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**ESH 403**

**First Semester M.Sc. Degree Theory Examination,  
December 2018/January 2019  
(CBCS)  
ENVIRONMENTAL SCIENCE  
Environmental Microbiology**

Time : 3 Hours

Max. Marks : 70

**Instruction :** Answer *all* the Parts and draw *neat* sketches *wherever* necessary.

**PART – A**

- I. Write short notes on **any four** of the following (**not** exceeding **2** pages **each**) : **(4×4=16)**
- 1) Indicator organisms in waters.
  - 2) Microbes in air.
  - 3) Bioremediation.
  - 4) Solid waste.
  - 5) Soil microbes.
  - 6) Microbial interactions.

**PART – B**

- II. Write explanatory notes on **any five** of the following (**not** exceeding **3** pages **each**) : **(5×6=30)**
- 7) Classification of microorganisms.
  - 8) Microbes of extreme environment.
  - 9) Control of pests and diseases by microorganisms.
  - 10) Microbial degradation of pesticides.
  - 11) Microbial influenced corrosion and remedies.
  - 12) Treatment of liquid industrial wastes.
  - 13) Role of Microbes in metal extraction.

P.T.O.



PART – C

III. Answer **any two** of the following (**not exceeding 8 pages each**) : **(2×12=24)**

- 14) Explain the role of microorganisms in CNS cycles.
  - 15) Describe the methods of sampling and identification of microbes.
  - 16) Write about genetically modified microorganisms and their ecological implications.
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