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Total No. of Pages : 02

Total No. of Questions : 09

B.Sc. (Hons.) (Agriculture) (Sem.-5)
MICROPROPAGATION TECHNOLOGIES

Subject Code : BSAG-519-19

M.Code : 90957

Date of Examination : 06-01-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

- 1. Write briefly :**
- a) Hardening
 - b) Somatic Embryo
 - c) IEDC
 - d) Somaclone
 - e) Seed culture
 - f) Gametoclone
 - g) Germplasm
 - h) Organogenesis
 - i) Protoclone
 - j) Diplointic selection

SECTION-B

2. What is micropropagation? Write note on stage IV *i.e.* transplant into soil.
3. Differentiate between Direct and Indirect plant regeneration.
4. What is meristem culture and Write precautions taken during meristem culture and how it is better than normal cultures?
5. Write contribution of the G. Haberlandt and EC Cocking in PTC.
6. What is hormonal theory of organ formation?

SECTION-C

7. What are various steps to get a somaclonal plant using PTC? Write its uses in crop improvement and how it is better than mutation breeding.
8. What is Cryo-preservation? Explain various steps for cryopreservation in plants.
9. What are secondary metabolites? Write various factors limiting large-scale production of useful compounds.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.