Assignment Titles for Fourth Semester- 2020 Last Date for Submission of Assignments: 10th April, 2020 10:00 a.m.		
Roll No.	**Name**	**Assignment Titles**
183460001	SANTHANALAKSHMI R	**4.1.a. Plant genome organization: Nucleus, Chloroplast and Mitochondria.** **4.1.b. Structural features of a typical plant gene.** **4.2. Non probability sampling techniques and random sampling techniques.** **4.3. Water irrigation; advanced irrigation system such as drip, microtube and sprinkler systems.**
183460002	YASMIN S	**4.1.a. Molecular markers – STS, Microsatellites, RAPD, SCAR and AFLP.** **4.1.b. Tagging, mapping and cloning of plant genes** **4.2. Measures of central tendency: Mean - median - mode** **4.3. Vegetative propagation using stem, leaf and root cuttings**
183460003	KANIMOZHI R	**4.1.a. Mitochondrial genome and Cytoplasmic male sterility** **4.1.b. Regulation of gene expression in plant development** **4.2. Measures of dispersion: Range - mean deviation - standard deviation.** **4.3. Propagation by division and layering, bulbs, corms, tubers and rhizomes-budding and grafting**
183460004	GANGA DEVI V	**4.1.a. Classification and functions of Seed storage proteins.** **4.1.b. Plant hormones and Plant transposons** **4.2. Test of significance: Null hypothesis - alternate hypothesis** **4.3. Indoor gardening: Foliage plants, flowering plants, hanging basket, Bonsai plants - Training and pruning.**
183460005	SELVI A	**4.1.a. Molecular Pharming and Transgenic plant derived products for commercial applications** **4.1.b. Golden rice and Flavr Savr®** **4.2. Data base searches - FASTA, BLAST - PSI BLAST** **4.3. Principles and methods of designing outdoor garden - hedges, edges, fences, trees, climbers, rockeries, arches, terrace garden**
183460006	INDHU	**4.1.a. Direct Plant transformation techniques.** **4.1.b. Selectable markers: Types and their role in plant transformation.** **4.2. PHYLODRAW- Phylogenetic tree.** **4.3. Production of seeds, their certification, storage and germplasm collection**
183460007	PARAMESHWAR KPP THEVER	**4.1.a. Symbiotic nitrogen fixation in legumes by Rhizobia** **4.1.b. Reporter genes: Types and role in optimizing transformation** **4.2. Sequence alignment - sequence similarity searches, amino acid substitution matrices** **4.3. Micropropagation – Introduction, stages and types of explants for commercial propagation, importance and applications of micropropagation**
183460008	MARYJANSI A	**4.1.a. In-Direct plant transformation technique.** **4.1.b. Plant genetic engineering for herbicide resistance** **4.2. Laws of Thermodynamics and Energy transductions in biological systems.** **4.3. Principles and protocols, protoplast culture and fusion- Importance of protoplast fusion and applications**
183460009	KIRUTHUEESWARI R	**4.1.a. Symbiotic nitrogen fixation in legumes by Rhizobia** **4.1.b. Reporter genes: Types and role in optimizing transformation.** **4.2. Sequence alignment - sequence similarity searches, amino acid substitution matrices** **4.3. Layout for a model college garden**
183460010	VINOTH GEETHA S	**4.1.a. Direct Plant transformation techniques.** **4.1.b. Selectable markers: Types and their role in plant transformation.** **4.2. Data base searches - FASTA, BLAST - PSI BLAST** **4.3. Lawn making and maintenance**
183460011	SUBASHINI T	**4.1.a. Plant genetic engineering for Virus resistance (Antisense RNA approach, Cross protection Satellite RNA, Ribozymes and Coat protein mediated protection).** **4.1.b. Promoters used in plant vectors.** **4.2. Photobiology: Dual nature of light, characteristics of solar radiation, solar energy.** **4.3. Native and synthetic hormones and other growth regulators- their importance in horticulture, gardening and landscaping**