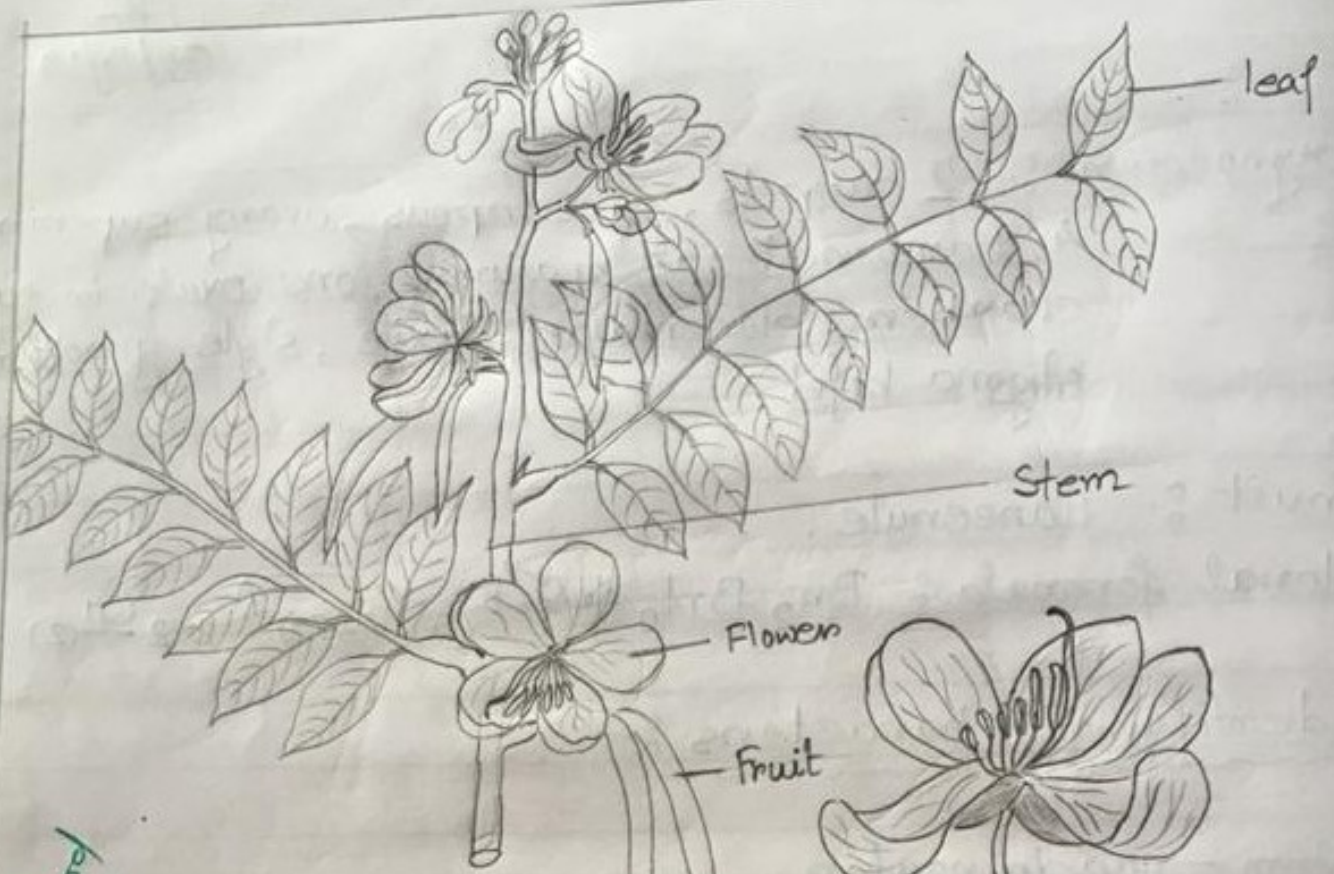


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NAAC ACCREDITED 'A' GRADE



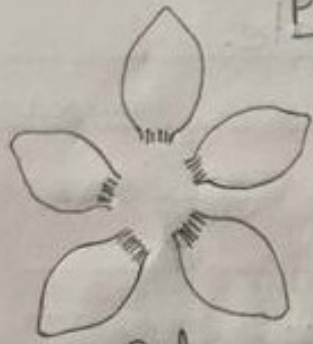
Topic: TAXONOMY
Course Title: PLANT DIVERSITY II
Paper: BOT-G-CC-2-2-P
Unit: 1
Semester: II
Name of the Teacher: Mrs. Rinku Halder Sahu and Smt. Mita Basu
Name of the Department: Botany (Morning)



