#### MCC/21/M.SC./SEM-III/BOT/1

# PG CBCS M.Sc. Semester-III Examination, 2022 BOTANY

PAPER: C-BOT 304 (PLANT & SOCIETY-II)

Full Marks: 40



Time: 2 Hours

#### Write the answer for each unit in separate sheet

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

# **UNIT: C-BOT 304.1: PLANT & ENVIRONMENT**

Marks: 20

#### **GROUP-A**

#### 1. Answer any TWO questions of the following:

 $2 \times 2 = 4$ 

- a) Define Phytoremediation
- b) What is sustainable development in ecology?
- c) Write the functions of aquatic ecosystem
- d) Mention two adaptations of mangrove plants. Give an example.

#### **GROUP-B**

## 2. Answer any TWO questions of the following:

 $4 \times 2 = 8$ 

- a) How genetic engineering enhanced the natural Phytoremediation process?
- b) Write short notes on Phytotransformation.
- c) How Phytostimulation process helps microorganism to digest and break down the toxic substances?
- d) Distinguish between Phytovolatilization and Rhizofiltration.

## **GROUP-C**

#### 3. Answer any ONE question of the following:

8×1=8

- a) What is social ecology? How social ecology helps to maintain biodiversity. 2
- b) What is meant by biodiversity conservation? What are the different methods of conserving biodiversity?

  2+6

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#### UNIT C BOT 304.2 PLANT & SOCIETY

Marks: 20

#### **GROUP-A**

# 1. Answer any TWO questions of the following:

 $2\times2=4$ 

- a) Why fermented foods are more beneficial than other foods?
- b) What are GM crops?
- c) Define totipotency
- d) What is red wine?

#### **GROUP-B**

## 2. Answer any TWO questions of the following:

4×2=8

- a) Write down different steps for cheese production and mention the microorganism used in this process.
- b) Write short notes on biodiesel.
- c) Define petro crops? Give two examples of two petrocrops.
- d) Discuss process for sausage preparation.

## **GROUP-C**

## 3. Answer any ONE question of the following:

8×1=8

- a) Write different steps of wine production. What is sweet dessert wine? 6+2
- b) Write down different steps of micro-propagation. Mention their advantages and disadvantages.

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