

PG CBCS
M.Sc. Semester-IV Examination, 2019
BOTANY
PAPER: BOT-495
PRACTICAL (Special Paper)
(ANGIOPERMS TAXONOMY & MOLECULAR SYSTEMATICS)
Full Marks: 50 **Time: 6 Hours**

1. Draw, label, dissect, and describe the supplied specimen A and identify the specimen upto species (with the help of local/regional flora or book).
 Leave your preparations. 12
(Drawings-3; labeling-1; description-4; dissection- 1+1.5 [including preparation and display], identification: family 0.5 [have to write without the help of flora/book], genus 0.5, species 0.5).
2. Make a comparative account of both plesiomorphic and apomorphic characters (at least 6) to represent advancements of features of the supplied specimens B, C, and D [Drawings and description not required].
 Mention which one is most advanced than that of others. 6
3. Perform the works as specified by the following: 6
 - a) Make a suitable preparation of the samples E and F and comment on these. 3+3
 Or
 - b) Comment on the specimens E and F. 3+3
 Or
 - c) Compare the surface ornamentations of the pollen grains of specimens E and F with microscopic drawings (in part or portion). 3+3
 Or
 - d) Compare the stomatal structures and types of the specimens E and F with drawings. 3+3
4. Identify the specimens G and H. 2

(Turn over)

5. Make a list of the species of *Cassia* L./ *Bauhinia* L./ *Blummea* DC. Found in West Bengal. 4

Or

Make a list of the genera of the family Menispermaceae/ Cruciferae/ Anacardiaceae represented with species in West Bengal with the help of relevant literature/ book. 4

6. Laboratory note book/ Practical performances. 5
7. Field report/ Field note book. 5
8. Submission of herbarium specimens/ slides, etc. 5
9. Viva-voce 5