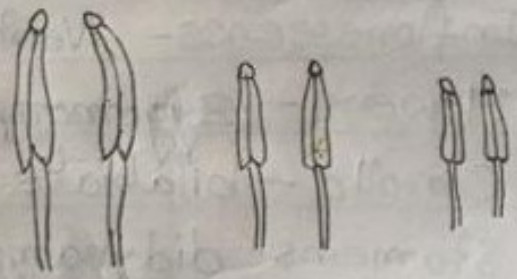
Plant twig

Flower

Root



Calyx



Androecium



Corolla



Fruit



Gynoecium

Stigma
Style
Ovary

Description of Plant specimen

Specimen :- Cassia sophora (Beng - Kalkashunda)

Stem :- Herbaceous, aerial, branched, cylindrical but flattened at the nodes; solid, glabrous, green.

Leaf :- Cauline, alternate, leaf base pubescent, with gland at the base of petiole, compound, paripinnate, stipulate, caducous, leaflets more than 5 pairs, lanceolate, entire margin, acute ~~at~~ apex, uniconate, glabrous.

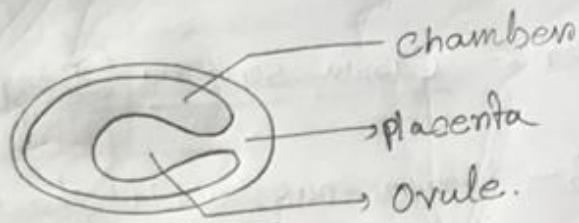
Inflorescence :- Racemose - Corymb

Flower :- Pedicellate, complete, bisexual, zygomorphic, pentamerous, dichlamydeous, slightly perigynous.

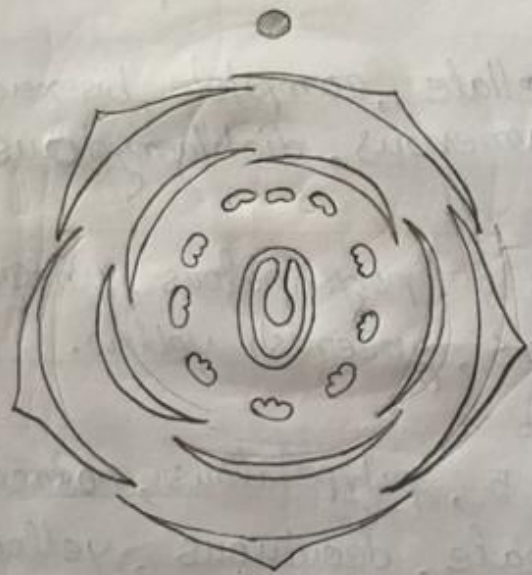
Calyx :- Sepals 5, polysepalous, unequal in size, quincuncial, deciduous, greenish yellow.

Corolla :- Petals 5, polypetalous, rosaceous, irregular, imbricate, deciduous, yellow.

Androecium :- Stamens 10, polyandrous, heterodynamous (2+4+4) where 6 fertile and 4 sterile (staminodes); anthers dithecous, basifixed, filament clubshaped.



T.S of Ovary



Floral diagram

Gynoecium :- Carpel - one, ovary superior, long, curved, pubescent, greenish, one chambered, one ovule in the chamber in cross section, placentation marginal, style terminal, short, stigma curved.

Fruit :- Legume.

Floral Formula :- $\% \text{ } \overset{\text{♀}}{\text{K}}_5 \text{C}_5 \text{A}_{2+4+4} \underline{\text{G}}_1$

Identifying character :-

1. Leaf :- Pinnately compound, unipinnate - bipinnate, petiolate with pulvinate leaf-base.
2. Inflorescence :- Racemose - corymb.
3. Flower :- Zygomorphic, slightly perigynous.
4. Calyx :- Sepals free, odd sepal ~~with~~ anterior.
5. Gynoecium :- Carpel - single, one chambered, placentation marginal
6. Fruit :- Legume.

— Hence, the supplied ~~sp~~ plant specimen belongs to the family Caesalpiniaceae or Fabaceae.