D 11570 (Pages : 2) Name.....

Reg. No.....

FIFTH SEMESTER B.A./B.Sc./B.Com./B.B.A. DEGREE (SUPPLEMENTARY/ IMPROVEMENT) EXAMINATION, NOVEMBER 2016

(UG—CCSS)

Open Course

CH 5D 01—ENVIRONMENTAL CHEMISTRY

Time : Three Hours Maximum : 30 Weightage

I. Answer all the *twelve* questions. Each question carries a weightage ¼ :

(This section contains multiple choice, fill in the blanks, and word answer questions)

Choose the correct answer of the following :

1 Which gas released from jet exhaust causes air pollution ?

(a) Chlorine. (b) Carbon dioxide.

(c) Fluorine. (d) Nitrogen oxides.

2 The total amount of dissolved salt in water is called :

(a) Salinity of water. (b) Alkalinity.

(c) Turbidity. (d) Total dissolved solids.

3 Which of the following gas is controlled using Wet and Dry Chemical scrubbers ?

(a) SO_2. (b) NO_2.

(c) CO_2. (d) CH_4.

4 In which term the air pollution is measured ?

(a) Parts per billion. (b) Parts per million.

(c) Parts per trillion. (d) Parts per gram.

5 Endosuiphan is an off patent organo chlorine ———— pollutant.

6 Minamatha incident is related to ———— Poisoning.

7 ———— type of pesticide causes' eutrophication, threatening aquatic life.

8 The amount of oxygen used up during oxidation of oxygen demanding waste is called ————.

9 Name one method of desalination of water.

10 What is the environmental segment of the outer mantle of solid earth ?

11 What is the other name of the horizon-top soil ?

12 What is the cloudiness or haziness of a fluid by suspended solids called ?

(12 × ¼ = 3 weightage)

Turn over

II. Each question carries a weightage 1. Answer all the *nine* questions :

13 What is the source of fly ash ?

14 Name of any two secondary air pollutants.

15 How is fluoride concentration in water tested ?

16 Suggest a method for detecting excess concentration of Sulphur dioxide gas in air.

17 Name any two environment friendly substitutes for CFC.

18 Suggest any four water quality indices.

19 Which is the major greenhouse gas. What is it's source ?

20 What is biosphere ?

21 Suggest a method of analysis of radioactive pollutants.

(9 × 1 = 9 weightage)

III. Each question carries a weightage of 2. Answer any *five* questions :

22 Write the difference between pollutants and contaminants.

23 Describe the harmful effects of thermal pollution.

24 Some inorganic ions and toxic heavy metalsare causing water pollution. What are they ?

25 Write briefly about the composition of the atmosphere.

26 What are persistent and non persistent pollutant ?

27 To determine dissolved oxygen in water by Winkler method, the test should be done instantaneously. Why ?

28 What are the various parameters in air quality monitoring fixed by Central Pollution Control Board of India ?

(5 × 2 = 10 weightage)

IV. Answer *two* questions. Each question carries a weightage of 4 :

29 Write the composition of particulates and discuss the health effects of particulates.

30 Discuss in detail the various noise control measures.

31 What are the steps involved in Tertiary treatment of Sewage ? Explain the USAB Process.

(2 × 4 = 8 weightage)