Roll No.						Total No. of Pages: 0	2

Total No. of Questions: 11

M.Sc (BT) EL-I (2018 Batch) (Sem.-1) ENVIRONMENT BIOTECHNOLOGY

Subject Code: MBT-111 M.Code: 75664

Time: 3 Hrs. Max. Marks: 70

#### **INSTRUCTIONS TO CANDIDATES:**

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains SEVEN questions carrying SIX marks each and students have to attempt any FIVE questions.
- 3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

### **SECTION-A**

# Q1. Describe briefly:

- a) Trickling filters
- b) Oxidation ponds
- c) Environmental pollution
- d) Metagenomics
- e) Phytoremediation
- f) Microbial leaching
- g) Biocomposting
- h) Biomineralization
- i) Biofuels
- j) Biosurfactants

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### **SECTION-B**

- Q2. Describe briefly the parameters used for monitoring water pollution.
- Q3. Describe the treatment of waste water from distillery with a flow sheet.
- Q4. What are lignocellulosics? Describe the biodegradation of lignocellulosics and agricultural chemicals.
- Q5. Describe the innovative techniques for prevention and control of pollution.
- Q6. What do you understand from preliminary treatment, clarification and coagulation? Explain briefly.
- Q7. What is organic farming? Describe biomass as a source of energy.
- Q8. What is biomedical solid waste? Discuss its treatment with suitable examples.

## **SECTION-C**

- Q9. Describe briefly water borne infectious agents. Also highlight the detection and control of pathogenic microbes in water.
- Q10. What is bioremediation? Describe the metagenomics and culture based approaches for bioremediation.
- Q11. Discuss the biodegradation of PAH, biosurfactants and oil pollution.

NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

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