

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- Sep 2019

M.Sc. 1st Semester

COURSE CODE: 18MS1BT111

MAX. MARKS:15

COURSE NAME: GENERAL MICROBIOLOGY

COURSE CREDITS: 3

MAX. TIME: One Hr

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

Q1. A. How can nucleic acid hybridization be used to identify unknown microorganisms by Southern Blotting. [1] (CO I)

B. Justify the statement – 'Numerical Taxonomy has proved to be a useful tool in Microbial taxonomy'. [2] (CO I)

Q2. Discuss Koch's postulates with diagrams; describe its significance in the development of medical microbiology. [3.5] (CO I)

Q3. Draw a typical bacterial growth curve. Describe each phase of the growth curve and its significance. [4] (CO II)

Q4. Give reasons FOR or AGAINST the following statements. [1.5 X 3 = 4.5] (CO II)

- i. High concentration of salt in pickles decreases its shelf life.
- ii. Pasteurization of liquid food items is preferred over autoclaving even though it does not kill 100% microorganisms.
- iii. The 'pour plate' is a better technique than 'spread plate' to determine bacterial colony count of a soil sample.