27/5/13 D: PH (April Exam) 31 Sem - II (Rev.) A TLT. Microbiology Con. 5450-13. (REVISED COURSE) | Total Marks: 40 (2 Hours) N.B. (1) Question No. 1 is compulsory. (2) Attempt any four questions from the remaining six questions. (3) Draw a neat labeled **diagrams** wherever **necessary**. 1. (a) Define the following terms with one example whenever necessary-(i) Numerical aperture (ii) Sanitizer (iii) TDP [Thermal death point] (iv) Sterilization. (b) Discuss in detail gaseous sterilization with respect to method and application. 2. Distinguish any two of the following:-8 (a) Gam +ve Bacterial cell wall and Gram-ve bacterial cell wall (b) Bacteria and fungi (c) Selective and Enrichment media. 3. Write short notes on any two of the following: 8 (a) Cultivation of anaerobic bacteria (b) Lysogeny in λ Bacteriophage (c) Bacterial capsule. 4. (a) Discuss phenol coefficient test for evaluation of disinfectants. 4 (b) Write a note on protozoal infection. 4 5. Write short notes on (any two) :-8 (a) Bright field Microscopy (b) Preservation of Bacteria (c) Economic importance of algae. 6. (a) Draw neat labeled diagram for any two of the following-4 (i) Bacterial sporulation. (ii) Fluorescence Microscopy. (iii) Reproduction in fungi (b) Explain in brieflytic cycle in T_4 bacteriophage. 4 7. (a) Name the causative organism, diagnostic test and treatment of the following injections (any two): (i) Tetanus (ii) Malaria (iii) Bacillary dysentry. (b) Answer any **five** of the following – 5 (i) Name any two fungal infections with causative organism (ii) Name any two examples of acid fast bacilli (iii) Name any two capsulated bacteria (iv) Name biological indicator of Dry heat sterilization (v) Write two application of UV light sterilization (vi) Name any two enteric pathogens. (vii) Name any two diseases caused by shigella.