?

(c) What is chemical speciation scheme ?

(d) Counter Measures against oil spills.

(e) Wash water characteristics from Cargo Vehicle.

(f) Factors affecting self purification.

(g) Disruption of Food Chain because of Thermal pollution.

(h) What is Flyash ?

(i) What is spray pond ?

(j) Types of Radio-active Fallout.

(k) Define Ionizing Radiation.

(l) What is Radioactivity ? 1×10=10