PRAMUKH SWAMI SCIENCE & H.D.PATEL ARTS COLLEGE, KADI
DEPARTMENT OF BOTANY
BOTANY PRACTICAL INDEX
SEMESTER-IV

Core Compulsory Course in BOTANY

CC-BOT-222

(Angiosperm Embryology, Biochemistry, Plant Physiology)

Sr. No.	Name of Experiment	Page No.	Date	sign
1	**Embryo:** Study of Embryo With endosperm haustoria from Cucumis and various developing stages of Embryo from Mustard and make temporary slide With proper stains			
2	**Microsporogenesis** : Study of Anther Though Aceto – carmine / Aceto-orcene squash technique in following plants : Aloe, Convolvulus and Onion			
3	**Permanent slide /chart /Microphotograph etc** . (a) Microsporogenesis, (b) Megasporogenesis, (c) Types and Structure of Ovule, (d) Structure of Mature Embryo sac and (e) Endosperm			
4	**(i)To determine isoelectric point of Casein (Protein)** **(ii) Esimation of Free Fatty acids by titration method.**			
5 (a)	**Bio –Molecules :** **Tests for detectinon of Carbohydrates**: The following Tests are to be performed to detect the nature of carbohydrates available in the supplied sample (Glucose, Fructose, Maltose, Sucrose and Starch).			

BOTANY DEPT. **Dr.K.J.Bhatt**

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(b) (c)	1. Molisch's test, 2. Benedict's test, 3. Barfoed's test , 4. Seliwanoff's test, 5. Iodine test, 6. Cobalt chloride test. **Tests for detection of :** i.e , Fat and oils: Microchemical Tests on sections of plant materials Sudan III stain, Solubility test **Tests for detection proteins :** Biuret test Xantopotic test			
6	**The following physiology experiment are to be performed by the students:** 1. To show the phenomenon of Ascent of sap. 2. To show unequal transpiration from the leaf surfaces Using Cobalt chloride paper. 3. To show four leaf experiment for process of transpiration			
7	**The following physiological experiment are to be Demonstrated to the students:** 1 .Demonstration of Path of water through xylem by Ringing experiment. 2. Demonstration of transpiration by Bell –jar method. 3. Demonstration the rate of leaf using Garreau's Apparatus. 4. Demonstration of rate of transpiration using Ganong's potometer. 5. Demonstration of rate transpiration using Farmer's Photometer. 6.To determine the amount of water absorbed and Transpired by a plant.			

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