Avinashilingam Institute for Home Science and Higher Education for Women
Deemed to be University Estd. u/s 3 of UGC Act 1956 Category 'A' by MHRD [now MoE]
Re-accredited with 'A++' Grade by NAAC CGPA 3.65/4, Category I by UGC
Coimbatore - 641 043, Tamil Nadu, India

Continuous Internal Assessment –II April 2025

II Semester

Class: I PG **Time:2Hrs**
Major: Botany **Max.Marks:60**

23MBOC11:Plant Physiology

CourseOutcomes:

1. Fundamental understanding of the metabolic events such as Transpiration and Translocation.
2. Enable the students to grasp the mechanism of Photosynthesis and Respiration.
3. Gains knowledge on practical applications of plant growth regulators and physiology of flowering in plants
4. Acquires knowledge on the seed physiology and its technical aspects.
5. Analyse the various responses of plants against stress in relation to the environment..

PartA

Choosethecorrectanswer **6x1=6**

1. Plants that flowers under the photoperiods, less than the critical day length are called CO3K3
   a) Long day Plantsb) Short Day plants c) Day Neutral plants d) Phototropic plants

2. Thesubstance that triggers the fall of mature leaves and fruits CO3K1
   a) Auxins b) gibberellins c) Abscisic acid d) ethylene

3. Possible reasons for seed dormancy is CO4K1
   a) Presence of pathogens b) Cracking of hulls c) Green distorati d) Immature embryo

4. Which of the following is the major acid used in acid seed scarification CO4K3
   a) Perchloric acid b) Acetic acid c) Sulfuric acid d) phosphoric acid

5. Small metal binding proteins which may protect cellular constituents from Oxidative damage due to heavy-metals CO5K2
   a) Histidineb) Phytochelatinsc). Metallothioneins d).Superaccumulaters
6. Glycophytes are ---------- plantsCO5K3
   a) salt- sensitive b)salt tolerant c)cold sensitive d)cold tolerant

Part B **3x6=18**

Answer all the questions

Answer should not exceed 400 words or two pages

7a.Enumerate the physiological effects of gibberllinsCO3K4

Or

7b.Classify plants based on photoperiodism CO3K4

8a. Enumerate the factors causing seed dormancy CO4K4

Or

8b. List the factors that affect the seed germination CO4K4

9a. Describe the effect of stress on plant growth. CO5K2

Or

9b. What is biotic and abiotic stress and give examples? CO5K1

PartC **3x12=36**

Answer all the questions.

Answer should not exceed 800words or four pages

10. a. Explain the mechanism of photoperiodism CO3K3

Or

10. b. Give an account on the theories of Vernalisation CO3K2

11 a. Explain the various methods to break seed dormancy CO4K2

Or

11.b. Describe the special seed treatment methods in detail CO4K1

12 a. Briefly explain the defense mechanism of plants against biotic stress CO5K2

Or

12.b.Describe the mechanism of plant resistance to heavy metals CO5K1

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