# BSc DEGREE EXAMINATION MAY 2017 MBcV (Sixth Semester)

#### **Branch - BIOCHEMISTRY**

#### ENVIRONMENTAL BIOCHEMISTRY & CIVICS

Time: Three Hours Maximum: 75 Marks

### SECTION-A (20 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10x2 = 20)

- 1 What is Eutrophication?
- What is composting?
- 3 Explain the role of microbes in pesticide degradation.
- 4 What is systemic pesticide?
- 5 Mention any two toxic effects of lead.
- 6 Define plant mining.
- What are mutagens?
- 8 Give any two examples of environmental teratogen. '\*
- 9 Enlist the fungal toxins.
- 10 Mention the importance of Bt toxins.

## SECTION - B (25 Marks!

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5x5 = 25)

11 \* a Write a note on municipal waste water treatment.

OR

- b Explain the different sources of air pollution.
- Write about the effects of pesticides on environment.

OR

- b Give an account on mode of action of 2.4 D and carbamates.
- 13 a Describe the toxic effects of mercury.

OR

- b Enumerate the biological and pathological effects of silica.
- 14 a Write short notes on environmental mutagens.

OR

- b Explain the mode of action of heterocyclic aromatic compounds in carcinogens.
- 15 a Write a short note on biofertilizers.

OR

b Explain the role of nif. genes in nitrogen fixation.

### SECTION - C (30 Marks).

Answer any THREE Questions

ALL Questions Carry EQUAL Marks  $(3 \times 10 = 30)$ 

- \* Explain the sources effects and control of soil pollution.
- Explain the role of recombinant DNA technology in pesticides degradation.
- 18 Give an account on microbial mining.
- 19 Discuss the teratogens and their effects.
- 20 Explain the role of microorganisms in nitrogen fixation.