

C.U.SHAH UNIVERSITY

WADHWAN CITY

University (Winter) Examination -2013

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

Subject Name: - Microbial Diversity & taxonomy

Duration :- 3:00 Hours

Date : 16/12/2013

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) Taxonomy (b) Classification (c) Nomenclature (d) Identification (e) Stromatolites (f) Genus (g) Systematics (7)

Q-2(a) Write a note on Carl Woese classification. (5)

Q-2(b) Describe Jaccard coefficient. (5)

Q-2(c) Give the importance of microbial taxonomy. (4)

OR

Q-2(a) Which genera of Gram negative bacteria are associated with plants as nitrogen fixers and plant pathogens? (5)

Q-2(b) Describe general features of Facultative anaerobic gram positive cocci with examples. (5)

Q-2(c) Describe phototrophic bacteria with examples. (4)

Q-3(a) Explain the various classification systems in taxonomy. (7)

Q-3(b) Give the general characters of family: Pseudomonadaceae with examples. (7)

OR

Q-3(a) Describe molecular characteristics used in assessing microbial taxonomy. (7)

Q-3 (b) Give a brief account of Bergey's manual of bacteriology. (7)

SECTION-II**Q-4 Define the following:**

- (a) Virus (b) Bacteriophage (c) Prophage (d) Capsid (e) Pseudopods (f) Phycology (g) Mycology (7)

Q-5(a) Write a note on algal pigments. (5)

Q-5(b) Explain the structure of retrovirus. (5)

Q-5(c) Define (a) Symbiosis (b) Parasitism (c) Commensalism (d) Mutualism (4)

OR

Q-5(a) Describe sexual reproduction in Fungi. (5)

Q-5(b) Describe life cycle of paramecium. (5)

Q-5 (c) Give the structure of amoeba. (4)

Q-6 (a) Explain Lytic cycle in detail. (7)

Q-6 (b) Write a note on Tobacco mosaic virus & its life cycle. (7)

OR

Q-6(a) Classify algae with examples. (7)

Q-6 (b) Describe the methods of cultivation of viruses and explain any one method. (7)

*****16*****

