

C 62095

(Pages 2)

Name.....

Reg. No.....

FOURTH SEMESTER B.Sc. DEGREE EXAMINATION, MAY 2014

(UG-CCSS)

Biotechnology

Complementary Course

BT 4C 02—ENVIRONMENTAL BIOTECHNOLOGY

Time : Three Hours

Maximum : 30 Weightage

I. Objective type question. Answer *all* questions :

A True or False :

- 1 Whey is a byproduct of textile industry.
- 2 Amylase is an enzyme widely used **in food industry.**
- 3 **Chlorella** is an excellent choice for use as **SCP.**
- 4 A **bioscrubber** is physically similar to a **chemical scrubber.**
- 5 The Odyssey disaster was due to water **pollution.**
- 6 **Polyactic acid (PLA) is a transparent plastic produced by bacteria.**

B. Name the following :-

- 7 An in situ **bioremediation** technology.
- 8 Enzyme widely used in leather industry.
- 9 Lactic acid based plastic.
- 10 A bacteria used for the industrial production of **PBA**
- 11 **Biotrickling** filters used to control odours.
- 12 **Minamata** disease is caused by.

(12 x = 3 weightage)

II. Short answer type questions. Answer *all* questions :

- 13 **Biofilters.**
- 14 Lagoons.
- 15 Natural dyes.
- 16 **Biopol.**
- 17 **Bio** degradation of pesticides.
- 18 **Biogas.**

Turn over

19 Applications of **bio-scrubbers**.

20 Microbes employed for the production of **SCP**.

21 Disadvantages of **bioplastic**.

(9 x 1 = 9 weight)

III. Short essay or paragraph questions. Answer any *five* questions :

22 Distillery waste water treatment techniques.

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23 Water pollution parameters.

24 Immobilisation techniques.

25 Detail the characteristics of Dairy waste water.

26 Lead pollution.

27 Treatment technologies of tannery effluents.

28 Disposal strategy of wastes generated from pulp and paper industry.

(5 x 2 = 10 **weightage**)

IV. Essay questions. Answer any *two* :

29 Detail waste water treatment processes.

30 How can biotechnology be used in controlling pollution through the use of cleaner technology ?

31 Sources and effects of pesticide pollution.

(2 x 4 = 8 **Weightage**)