

C.U.SHAH UNIVERSITY

WADHWAN CITY

University (Winter) Examination -2013

Course Name :B.Sc(Micro) Sem-I

Subject Name: -World of Microbes

Duration :- 2:30 Hours

Date : 12/12/2013

Instructions:-

- (1) Attempt all Questions of both sections in same answer book / Supplementary.
- (2) Use of Programmable calculator & any other electronic instrument is prohibited.
- (3) Instructions written on main answer Book are strictly to be obeyed.
- (4) Draw neat diagrams & figures (If necessary) at right places.
- (5) Assume suitable & Perfect data if needed.

SECTION-I

Q-1 Define the following

- (a) Microbiology (b) Animalcules (c) Antibody (d) Immunology (e) Media (f) CFU (g) Pure culture (7)

Q-2(a) Write a note on Theory of spontaneous generation. (5)

Q-2(b) What is germ theory of disease? Who proposed the germ theory? (5)

Q-2(c) Explain the contributions of Anton Von Leeuwenhoek. (4)

OR

Q-2(a) Explain the contributions of Louis Pasteur in the field of Microbiology. (5)

Q-2(b) Explain the contributions of Ignaz Semmelweiss in the field of Microbiology. (5)

Q-2 (c) Briefly discuss scope of microbiology. (4)

Q-3(a) Write a note on history of microbiology. (7)

Q-3(b) Describe the process of active & passive transport. (7)

OR

Q-3(a) Describe Replica plating technique. (7)

Q-3 (b) Give the composition of Mac Conkey agar & enlist its functions. (7)

SECTION-II

Q-4 Define the following:

- (a) Resolving power (b) Magnification (c) Dye (d) Chromophore (e) Sterilization (f) Antiseptic (g) Disinfectant (7)

Q-5(a) Briefly describe about Scanning electron microscopy. (5)

Q-5(b) Explain the principle & procedure of Gram staining. (5)

Q-5(c) Classify bacteria based upon their shapes. (4)

OR

Q-5(a) Classify Dyes with examples. (5)

Q-5(b) Describe the gram negative cell wall. (5)

Q-5 (c) Classify microscopic techniques with examples . (4)

Q-6 (a) Classify methods of sterilization and explain about dry heat method. (7)

Q-6 (b) Describe the detailed structure of bacterial cell. (7)

OR

Q-6(a) Discuss the mechanism of action of antibacterial drugs with suitable examples. (7)

Q-6 (b) Give the principle & working of Autoclave (7)

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