Odd Semester Lesson Plan

Teacher name: Dr.meenu rathi

**Paper – I Plant Physiology**

October 2020

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| **Plant-water Relations**: Importance of water to plant life; physical properties of water; Imbibition, Diffusion,  Osmosis and Plasmolysis; absorption and transport of water; transpiration-types, physiology of stomata,  factors affecting transpiration, importance of transpiration. |

November 2020

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| **Mineral Nutrition:** Essential macro and micro elements and their role; mineral uptake; deficiency symptoms.  **Transport of Organic Substances:** Mechanism of phloem transport; source-sink relationship; factors  affecting translocation |

December 2020

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| **Photosynthesis:** Significance; historical aspects; photosynthetic pigments; action spectra and enhancement  effects; concept of two photosystems; Z-scheme; photo-phosphorylation; Calvin cycle; C4 pathway; CAM  plants; photorespiration |

January2021

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| **Respiration:** ATP–the biological energy currency; aerobic and anaerobic respiration; Krebs cycle; electron  transport mechanism (chemi-osmotic theory); redox -potential; oxidative phosphorylation; pentose  phosphate pathway |

February 2021

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| Seed dormancy; plant movements; the concept of photoperiodism; physiology of flowering; florigen concept;  physiology of senescence; fruit ripening. |