C 83030 (Pages : 2) Name Reg. No.....

SECOND SEMESTER B.Sc. DEGREE EXAMINATION, MAY 2015

(CUCBCSS-UG)

Complementary Course

Biotechnology

BT 2C 07—ENVIRONMENTAL BIOTECHNOLOGY

Time: Three Hours

Maximum: 80 Marks

Section A

Answer any **two** out of four questions in about 1500 words. **10** marks for each question.

- 1. Describe the tertiary treatment of wastewater.
- 2. Explain medical waste treatment methods.
- Which are the important characteristics of waste water.
- 4 Describe the steps for determining the quality of potable water.

 $(2 \times 10 = 20 \text{ marks})$

Section B

Answer any **seven** out of fourteen questions in about 750 words. 5 marks for each question.

- 5. What is activated sludge process?
- 6. Write down the procedure of distillation of water.
- 7. What is a fedbatch reactor?
- 8. What is confirmed test?
- 9. What is a packed column reactor?
- 10. What is phytoremediation?
- 11. State the adverse effects of nitrate in drinking water.
- 12. What is eutrophication?
- 13. Write a note on water contaminating microorganisms.
- 14. Which are the measures to control water pollution?
- 15. What is fluidized bed reactor?
- 16. Why E-coli is used as an indicator?
- 17. What is chemical characters of waste water?
- 18. What is UASB?

 $(7 \times 5 = 35 \text{ marks})$

Turn over

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Section C

Answer all questions in about 300 words.

3 marks for each question.

- 19. What is dissolved oxygen content?
- 20. What is **BOD**? State the significance.
- 21. What are methanogens?
- 22. What is the use of duckweed?
- 23. Advantages of biological treatment.

 $(5 \times 3 = 15 \text{ marks})$

Section D

Answer all questions in about 200 words. 2 marks for each question.

- 24. Write down a method for the removal of salinity from drinking water.
- 25. What is **imhoff** tank?
- 26. Mention the principle of **UVIight** treatment of water.
- 27. State the uses of sludge.
- 28. What is the reason for temporary hardness of water?

 $(5 \times 2 = 10 \text{ marks})$