



**PAF-003-1582002**

Seat No. \_\_\_\_\_

**M. Phil (Botany) (Sem. II) (CBCS) Examination**

**August – 2020**

**Advance in Plant Biology : BOT - 203**

**(New Course)**

**Faculty Code : 003**

**Subject Code : 1582002**

**Time : 2:30 Hours]**

**[Total Marks : 100**

**Instruction :** All questions are to be attended as per information.

**1 Answer the following : 20**

- (a) Explain physiological role of ethylene and auxin in detail.
- (b) Explain different methods used for estimation of phytohormones from plants.

**OR**

**1 Answer the following : 20**

- (a) Explain physiological role of cytokinin and Abscissic acid in detail.
- (b) Explain growth regulatory function of Jasminoic acid in detail.

**2 Answer the following : 20**

- (a) What is macropropagation? Explain its types in detail.
- (b) Explain importance of Horticulture in detail.

**OR**

**2 Answer the following : 20**

- (a) Explain different methods used in hydroponics.
- (b) What is micropropagation? Explain different types in brief.

**3 Answer the following : (Compulsory Questions) 20**

- (a) Explain advantages and limitations of RAPD and RFLP techniques.
- (b) Explain ISSR and SSR technique in detail.

**OR**

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**1**

**[Contd...**

- 3** Answer the following : (Compulsory Questions) **20**  
(a) Explain advantages and limitations of AFLP and SNP techniques.  
(b) Give significance of Molecular marker techniques.

- 4** Answer the following : **20**  
(a) Explain multiple shoot culture in detail.  
(b) Explain protoplast culture in detail.

**OR**

- 4** Answer the following : **20**  
(a) Explain pollen culture in detail.  
(b) Explain in detail callus induction and subculturing process.

- 5** Answer the following : (Any Two) **20**  
(a) Write short note on grafting of plants.  
(b) Write short note on bonsai and its development.  
(c) Explain growth regulatory function of brassinosteroid in detail.  
(d) What is floriculture? Give its significance.

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