

## **LS 103- Plant Biotechnology Syllabus (2 credits)**

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<b>S. No.</b>	<b>Topic</b>	<b>Name of the Faculty</b>	<b>No. of lectures</b>
1.	Origin of life		2
2.	Formation of Angiosperm, gametes, self pollination vs out crossing, mechanisms of pollen dispersal, adaptive traits, fertilization (double fertilization, triple fusion), seed and fruit formation, Embryogenesis, seed dormancy, dispersal of Seed, seed germination.		10
3.	Basics of Plant Development, shoot, leaf, root and floral meristems, transition from vegetative to reproductive stages, growth regulation of plants.		2
4.	Plant Kingdom-classification, respiration-the role of energy in living system, transport systems in plants-water, food substances.		4
5.	Maintaining life, food chain, producers and consumers, pyramid of energy, food webs, decomposers, food chains and human, the fuel of life, how plants feed, photosynthesis, chloroplasts, site of photosynthesis, the reaction behind.		6

### **Suggested Reading:**

1. BIOLOGY, by Michael Roberts, Thomas Nelson and sons Ltd.
2. Discover BIOLOGY, Cain, Damman, Lue and Yoon, Sinauer Associate Inc.
3. BIOLOGY by Peter H Taven and George & Johnson WCB McGraw Hills.