(C) Give a brief account of sources and health significance of Cr and Cu metal. **4**

Or

How lime analyse in soil sample ?

(D) Describe method for determining total nitrogen in soil. **12**

Or

With reference to metals Hg, Cd, As, explain biochemical effect of heavy metals contamination.

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Roll No. ..... Total No. of Sections : 4

Total No. of Printed Pages : 4

Code No. : B03/302

III Semester Examination

M.Sc.

CHEMISTRY

Paper III

[Environmental Chemistry]

Time : Three Hours] [Maximum Marks : 80

[Min. Passing Marks : 16

Note : *Part A and B of each question in each unit consists of Very Short Answer Type Questions which are to be answered in one or two sentences. Part C (Short Answer Type) of each question will be answered 200-250 words. Part D (Long Answer Type) of each question should be answered within the word limit 400-450.*

Unit–I

1. (A) Write the composition of atmosphere. **2**

(B) Draw the sulphur cycle. **2**

(C) Explain vertical temperature of atmosphere. **4**

Or

Give an account of pollution by thermal power plant.

(D) Discuss the disposal of waste and their management. **12**

Or

Explain nitrogen and phosphorus cycle with diagram.

Unit–II

2. (A) What is water quality standards ? **2**

(B) Define biodegradability. **2**

(C) Describe the pollution of soil due to fertilizers and how can we control it ? **4**

Or

Describe pesticide pollution or agriculture pollution.

(D) What is water pollution ? Describe the types of water pollution (aquatic pollution). **12**

Or

Describe the methods of water treatment.

Unit–III

3. (A) What is acid rain ? **2**

(B) What is photochemical smog ? **2**

(C) Give the importance of earth's radiation balance. **4**

Or

Describe any two methods for sampling air pollutants.

(D) What is air pollution ? Describe types of air pollutants and their effect. **12**

Or

Describe the techniques to control air pollution.

Unit–IV

4. (A) How will you determine pH in soil ? **2**

(B) Define chlorine demand or residual chlorine. **2**