

GURUDAS COLLEGE

**B. Sc. SEMESTER I (Honours) Odd Semester Examination, 2021
Online Practical Examination**

Subject: BOTA

Subject Category: Honours

CORE COURSE-1

Course: BOT-A-CC-1-1-P

Course Name: Phycology and Microbiology

Date of Examination: 5th March, 2022

Full Marks – 30

Time – 1 hour & 30 minutes

Q1. Describe the external features of the thallus of Macrandrous species of *Oedogonium*. Make a free hand drawing with labels of the reproductive structures of the Macrandrous species of the algae. Write the identifying features of *Oedogonium*. 4+2+2+2

- Q2. a) What is differential staining? 2
- b) Name the reagents required for Gram's staining for bacterial culture. 2
- c) What do you mean by heat fixation? 2
- d) What are the characteristics of a bacterial cell that can be determined using Gram's staining? 2
- e) What is the purpose of using counter stain in Gram's staining? 2

Q3. a) Identify the genus with reasons.

1+1½

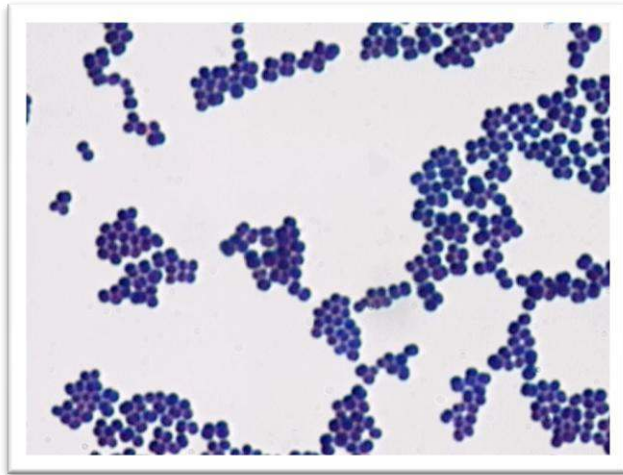


b) Identify the genus with reasons.

1+1½



c) Comment on the nature and morphology of the bacterial colony as shown in Figure below. 1+1½



d) Name one mounting media used for making algal slide. Name the equipment which is required to find out the magnification of a prism drawing of an algal sample. 10 small stage divisions are magnified to 2cm. under low power objective of a compound microscope. Find out the magnification.

$\frac{1}{2} + \frac{1}{2} + \frac{1}{2}$

Instructions for submission of answer scripts

1. Write the front page/top sheet as per instruction.
2. Scan the pages in sequence and make a single PDF file.
3. Rename file as per instruction.

4. Email the PDF file within the stipulated time to the following Email IDs:

1) botahons2020@gmail.com

2) bothons2020on@gmail.com

3) 2021sem1bota@gmail.com