This question paper contains 2 printed pages.

B.Sc. (Part. - I) **Roll No.**

8001 - I **Microbio.**

B.Sc. (Part - I) EXAMINATION - 2020
(Faculty of Science)
(Common to Three and Five Year Integrated Course)
BIO - TECHNOLOGY
Paper - BT - 101
Microbiology

Time Allowed: Three Hours
Maximum Marks: 50

Note:- (i) Question paper will be divided into two Parts A and B. Part - A of question paper shall be compulsory and contain 10 (Ten) very short answer type question of 20 words covering entire syllabus. Each carrying 1 (one) mark, with a total of 10 marks.

(ii) Part - B of question paper will have 4 questions, one question with internal choice from each Unit / section. Students are required to attempt four questions in all from Part - B. selecting not more than one question from each Section. Each question will carry 10 marks, with a total of 40 marks.

SECTION - A

1. Answer the following question briefly:- $1 \times 10 = 10$

   (a) What is Whittaker five kingdom concept?

   (b) What is Bergey's Manual used for?

   (c) Write the name of stalked bacteria.

   (d) What is amphitrichous? Also write an example of amphitrichous bacteria.

   (e) What is transduction?

   (f) Define Batch culture.

   (g) Define Biofertilizers.

   (h) What are biopesticides?

   (i) What are secondary metabolites?

   (j) What is Archae bacteria?

SECTION - B

2. Write a detail note on characteristics and structure of mycoplasma. 10

OR

Write short notes on following:- $5+5=10$

(a) Algae characteristics.

(b) Haecket's three kingdom concept.

3. Write a detail note on nutrition in bacteria. 10

P.T.O.

OR

Write short notes on following:-

(a) Difference between Gram positive and Gram negative bacteria.

(b) Plasmid.

4. Describe the process of transformation in bacteria.

OR

Explain the microbial growth curve.

5. Write notes on:-

(a) Food preservation.

(b) Secondary metabolites.

OR

How pollution control through use of consortium of micro-organism describe in detail.