### Total Pages-5 PG/IIIS/BOT/304.1 & 304.2/23 (CBCS)

# M.Sc. 3rd Semester Examination, 2023 BOTANY

PAPER - BOT-304.1 & 304.2(CBCS)

Full Marks: 50

Time: 2 hours

Answer all questions

The figures in the right hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

## PAPER - BOT-304.1 [ Marks : 20 ]

- A. Answer any two from the following:
- $2 \times 2$
- 1. Name the largest Ramsar site in India.
- 2. What are the three main goals of CBD?

- 3. What is Rio Summit?
- 4. What is social ecology?
- **B.** Write short notes on any *two* from the following:  $4 \times 2$ 
  - 5. CITES
  - 6. Silent Valley movement
  - 7. Montreal Protocol
  - 8. Ramsar convention.
- C. Answer any one from the following:  $8 \times 1$ 
  - 9. Briefly describe Kyoto protocol. Name two green house gases.
  - 10. Why Chipko movement was started? Write a short note on Beij Bachao Andolan.

#### PAPER - BOT-304.2

[ Marks : 20 ]

#### A. Answer any two of the following:

 $2 \times 2$ 

- 1. What is redifferentiation in callus culture of plant?
- 2. How is the Innate Russet Burbank potato superior to the conventional potato? What is the benefit of that?
- 3. What is Pudding? What are different types of pudding found?
- 4. Name any one fermented non-liquid food, its starting material and the fermenting agent.

**B.** Answer any *two* of the following:

 $4 \times 2$ 

- 5. Define meristemoid and embroids mentioning their significance. What is xylogenesis and how is it useful? 2+2
- 6. How is transgenic Bollgard II cotton genetically modified and advantageous over the common cotton?
- 7. Give a brief account of four uses of microbial biotechnology. 4
- 8. How does beer differ from wine? Give a schematic account of beer production procedure. 2+2
- C. Answer any *one* of the following:  $8 \times 1$ 
  - 9. What is shoot apex culture? Why is it effective in raising virus free plantlets?

10. Give a comprehensive account of two oriental fermented food, source materials and their production. Give schematic diagram on production of cheese. 4+4

[Internal Assessment - 10 Marks]