C 4015



Name
Reg. No

FOURTH SEMESTER B.Sc. DEGREE EXAMINATION, MAY 2016

(CUCBCSS-UG)

Complementary Course

BTY 4C 15—ENVIRONMENTAL BIOTECHNOLOGY

Time: Three Hours

Maximum: 40 Marks

Section A

Answer any one question out of two questions in about 1500 words.

Each question carries 10 marks.

- 1. What are the feed-stocks and conversion routes in the production of bio-energy?
- 2. What are the types of single cell proteins? Describe the general procedure of production of micro-algal biomass.

 $(1 \times 10 = 10 \text{ marks})$

Section B

Answer any three out of five questions in about 1,000 words.

Each question carries 5 marks.

- 3. Describe land farming technique for soil bio-remediation.
- 4. What are bio-pesticides? How are they classified based on origin?
- 5. What is the process involved in bio-leaching of uranium?
- 6. What are the properties and applications of PHB?
- 7. What are the in situ bio-remediation techniques?

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

Section C

Answer all **five** questions in about 500 words. Each question carries 3 marks.

- 8. What are the environmental benefits of bio-plastics?
- 9. What is phytoextraction?
- 10. Explain the process of methanogenesis.
- 11. What are the nitrogen fixing bio-fertilisers used in agriculture?
- 12. What is bio-derived polyethylene?

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