

**2008****M.Sc.****3rd Semester Examination****AQUACULTURE MANAGEMENT & TECHNOLOGY****PAPER—AMT-3002***Full Marks : 40**Time : 2 Hours**The figures in the right-hand margin indicate full marks.**Candidates are required to give their answers in their own words as far as practicable.**Illustrate the answers wherever necessary.***(Microbiology and Public Health Fishery)***Answer Q. No. 1 and any three from the rest.*

1. Answer any five of the following: 2×5
- a) Write the importance of sub-merged aquatic weeds.
  - b) What is oxidation pond?
  - c) State the significance of gram staining.
  - d) What do you mean by holocarpic fungi?
  - e) What is the level of BOD<sub>5</sub> in aquatic ecosystem?
  - f) What are the agricultural effluents?
  - g) Define algal bloom.
  - h) What is cultural entrophication?

*(Turn Over)*

2. a) Define virus.  
b) Write the names of two beneficial bacteria of human importance.  
c) Briefly describe the Microbiological methods of waste water treatment.  
d) Why *E. Coli* is considered as an indicator organism of water pollution? 2+2+4+2
3. a) What do you know about water pollution?  
b) State the sources of water pollution.  
c) Give an account on health impacts of water pollution. 2+3+5
4. a) What are the causes of eutrophication?  
b) Briefly discuss the impact of marine pollution on aquatic biota.  
c) Enumerate the WATER (PREVENTION AND CONTROL OF POLLUTION) ACT, 2003. 2+4+4
5. a) Compare the cell wall structure of Gram +ve and gram -ve bacteria.  
b) What are the factors which generally regulates the growth of micro-organisms in an aquatic body?  
c) What do you mean by Lyophilization? 4+4+2
6. Write short notes (any two) : 5×2
- a) Pure culture techniques.  
b) Types of fungi & their identifying characters.  
c) Sewage treatment.  
d) Importance of aquatic Macro vegetation.
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