# 2022

# B.A./B.Sc.

# **Fourth Semester**

#### GENERIC ELECTIVE - 4

### **BOTANY**

Course Code: BOG 4.11

(Economic Botany & Biotechnology)

Total Mark: 70 Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

#### UNIT-I

- 1. Give an account of Vavilov's concept of centres of origin. State its 10+4=14importance.
- 2. Describe the origin, morphology, and uses of rice. 14

# **UNIT-II**

- Give a general account of the economic importance of gram. 14
- 4. Describe the morphology and uses of ginger. 7+7=14

#### UNIT-III

- 5. Explain the processing of cotton.
- 14
- 6. What are oils and fats? Give a general account of it with reference to 4+10=14groundnut.

#### **UNIT-IV**

- 7. Give the protocol and application for androgenesis. 14
- 8. Give an account of endosperm culture with the application. 14

# UNIT-V

9. What are blotting techniques? Describe any one blotting techniques
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4+10=14

10. Write notes on the following:

 $7 \times 2 = 14$ 

- (a) ELISA
- (b) Human gene therapy

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