M.Sc. (Part-I) (Environmental Science) (with Credits)-Regular-Semester 2012 (Old / CBCS Pattern) Sem II

EVS-09 / Old-Paper-VII + CBCS-PSCENVT07: Environmental Disaster and **Environmental Microbiology and Biotechnology**

P. Pages: 1 GUG/S/18/5745 Time: Three Hours Max. Marks: 80 Notes: 1. All questions are compulsory and carry equal marks. Illustrate the answers with suitable diagrams and examples. 2. 1. Discuss landslides as environmental hazard w.r.t. magnitude of the problem and 16 adjustment to it. OR a) How earthquake resistance buildings can be constructed? 8 Describe man induced hazards w.r.t. dam bursts. b) 8 2. Discuss the role of micro organisms in activated sludge process and trickling filter. 16 OR Explain the structure of fungi and bacterial. a) 8 Describe environmental aspects of infectious diseases w.r.t. water borne diseases. 8 b) Discuss mushroom cultivation and vermiculture method. 3. 16 OR Describe how biotechnology is used in reclamation and restoration of environment. 8 a) b) Explain the scope of biotechnology. 8 Discuss research problem and design w.r.t. problem selection, necessity of defining the 4. 16 problem and technique involved in defining a problem. OR Describe writing steps in writing reports. 8 a) What are random and non-random sampling methods? 8 b) 5. Write a brief note on snow avalanche. 4 a) What is the scope of environmental microbiology? b) Explain the terms: Bioethics and biosafety. c) d) How research data is collected through census? 4