

GURUDAS COLLEGE

DEPARTMENT OF BOTANY
ONLINE INTERNAL EXAMINATION, 2020
BOTANY — HONOURS
B. Sc PART-I (1+1+1)
Paper: I

Full Marks: 100

Date of examination: 9th December, 2020

*The figures in the margin indicate full marks
Candidates are required to give their answers in their own words as far as
practicable*

Moudule – I

Full Marks: 50

Q1. Answer **any two** of the following: 20 X 2

A) Write a short note on each of the following: 4 x 5

- i) Algal toxins
- ii) Structure and functions of heterocyst
- iii) Thallus structure of *Oedogonium*
- iv) Economic importances of algae

B) Answer the following:

- i) Why Blue Green Algae is also called Cyanobacteria? 5
- ii) Draw and label the male reproductive organ of *Chara* . 5
- iii) Describe the structure of Diatom cell. 5
- iv) Mention the pigments and stored food of Phaeophyta. 5

C) Write a short note on each of the following: 4x5

- i) Bacterial plasmid
- ii) Bacterial endospore structure
- iii) Lytic cycle
- iv) One step growth curve of viral multiplication

D) Answer the following:

- i) Discuss industrial production of vinegar. 5
- ii) Write briefly about generalized transduction. 5
- iii) Mention important characters of Archae bacteria. 5
- iv) What is F-factor? How does it differ from Hfr? 2+3

Q2. Answer *any one* of the following: 10 x 1

- a) Write down the salient features of Rhodophyta . What are phycobiliproteins and where are they found? 5+3+2
- b) Distinguish between the chemical nature of Gram positive and Gram negative bacterial cell wall. 10

Module II
Full Marks: 50

3. Answer the following questions (Any 2):

20 x2

a. Write a short note on Disease Triangle. Define pathogenicity and pathogenesis. Discuss about Koch's Postulate. Explain the role of quarantine in the plant disease management.
5+5+5+5

b. Discuss the mode of nutrition in fungi. Describe the economic importance of Lichen. Give a brief outline on the industrial production of ethanol from fungus. Discuss about the fruiting body of *Ascobolus*.
5+5+5+5

c. What is plant disease and state the factor responsible to cause plant disease. Define: Primary Inoculum and Necrotroph. Discuss briefly about the Integrated plant disease management. Name a disease caused in potato, its causative agent and symptoms.
5+5+5+5

d. Explain the life history of *Agaricus* sp. Give a brief account on Ainsworth's system of classification of fungus. Describe about different types of Lichen. Write a short note on Aflatoxin.
5+5+5+5

4. Answer any 1 of the question:

10X1

- a. Discuss the biological plant disease management.
- b. Explain the nutritional value of mushroom.

Instructions for submission of answer scripts

1. Write the front page/top sheet as per instruction. Give page numbers on each page.
2. Scan the pages in sequence and make a two PDF files one for Paper II and another PDF file for Paper III.
3. Rename file as per instruction.
4. Email the PDF file within the stipulated time to **honsbotanygurudacollege@gmail.com** and also give CC email to **botanygurudacollege@gmail.com**